

PLAINTIFF'S
EXHIBIT

ETCO-96

ETHYL
NEWS

1936

ETC 21086



NEWS

JANUARY, 1936

ETC 21087

To All Members of The Sales Department

- MANY years ago, young Dr. Smith completed his medical course, arrived home, hung out his shingle and waited for patients. They came slowly, very slowly. Finally the young doctor bought an automobile, and each day three or four times, he hurried out with his medicine case, jumped into the car and dashed off in a cloud of dust. He looked busy, and immediately business picked up.
- YESTERDAY, smart young Dr. Smith. Today, rich old Dr. Smith. He certainly knew his psychology.
- As we enter January, many men will start the New Year with a Dr. Smith turn of mind. They will start out after business just as if it were there—and it is. Prospects for 1936 are excellent. True, hard times have not been entirely relieved. We still have the unemployed. But in general, recovery is proceeding rapidly and for many millions of people, good times are here again.
- PSYCHOLOGY is playing an important part in the general business situation today. The psychology of fear and hesitation is fast being supplanted by that of optimism, enthusiasm and activity.
- AIDED by your combined efforts, our company has completed another successful year. Our customers more and more are concentrating their efforts on obtaining a larger percentage of the available premium business, as is indicated by the steady upward trend of Ethyl sales charts. The use of lead in regular gasoline has become more universally adopted.
- WITH these reassuring facts plus the improving economic outlook, there is no better New Year's message I can leave in your mind than to recommend that each member of our field staff enter 1936 with optimism, enthusiasm and activity.

J. C. Taylor

To All Members of The Sales Department

Unless otherwise indicated, all artwork and photographs destroyed
May 1957.

- MANY years ago, young Dr. Smith completed hung out his shingle and waited for patients. They the young doctor bought an automobile, and each out with his medicine case, jumped into the car and looked busy, and immediately business picked up.
- YESTERDAY, smart young Dr. Smith. Today, rich his psychology.
- As we enter January, many men will start the mind. They will start out after business just as it for 1936 are excellent. True, hard times have not the unemployed. But in general, recovery is process of people, good times are here again.
- PSYCHOLOGY is playing an important part in the mind. The psychology of fear and hesitation is fast being suppressed by the new enthusiasm and activity.
- AIDED by your combined efforts, our company has completed another successful year. Our customers more and more are concentrating their efforts on obtaining a larger percentage of the available premium business, as is indicated by the steady upward trend of Ethyl sales charts. The use of lead in regular gasoline has become more universally adopted.
- WITH these reassuring facts plus the improving economic outlook, there is no better New Year's message I can leave in your mind than to recommend that each member of our field staff enter 1936 with optimism, enthusiasm and activity.

J. C. Taylor



Vol. 3, No. 1

ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

JANUARY, 1936

Published monthly by the Ethyl Gasoline Corporation for the entertainment and benefit of the members of its organization. Address all news items, correspondence or other material to the Editor, W. Cary Harris, 35th floor, Chrysler Building, New York City.

W. CARY HARRIS Editor

Associate Editors

EDWIN DOWNS

RUSSELL B. WESTON

CORRESPONDENTS

Atlanta Division	GEORGE W. WARREN
Baltimore "	L. W. SHANK
Boston "	DONALD S. FLYNN
Chicago "	A. B. WYRICK
Dayton "	VINCENT KEENAN
Kansas City "	C. M. BERRY
Los Angeles "	R. G. LOSER
New York "	R. C. MURPHY
Toronto "	J. N. FITZGERALD
Tulsa "	HARRY KUHE
Engineering Dept.	JULIAN J. FREY
Manufacturing Dept.	ARTHUR P. STOVER
Gasoline Testing Dept.	LESTER B. ROBERTS
Export Dept.	HUBERT FOSSETT

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH

Who Owns Our Wealth?

By
BIRD REES

• No thoughtful person recognizing the fundamental fact that wealth is not money but rather "desirable things" which satisfy human wants—can look about him without realizing the utter absurdity of the often repeated fallacious dictum that 2% of the people own 60% of the national wealth of this Country. This absurd statement has no foundation in any complete or accurate study of underlying facts. It is based on a very limited study made in 1915 by Dr. Willford King, a prominent economist. He made a survey of estates probated in Massachusetts in 1859-1861, 1879-1881 and 1889-1891 and in Wisconsin in 1900. These figures had nothing to do with living persons—only with estates of decedents of fifty years ago.

Yet to that study, a commission created by Congress, referred in its 1916 report and that report (twenty years ago) is responsible for this common fallacy. The report reads:

"The recently published researches of a statistician of conservative views have shown that as nearly as can be estimated, the distribution of the wealth in the United States is as follows:

"The 'rich', 2% of the people, own 60% of the wealth.

"The 'middle class', 33% of the people, own 35%.

"The 'poor', 65% of the people, own 5%."

Against such absurd conclusions from this very limited study, we now have the unbiased and reliable authority of the national industrial conference board, after reviewing the record, find that "no conclusive statistical information on a nation-wide scale" has ever been collected. Finally, coming down to current facts, we find

(Continued on page 3)

ETC 21090



In Memoriam



A CATASTROPHE of the air, depriving our organization of two of its most useful and most engaging personalities, marred the closing month of an auspicious year. With dramatic suddenness, death ended the service of Edford M. Walter and Dewey L. Noyes on the afternoon of December 11th. Near Nunda, N. Y., disaster overtook the plane in which they were traveling from New York to Detroit. Captains each in his own sphere, their influence survives to inspire their sorrowing associates.

EDFORD M. WALTER by nature and by training, was fitted for responsible tasks. Of inexhaustible energy, he yet exercised the restraint which is essential to success in administration and to leadership of men. With the quality of industry, tempered by a rare sense of direction, he combined a sympathetic understanding of the problems of others. Personal charm and unfailing tolerance were other attributes of the endowment which he unreservedly applied to the service of his organization and of his fellows.

It would be difficult to chronicle the progress of Ethyl Gasoline without mention of Ed. Walter, whose work with the Corporation began in the pioneer days. In 1920 he joined the General Motors Research Corporation where he was engaged in the development of an air-cooled motor for passenger cars. In 1923 he was transferred to the General Motors Chemical Company, predecessor of the Ethyl Gasoline Corporation. He aided in the development of Ethyl fluid and in the initial sales promotion activities. He became a member of the New York staff of the Ethyl Corporation in 1926 and subsequently was named Assistant General Sales Manager, a post which he held at the time of his death. In length of service, he was one of the oldest members of the Ethyl family.

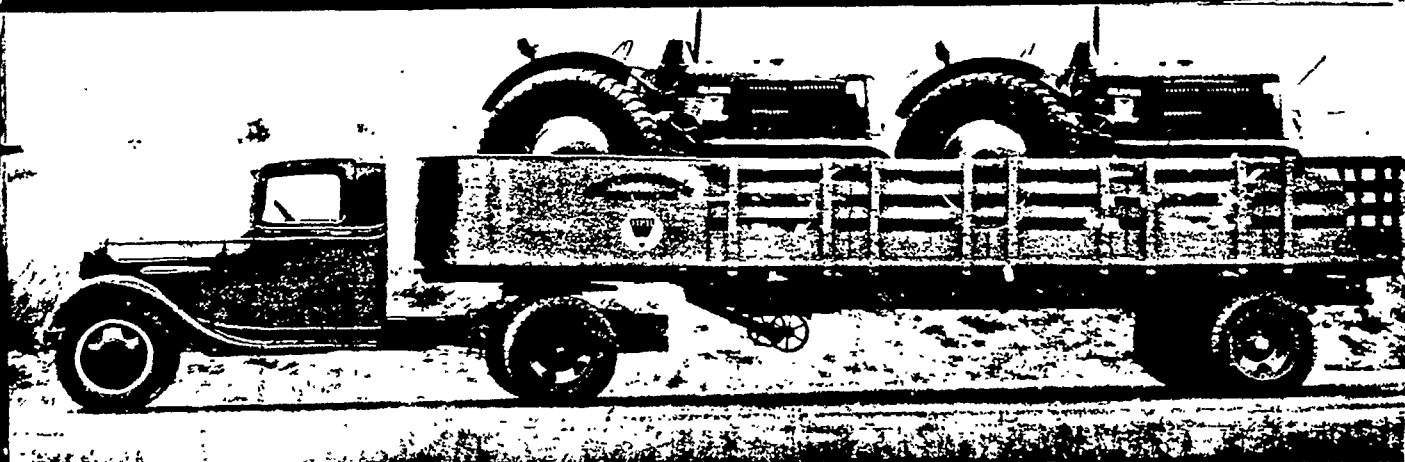
Mr. Walter was born on October 15th, 1893, in the Kentucky mountains near Blaine. He was graduated from the University of Kentucky with the degree of Bachelor of Science in Mechanical Engineering in 1915. Upon graduation he entered the heating and ventilating equipment field with the B. F. Sturtevant Co. in Boston. During the World War he spent eighteen months in France and was in action with both the Engineers and Field Artillery, resigning from the Army with a commission of First Lieutenant. In 1918 he returned to the Sturtevant Company, where he remained until he became associated with the General Motors Research Corporation.

Mr. Walter is survived by his wife, Alice McClevey Walter, to whom he was married in 1923; by three sisters, Mrs. B. H. Vaughan of Port Arthur, Texas; Mrs. C. L. Thompson of Wilmore, Ky., and Mrs. D. J. Thompson of Webbville, Ky., and by three brothers, Henry and Roscoe F. Walter of Washington, D. C. and Luther M. Walter of Chicago.

DEWEY L. NOYES' eventful life was dominated by courage and character. Devoted to aviation since early youth, his career was symbolic of romance—the romance of Ethyl and the romance of aeronautical science. Guided by the moral compass of fidelity, his name is enshrined in the dauntless company of navigators who blazed for civilization a new frontier. Dewey's first flying was done in 1915 in Rutland, Vt., where he was born on February 27th, 1899, and where his early life was passed. He attended New York Military Academy at Cornwall, N. Y., and Montclair Academy at Montclair, N. J. For one year he studied at the University of Vermont, and completed his college work at St. John's college, Annapolis, Md.

At Rutland he experimented with gliders and a reconditioned Curtis pusher. In 1916 he made a complete flight in an old plane which, in landing, was wrecked in a clump of trees. While a student at St. John's he carried passengers in a flying boat in the vicinity of Annapolis. After a period of exhibition parachute jumping from hot air balloons, he came to New York as a flying instructor at Roosevelt Field, L. I., and at Miller Field, Staten Island, where men were being trained for the Army Air Service.

For three years following the World War, Dewey, with Clarence Chamberlin as a partner, was engaged in commercial aviation purchasing surplus training planes from England. He sold his interest in the enterprise to Chamberlin and in 1921 diverted his activity from flying to construction, becoming a departmental superintendent of the Conglomerate Company in Cleveland. The lure of the air, however, was still strong, and, purchasing a plane, he spent his weekends barnstorming in northern Ohio. In 1926 he resigned from the Conglomerate Company to aid in organizing the new Federal airmail route from Pittsburgh to Cleveland. Making the first run over the new line, he served as its chief pilot until 1929 when he became associated with the Standard Oil Company of Ohio in their Aviation Department. In 1932 he joined the American Airways flying between Fort Worth and Cleveland and the following year came to the Ethyl Gasoline Corporation. He is survived by his wife, Blanche Wilcox Noyes, and four brothers, Arthur F. of Long Green, Md.; Charles G. of Rutland, Vt.; Henry H. of Albany, N. Y., and William D. of Salem, Mass., and a sister, Mrs. Helen Clemons of Rutland.



Ethyl Gasoline Corporation's High Compression Farm Tractor Demonstrating Unit

• THE above picture shows the new 1936 Chevrolet Truck and Trailer which is being used by our Company to transport our Farm Tractors which are used for demonstrating high compression performance and economy to the farmer on the farm. This truck and semi-trailer unit was designed by Chevrolet engineers especially to meet our needs. The trailer was built by the General Motor Truck Company. It is 26 feet long and 8 feet wide and is the largest semi-trailer that has ever been used with a Chevrolet Truck-Tractor. The entire unit has been loaned to us by the Chevrolet Motor Company. Chevrolet expects that this unit will be the forerunner of many similar ones that will be built to meet the special hauling requirements of Farm Machinery dealers. The truck is powered with a standard Chevrolet high compression truck engine.

This new unit was christened in an interesting way. The Chevrolet Motor Company had all of their dealers come to Detroit to witness the pre-view of the 1936 model Chevrolet cars and trucks. During this show, which was held at the General Motors Proving Grounds, our truck, painted a brilliant red and bearing the Ethyl trademark, led the entire parade of new 1936 Chevrolet models. Several thousand Chevrolet dealers from all parts of the United States and Canada witnessed the showing.

The tractors on the trailer are two of the new Oliver "70" high compression jobs built to operate exclusively on 70 Octane gasoline. The rods sticking up above the tractors are the radio antennas. Two Oliver Plows are also on the trailer but being on the other side of the tractors do not show in the photograph.

The farm demonstrations which are being conducted consist of running a high compression tractor burning 70 Octane gasoline against a low compression tractor, of the same make and model, burning distillate. Such demonstrations are very valuable in showing the farmer the many advantages of high compression and good gasoline as applied to the farm tractor. The high compression equipment can do about 50% more work than can the low compression job on the same amount of fuel; or, can do the same amount of work and use about a third

less fuel. Any standard low compression 2 Plow Tractor, when changed over to high compression will pull 3 plows with ease. As a result of previous demonstrations which were conducted experimentally various farm organizations in several states have requested our company to put on a series of demonstrations for them during the Spring, Summer and Fall of 1936. Due to these requests the schedule for the Demonstrating Unit is practically filled to capacity for the next few months. The Unit will be available for demonstrations in all of our divisions provided of course, that schedules can be worked out that will not conflict with present arrangements.

WHO OWNS OUR WEALTH?

(Continued from page 1)

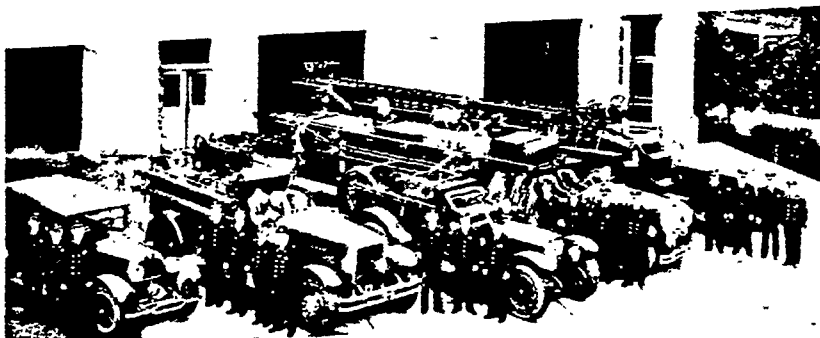
that the wealth of the Country—the "desirable things" include 7,000,000 farms with their equipment and live stock and 28,000,000 private homes with everything which they hold, half in each case being owned outright by those who occupy them. Then, there are hundreds of thousands of stores, shops, small enterprises; of more than a million corporations of which only 2,500 are large enough to be listed on any stock exchange; of more than 45 million individual deposits in savings banks and 10 million memberships in building and loan associations with assets of more than \$8,000,000,000; of 113 million life insurance policies representing actual assets of more than \$21,000,000,000; of 20 million privately owned automobiles and of other assets whose totals run into unbelievable figures.

And the situation is similar if we examine income figures released by the Department of Commerce in August 1935 which show that for the four worst years of the depression, 1931-1934, the total national income paid out totalled \$203,000,000,000 of which \$132,000,000,000 was distributed in wages and salaries and \$33,000,000,000 in withdrawals of shopkeepers, tradesmen and farmers who do not differentiate between wages and profits. Thus 81.5% of the total national income was paid out to these people; rents and royalties accounted for 2.5% and dividends and other property income accounted for 15.9%.

Let's make no mis-statements about who owns our wealth!



• THE SKELLY OIL COMPANY blending plant at Burkburnett, Texas, in our Mr. J. O. Balzer's territory, to whom we are indebted for these pictures. While the plant is small it is a very complete installation and the unusual feature is the fact that the entire output is made into Ethyl Gasoline. This has been the case since the blending plant was established and Mr. Balzer believes it to be unique in that respect. A general view of the plant is shown as well as one of the blending plant proper and the blending personnel. From left to right they are Messrs. Colburn, Bazell, (Supt.) and Fewin.



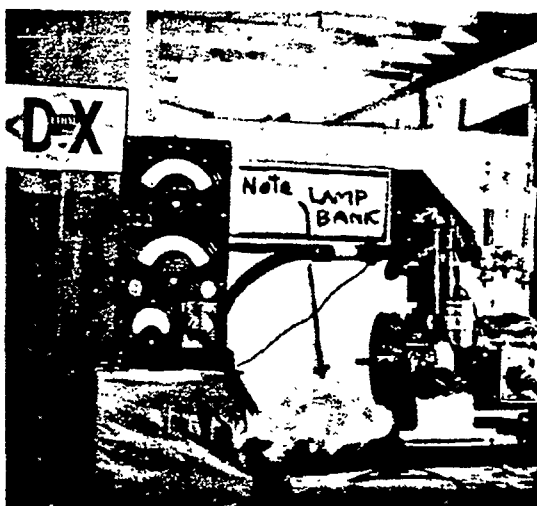
✓ • CENTRAL STATION UNIT of the Jackson, Miss., Fire Department. Our Mr. Petty reports that the entire Fire Department of the Capitol City are now using No Nox Gulf Ethyl exclusively. He has, for some time, been working with other departments and advises that all branches have changed to leaded gasoline. Chief McDonald says that he is well pleased with the increased performance the use of Ethyl gives his equipment.

✓ • AN ENTIRE WEEK was spent demonstrating for Mid-Continent Petroleum Corporation at their booth at the Tulsa Four State Fair. The demonstrations were practically continuous from 1:30 to 11:00 p.m. and 2500 spectators visited the booth. The exhibit was very attractively decorated with D X Ethyl advertising as shown in one of the illustrations. Mid-Continent had a replica of its West Tulsa refinery which we also show. To further aid in the demonstration, microphones were placed so that our speakers could be easily heard above the running motor. As an added attraction Mid-Continent put on a minstrel show with black faced comedians and an orchestra. This show was put on twice each day and at the conclusion the Ethyl demonstration was presented to the audience. Mr. Kuhe conducted the demonstration and during the period, made some very favorable contacts with captains of police and fire departments, highway superintendents and a number of commercial fleet operators.



A New Feature for Demonstrator

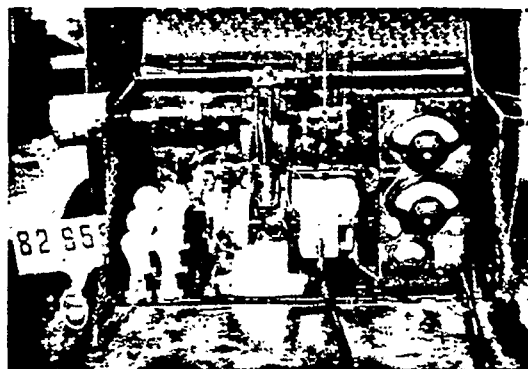
• Most of our men who have made extensive use of the demonstrator have encountered the difficulty of visibility of the dials when addressing a large audience. Due to the small size of the watt, or horsepower meter, the graduation on the dial cannot easily be read at a distance of more than ten feet or so. Furthermore it is quite likely that only a small percentage of the spectators have the technical training to properly read the meter with the result that the full effect of the demonstration is not always apparent.



Several attempts to overcome the weakness have been tried with indifferent success. A large dial would increase expense and the added bulkiness of the equipment would be a handicap. The experiment of projecting an enlarged image of the dial on a screen also has the drawback of increasing the necessary equipment; moreover the frailty of the projection machinery is a distinct hinderance.

After giving the matter considerable study, Mr. Kuhe developed a scheme which has given him satisfactory results in overcoming the problems. It occurred to him that the manifestation of power might be revealed through the medium of the electric light bulb as everyone recognizes that a decrease in power will dim the light. Accordingly six bulbs of 32 volts and 100 watts each were procured and connected in parallel to the power take-off on the watt meter. One of the two register coils on the parallel board was disconnected, allowing the lampbank to take its place, thus the load on the motor armature remained the same. The functioning of the wattmeter is not disturbed and the needle still records specific data.

The lampbank will operate in the daylight as well as a darkened room, the bulbs showing plainly. When the change is made from Ethyl to Q, the drop in power produces a slight dimming of the lamps and when third



grade is run they show only a dull glow. Or in other words, when the motor knocks, the light is subdued but when run on Ethyl the lamps shine brightly.

This arrangement was first tried at the Tulsa Four State Fair, most successfully (see photo) as to the average visitor the lampbank spelled one thing—more power with Ethyl—in a way that could be seen and understood by all. There is also shown a picture of Mr. Kuhe's adaptation of the lampbank to his demonstrator in the trunk of his car. The arrangement may, of course, be improved further and Mr. Kuhe will be glad to receive any suggestion.

He Wanted To Know

• THE following self-explanatory letter was recently received at the Dayton Division office:

"Gentlemen:

"I ask for information at the filling stations and get a lot of contradictory information. Is Ethyl something put into ordinary gas? Who puts it in? Can it be bought separately? What is its effect when used in gasoline? Does it give more mileage? Does it dissolve carbon? Does it injure the cylinders in any way? The Standard X-70 advertises that it contains a carbon solvent. If Ethyl does that and nothing else why pay a premium? Why pay a premium anyway?"

"Respectfully,
(Signed) "Charles S. C——."

Mr. Bingham was delegated to interview the writer and supply him with all the necessary information. His report, copy of which follows, likewise is self-explanatory:

"In accordance with instructions I called on the above party and answered the questions he had sent to our office. I found him to be a fine old gentleman 84 years of age who is still driving his own car almost daily. He is driving a 1934 Terraplane. I answered all of the questions in his letter and at least 40 more."

It certainly is interesting to find a gentleman 84 years old who gives enough thought to his motoring supplies to inquire in detail regarding the merits of Ethyl Gasoline. Concern of this sort indicates that he is anxious to get the most out of his car.

Here and There

• That Ethyl Gasoline is necessary for the 1936 motors is a statement attributed to Mr. H. A. Jackson, district manager of Associated Oil Company as reported in the Seattle (Wash.) Times of December 15th. "We don't mean that the new cars won't run on anything else," Mr. Jackson says, "but it should be the desire of every motorist to gain the highest efficiency from these wonderful pieces of mechanism which are featured in the shows." It is, moreover, his opinion that the public have never before been offered such splendid values in motor cars. The manufacturers this year have produced a product that is more efficient, better powered and better lubricated.

• A successful campaign was recently concluded for the Tide Water Distributors in eastern New York State by Messrs. Ball and Hutson of the Boston Division, and Ethyl volume for two of these concerns is now running more than 100% above last year. Only those handling 1,000,000 gallons or over, annually, were covered at the time but if results justify it the smaller concerns are to be covered later. Following the campaign in direct territory, it was decided to continue the same schedule with indirect operation in order to make the results more effective. To get this started, the departmental office of Tide Water at Albany, sent out a letter to distributors stating the Ethyl Gasoline Corporation would be glad to conduct a demonstration for the jobber and his dealers. A few weeks later a follow-up letter was sent saying that an Ethyl representative would call to arrange for a demonstration. An evidence that the jobber is interested in selling more Ethyl is shown by one who ordered 200 postal cards as prepared by Associated Oil to send out to customers. Where dealers knew of the meeting sufficiently in advance, they arranged a good turnout. In one location, an enterprising automobile dealer secured both mayoralty candidates as well as their following. In conjunction with the campaign on Esso being conducted by the entire retail department of the Colonial Beacon Oil Company throughout the month of December, the Boston Division is assisting the drive by running meetings. Messrs. Blatchford, Coveney and Flynn have already held meetings in Boston, Providence and Springfield, Mass., and before the end of the month, meetings will have been conducted throughout the entire Boston Division.

• Mr. J. S. Cole, of the Baltimore Division, held a series of meetings for Standard Oil Company of New Jersey using the gum dishes recently received from the Detroit Laboratory. These dishes and talk made quite an impression on the management of the Retail Department of the organization in Baltimore and they have requested their New York office to have enough of the dishes made up so that a set can be on display at each one of their stations. They feel that if they are able to place them in the hands of the customers and at the same time tell the story of "Gum Free Esso" it will be much more impressive than just giving the story. This will be quite an undertaking as the Baltimore Division of Standard Oil have approximately 200 stations under the supervision of the Retail Department.

• The Glasgow (Scotland) Evening News of November 20th says: "Esso has become a household word in the short space of time that has elapsed since the name was adopted to take the place of the old name, Pratts. The Esso brands are famous for their anti-knock qualities and suit the modern high-compression engine very well. In fact the modern type of high-effi-

ciency engine could not have come into general use had there not been such high octane number petrols in universal distribution as Esso High Test, Esso Ethyl and the rest."

• A report from the Dayton Division says that in making contacts at service stations in the territory it is learned many customers are changing to Ethyl on the approach of colder weather for the quicker starting and warm up of their motors. Service station men say that practically all the new 1936 car owners are asking for Ethyl Gasoline. Down in West Virginia especially, there is a good increase in Ethyl sales and after December 1st, all Esso is reported to have an 80.5 octane rating.

• Mr. Walker, the zone service manager of Chevrolet Motor Company, Detroit district, is enthusiastic on the merits of Ethyl Gasoline and feels that more economical operation will result with the octane selector fully advanced with Ethyl. Likewise, Mr. Hendrickson, the Parts & Accessories Manager, feels that Ethyl will give more economical transportation. It might be interesting to note that these two key men of the Detroit zone were sold on Ethyl by two of our representatives in other sections of the United States. This only goes to show that perhaps we are not conscious of how much good we are doing when we call upon shop foremen in some automobile dealer's shop in a small town. It so happens that Chevrolet Motor Co. draws many men from these shops throughout the entire United States.

• Mr. Newman, down in West Virginia, always has his eye open for new prospects. Some weeks ago he began making fleet contacts with the various CCC Camps in his territory. It was found that in common with other similar camps the country over, practically all the motor truck equipment was new and consisted of Ford Chevrolet and Dodge units, which require high anti-knock gasoline for best performance. Armed with this information he systematically contacted the ranking officers in charge of the various camps with the result that before long several of the camps were using Ethyl and a number of others led regular. This activity on Mr. Newman's part resulted in Bulletin No. 112 being issued, which requested that contacts be made at all CCC encampments so as to bring to their attention the advantages of Ethyl Gasoline in the trucks.

• The New York Division recently made arrangements with the regional service managers of the Chevrolet Motor Company at Buffalo and Tarrytown whereby 1600 of the booklet entitled "Peak Performance from Chevrolet by Using Good Gasoline and Perfect Tuneup" were sent to Chevrolet dealers in their territories.

• Starting December 1st the Kansas City Public Service Company will use 70 Octane leaded gasoline in all of their equipment. The product will be supplied by the Sinclair Refining Company through the Eureka Petroleum Company.

• Our Mr. C. E. Smith (Detroit Rep.) has arranged to conduct a series of meetings with the Service Managers School of the General Motors Institute. The first was held December 6th and attended by the men taking the five week Service Managers' course as well as those in the Institute's regular senior class. The General Motors Institute is bringing in a group of men every five weeks during the winter months for the Service Managers School. Mr. Smith has a place on each program for a talk on Ethyl Gasoline.

• The Glenn L. Martin Company of Baltimore, who designed and built the China Clipper and her two sister ships, the Philippine Clipper and Hawaiian Clipper have just signed another year's contract for Stanavo Ethyl Aviation Gasoline. An indication of the tremendous growth in aviation gallonage during the last five years is noted, when we point out that in 1929 S.O.N.J. supplied the Martin Company with about 700 gallons, whereas in 1934 they purchased over 35,000 for use in making test flights before delivery. Although the Martin Company are the builders of these giant 5100 pound seaplanes—the largest ships in service—their principal activity is the designing and constructing of bombing planes for the U.S. Army. It is understood that between now and next fall deliveries will be made to the government at the rate of two or three planes each week.

• During November our Mr. Reinhart attended a most enthusiastic meeting of United Motors Service in Seattle. This was only one of a number held throughout that area but to a great degree is typical of the others. There were about 850 present and the meeting was conducted by Mr. Nagle, who is their general service manager from Detroit. The audience was made up of men from all branches of the automotive industry. The speakers discussed various parts of the automobile and the importance of having correct adjustments made by the use of proper instruments and particularly the need of using quality fuels. He called their especial attention to the importance of correct spark settings, higher compression ratio, etc. Finally he concluded this part of his discussion by saying that they might just as well forget everything he had said pertaining to engine performance unless Ethyl Gasoline was recommended and used.

• A series of ten meetings was held during the first part of December for the Phillips Petroleum Company's jobbers and dealers throughout the Northwest by Mr. H. C. Dees of the Chicago Division. Phillips' new improved, airplane type motor fuel was advertised both by radio and newspaper during the first part of December throughout the territory covered by them in the Middlewest. The Chicago Division expects to have from 25 to 30 additional sales promotion meetings on Phillips 77 Aviation Ethyl in the near future. The sale of the new product is reported to be exceeding their expectations.

• The Calgary Service Club was formed by our Mr. C. J. McFarlane five years ago, with the object of creating a friendlier feeling between the service departments of different motor car companies, and to enable them to discuss their various problems with each other. It is in a great measure due to Mr. McFarlane's efforts that the club has developed to the point where it is now the most active and largest of its kind in Western Canada. In view of the success of the Calgary Club another was formed in Edmonton, and again Mr. McFarlane took a leading role. These clubs are of considerable value to the Ethyl Gasoline Corporation as all fuel and technical problems are discussed at the meetings. The Calgary press recently commenting on the subject, said: "The Calgary Auto Service Club, established here five years ago, held its first social evening this week. The club which has carried on educational work on technical subjects received greetings from the Society of Automotive Engineers of New York and the Edmonton Auto Service Club. About 120 members of the wholesale accessory trade and retail automobile trade were present and heard the speakers stress the importance of the organization as an influence in this community."

• Messrs. Berry and McCulloch, of the Kansas City Division, recently held several Mobilgas Ethyl Clinics with the Lubrite Division of Socony-Vacuum at St. Louis. Actual Mobilgas Ethyl sales were substantially increased at the four stations that they worked, and many new customers were secured by

Socony-Vacuum during the clinics. These customers told their friends of the improved performance due to the minor adjustments and Mobilgas Ethyl, with the result that many unsolicited requests for the service were received. Mr. H. A. Bickell, in charge of service station sales in St. Louis, for the Socony-Vacuum Oil Company, was very much impressed with this manner of securing new customers as well as the increased Mobilgas Ethyl sales.

• The improvement in general conditions in the state of North Dakota, is well typified by the consumption of petroleum products. In September of this year, 13,903,210 gallons were shipped in to the state as against 9,394,013 the same month a year ago or a 33% increase. For the first nine months of this year there was an increase of 24%. Inasmuch as the American Petroleum Institute figures show that the consumption in the country as a whole increased only about 7% it would appear that North Dakota is enjoying exceptional prosperity.

• Captain William Tebbetts, Ass't Director of the Fire College, City of Los Angeles Fire Department, recently addressed an inquiry to the New York office asking for complete information on Ethyl Gasoline. Mr. Frank Elliott was assigned to follow up this lead and the result was that we were invited to send a man to the Fire College to tell the complete story of gasoline and demonstrate the difference between the three grades. Mr. Carl Abell was given the assignment and spent two hours each day from the first to the 13th of December. The group, 156 in number, were fire engineers who operate the pumps, and the classes were limited to 16 men each session to insure a thorough training. They were the ranking men from whom the future officers of the department are selected. In addition, the mechanized staff of the division attended the meetings in groups of two and three.

• Over the entire state of North Carolina, general business conditions continue to be fairly good. Taking advantage of this fact, the retail department of the Standard Oil Company of New Jersey started the 1st of December, being the first anniversary of the introduction of their Aerotype Esso, a drive to boost their Esso sales to 30% of total motor fuel. They plan to continue this campaign through several months and have high hopes of exceeding by a good margin their percentages of the corresponding months of a year ago. A similar program as was undertaken the first of 1935 with Standard, demonstrating Aerotype Esso at company stations and at their meetings, is in the making now for sometime after the first of January. We learn from our South Carolina representative Mr. Jeppe that a similar program has been inaugurated in that state also.

• The Raymond Transportation Company, with offices in St. Cloud, Minnesota, has recently changed to leaded gasoline through the efforts of our Minnesota representative, Mr. Fred Naylor. This company operates 70 large trailer units covering the entire Northwest and have a monthly consumption of over 50,000 gallons. Four of the Internationals, Model A-6, have been high compressioned by installing sleeves and pistons of the Model C-55. This change resulted in a large increase in horsepower and a 25% increase in economy.

• Mr. Paul Johnson of the Kansas City Division, took our two new booklets—"New Easy Ways to Increase Sales at Gasoline Service Stations" and "The Automobile Question and Answer Book" to the Standard Oil Company (Ind.) Division office located at Denver, Colorado. This resulted in a general bulletin being prepared by Standard Oil Company directed to "All Salesmen, Agents and Service Station Supervisors" requesting that they write to our New York office for copies. The booklets were well described in the bulletin which closed with the admonition: "Sell More Red Crown Ethyl."



Putting concrete forms in place—July, 1933.



Building anchorage for power house—July, 1933.



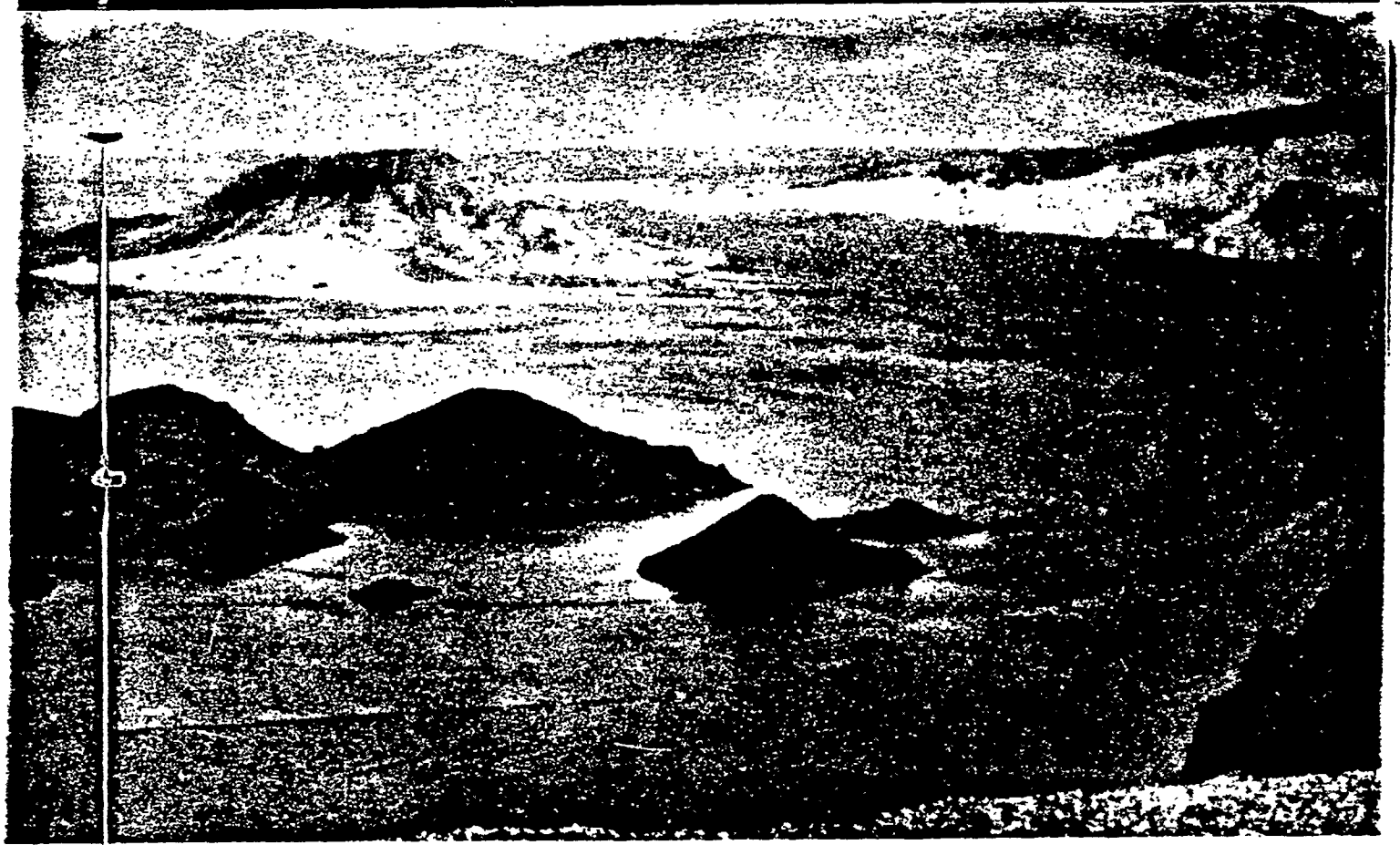
Looking down base of dam—February, 1935.

✓ 1.5 1/20
• SOME of our executives, while attending the recent American Petroleum Institute convention at Los Angeles, visited Boulder Dam. They were so impressed by the gigantic undertaking and the amount of work accomplished since its commencement in 1931 that a brief description, together with the accompanying pictures may prove interesting to others of our readers. When the project was begun it was too large for any one company to handle so a combination of six was formed which is today known as the Six Companies.

A great deal of preparatory work was of course necessary but the first actual construction of consequence was to cut diversion tunnels through the solid rock walls of the canyon. After this was completed the coffer dam was built and the water diverted to these 50 foot tunnels which were about two city blocks in length. The next step was the excavation down to bed rock—about 150 feet—to lay foundation for the dam, and the “scaling off” of the walls of the canyon where the dam was to be anchored. Then the forms were put in place and pouring in of the concrete began, from buckets holding some 16 tons each. Gradually the dam took form until today it rises 760 feet up the canyon walls. At its base it is 650 feet through and 48 feet wide at the top.

Some day in the next ten years an enormous lake will be formed behind the wall which will extend up stream 115 miles and 7 miles at its widest point. It will be 720 feet deep at the dam. The view we show of this lake was taken recently by our Los Angeles Manager, Mr. Wagner. When it is full, only 30 feet of the moun-

BOULDER



Boulder Dam

tain seen in the right center, will be out of the water. At present this mountain island is infested with rattlesnakes driven to the high ground by the rising waters. The water is now within 314 feet of high level. Back of the dam are located the four huge intake towers—50 feet in diameter—through which the water flows to operate the great turbines in the power plant on the downstream side. It is estimated that this plant will generate as much power as the four largest plants in the United States combined.

Two hundred miles below this point a small dam is under construction which will supply water to most of the Southern California cities through the great aqueducts now being built.

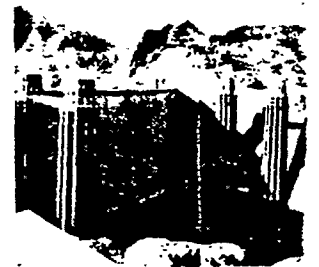
Some of the pictures shown here were taken from a point about 1,000 feet above the bottom of the canyon and show this \$152,000,000 enterprise in its various stages of construction. Numerous industries have played their part in this stupendous undertaking and our own organization is not absent from the picture. During the early days of construction it was found that the buses employed to transport workers the seven miles from Boulder City did not have enough power to maintain schedules. To overcome this difficulty, auxiliary motors were installed on the side of the buses operating on V belts. In order to still better the situation the equipment was high compressioned and put on Ethyl with the result that the auxiliary motor was rarely needed. We show a picture of this unusual type of bus which has a capacity of 147 passengers.



Upstream view today.



Downstream view with water from Diversion Tunnels in July, 1933



Intake Towers above dam today.

Buses accommodate 147 workmen.





Standard Oil Co. of Kentucky Train Special Men for Ethyl Demonstrations

• FOR some weeks Mr. M. M. Smith, our Georgia representative, has been training two service station operators of the Standard Oil Company of Kentucky to give demonstrations. Mr. R. E. Hodgson, District Manager and Mr. W. S. Sutherland, Assistant District Manager of the Standard Oil Company in Georgia, have been giving their fullest cooperation to this activity. The two men assigned to this work, Messrs. Lamar Swift and Clark Lyndon, were carefully selected by the Superintendent of Service Stations in Atlanta. They were given white coats with the words "Aerotype Crown Ethyl" on the back. The plan is to use them for a day or so at each station in Atlanta, giving demonstrations to all customers who might happen in or are invited by the station operators. A large sign is set up announcing that the demonstrations are being held. The accompanying pictures were taken at the New Oxford Road and North Decatur station, one of the largest in the city. In one, Mr. Swift is shown giving a demonstration to Mr. Sutherland and Mr. Hodgson. Another is of Mr. Smith of our Atlanta Division flanked by the two Standard Oil District Managers and a view of Mr. Swift standing beside his demonstrator.

A Boost for Ethyl from Melbourne

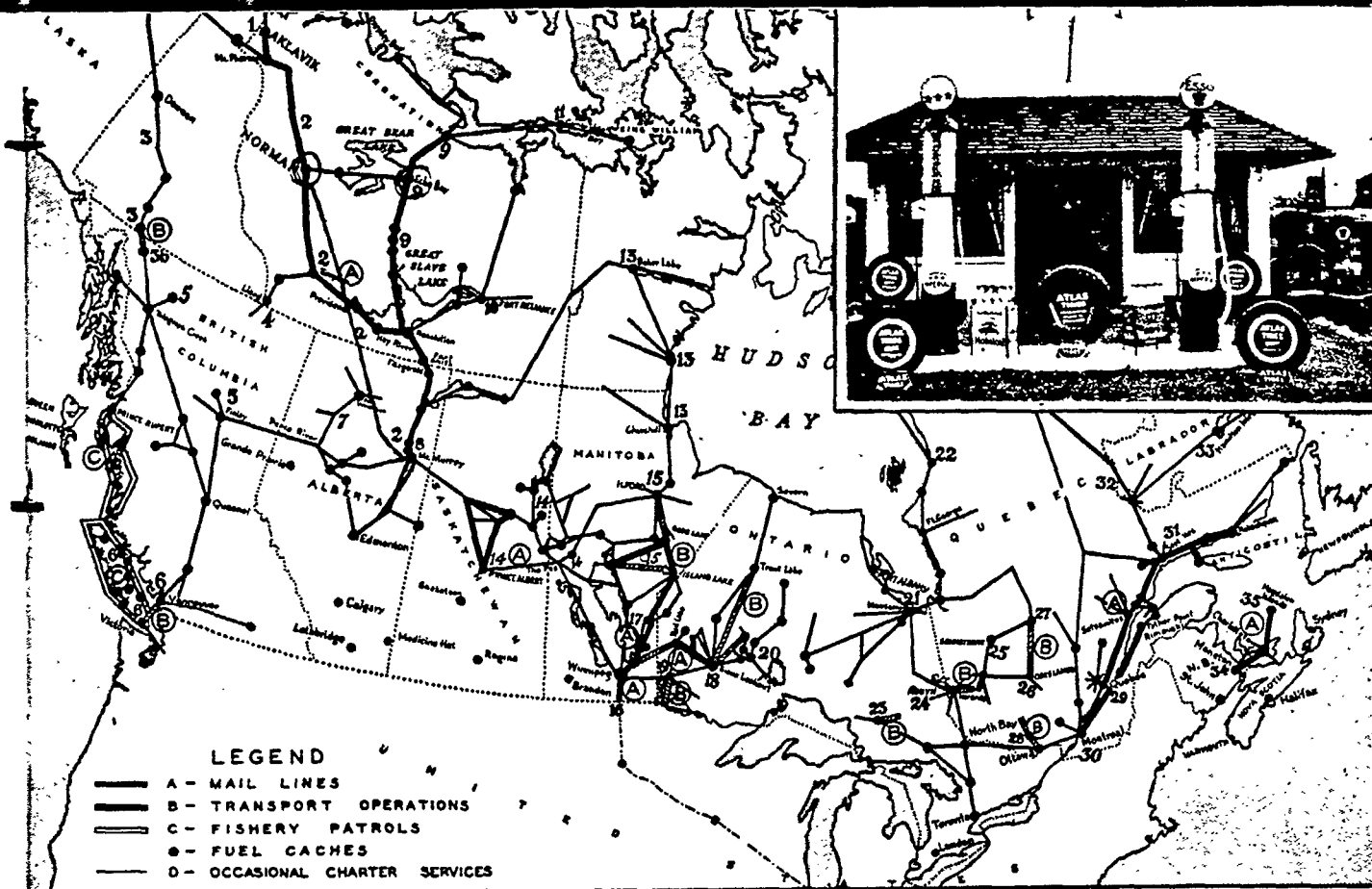
• "In a recent moving picture, widely distributed throughout the British Empire, entitled "Bulldog Jack," starring the popular English star, Jack Hulbert, an incident occurs which should stand as a shining example to all service station operators in the Ethyl Empire. ✓

Two unscrupulous villains bind and gag a service station operator in order to take his place in servicing Bulldog Drummond's motor car. This is to give them the opportunity of removing the cotter pin holding the brake-rod in place, thereby causing Drummond's car to break down and preventing him from keeping an appointment. When Bulldog Drummond drives into the station, the imposters, in addition to pulling out the cotter pin in question, show their knowledge of good salesmanship by the following procedure: One of them meets his customer at the pump, and the moment Drummond's "Bentley" comes to a stop the attendant is at the car window with the pump nozzle in his hand, greeting him with the words, "Will this do?" Drummond replies in the affirmative and states that he will have eight gallons. The attendant puts in the eight gallons, carefully replaces the cap on the tank, and returns to the car door. Drummond tells him to charge the petrol to Captain Drummond and as the dust is settling on the drive after his departure, the attendant is shown against the back-ground of a long line of pumps, replacing the hose on the BP Ethyl pump.

While few motorists would appreciate having their brake-rods disconnected, we could not help but admire the way in which the villain sold his customer the world's highest quality petrol."

(The above letter was received from an Ethyl rooster in Melbourne, Australia.)

• "AUTOMOTIVE INDUSTRIES" reports in its weekly letter at the end of Dec. that: "Despite seasonal holiday let-down in motor vehicle production, the activity of the first three weeks of the month indicates an output of close to 400,000 units for December and virtually assures realization of the latest Automobile Manufacturers Association projection of 4,150,000 units for 1935."



WHERE THE SUN STAYS OVER THE MOUNTAIN

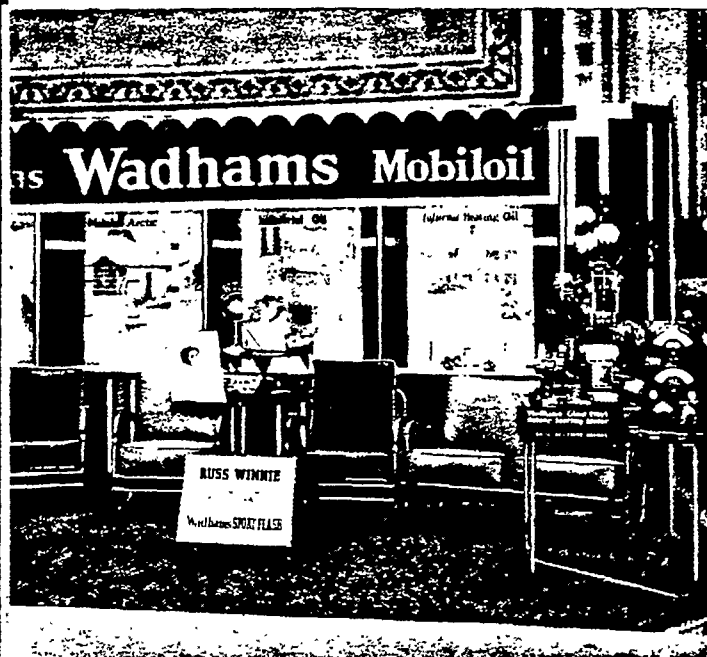
• THE "Land of the Midnight Sun"—a picturesque name surely, but how many living to the south realize how literally it describes that portion of the earth's surface adjacent to the poles.

We are indebted to our Mr. C. J. McFarlane of the Toronto Division who headquarters in Calgary, Province of Alberta, for the accompanying pictures and notes on this far north land. Incidentally he informs us that the "sales of Ethyl in Edmonton have shown a very satisfactory increase in 1935." He also gives percentages of

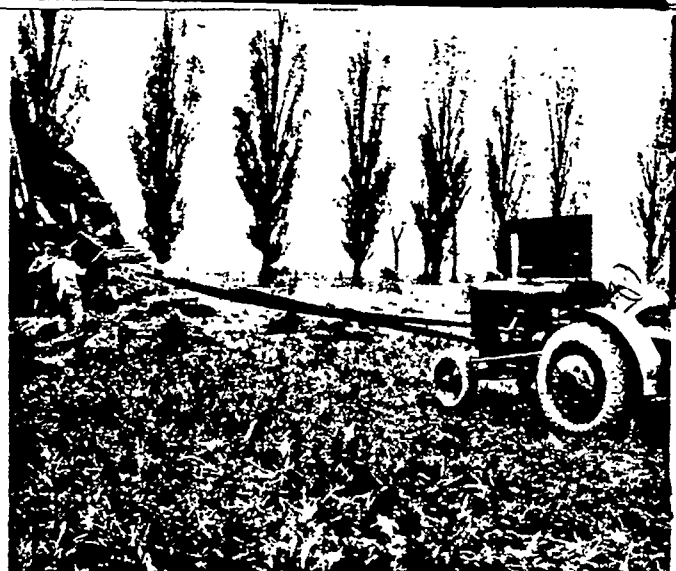
Ethyl sales to total gasoline output for the first nine months of the year, as shown by five of the leading distributors there, which are surprising. They run from 30% to 74%.

Edmonton is the most northerly city in Canada, being in 53.35 latitude and 113.30 longitude but there are many villages and towns considerably further north. In fact one settlement, Aklavik, is 1942 miles to the northwest. At Fort Norman, which is 1184 miles north of Edmonton,

(Continued on page 13)



✓ On November 24th, the Milwaukee & Wisconsin Exposition, held at the Milwaukee Auditorium, came to a close—a dynamic exposition lasting nine days. It gave industrial and commercial enterprises of Milwaukee and the State an opportunity to display to 130,319 people their machinery IN OPERATION, products IN USE, service IN SERVICE—the most unique, interesting and educational exhibit ever offered to the local public. The Exposition was sponsored by the Milwaukee Association of Commerce and endorsed by the Wisconsin Manufacturers Association and the State Chamber of Commerce. The nationally known Ted Weems Orchestra supplied the music supported by such famous radio stars as the Mills Brothers, Pickens Sisters and others. The Wadham's Oil Company installed our demonstrator in their booth which was viewed by thousands in attendance. A special feature, as shown by the accompanying photograph, was offered by Wadham's in the person of Russ Winnie, sports announcer, who gave daily broadcasts from the booth. Due to the extensive advertising campaign launched for the promotion of that company's Giant Ethyl, particular interest was shown for our demonstration.



Ohio Farm Bureau Tests

• HERSHEL DEDO brings to a close a season of intense activity on farm tractor demonstrations in the Dayton Division. The effectiveness of his work, most of which has been in cooperation with the Ohio Farm Bureau, is pointed out in the Farm Bureau News of December on page 18, under the heading "Why Not High Compression in Farm Tractors." The article speaks for itself and will doubtless be read by no less than 20,000 subscribers. At this season of the year a farmer has completed his strenuous activities and we are assured by those who know, that the greater portion of his time is devoted to the reading of articles appearing in the journals dealing with farm problems. Mr. Dedo was responsible for having had prepared and distributed to 4,000 delegates attending the Ohio Farm Bureau Cooperative State Convention recently held at Columbus, the following report, entitled "Is High Compression Practical." Photo shows the high compression test tractor at work on a thrashing job.

RESULTS OF TESTS CARRIED OUT IN CONNECTION WITH FUEL DEMONSTRATIONS SPONSORED BY OHIO FARM BUREAU

County	Date	Tractor	Time Plowed	Acres	Gals. per Acre	Grade
Fairfield	10/25	CO-OP LC	31M.	.6518	2.957	1.928 70 Octane
		CO-OP HC	32½	.9725	1.982	1.928 70 Octane
Highland	10/26	CO-OP LC	33½	.723	2.42	1.75 Clear
		CO-OP HC	35	.995	1.76	1.75 70 Octane
Sandusky	11/6	CO-OP LC	27½	.406	4.31	1.75 70 Octane
		CO-OP HC	28½	.584	2.99	1.75 70 Octane
Lake	11/7	CO-OP LC	30	.576	3.03	1.75 70 Octane
		CO-OP HC	31	.882	1.98	1.75 70 Octane
Tuscarawas	11/9	CO-OP LC	18½	.332	3.01	1.0 Clear
		CO-OP HC	19½	.547	1.82	1.0 70 Octane

Average fuel consumption per acre:

CO-OP Low Compression—3-14 Gallons per Acre

CO-OP High Compression—2.10 Gallons per Acre

CO-OP High Compression Tractor Used 49½% less fuel per acre.

CO-OP High Compression Tractor with 3-14" Plows

CO-OP Low Compression Tractor with 2-14" Plows

Where 70 Octane is mentioned on the above table it refers to Farm Bureau Q gasoline. For further details see your County Farm Bureau Cooperative Managers.



• BACK ROW LEFT TO RIGHT: M. I. McCoolley (Va. Fieldman E.G.C.), Mr. Goodykoontz (Tire-Battery-Accessory Mgr.), Joe Costello (Asst. D. M. of Balto Div.), Mr. F. Billups (Marketing Asst.), Mr. Leckie (Asst. Retail Mgr.), Mr. Owens (S. S. Supervisor).

• FRONT ROW: Frank Cronin (E.G.C.), F. M. Brown (Merchandising Mgr.), Mr. Harvey Skehan (Division Mgr. S.O.N.J.), L. W. Shank (Div. Mgr. E.G.C.), Walter Phillips (Lube. Asst.), Wm. Hewlitt (Asst. Wholesale Mgr.)

Virginia Division of Standard Oil Co. of N. J. and Ethyl's Baltimore Division Cooperate in Esso Drive

✓ The Virginia Division of the Standard Oil Company of New Jersey have determined to put over this year's Esso drive in a big way by holding meetings of a somewhat different type. As they had only a few days to get things going they welcomed our offer of cooperation. On December 6th Messrs. Shank and Costello held a conference with Standard officials in Richmond for the purpose of laying out a program and other necessary details.

It was decided to put on a two act skit using a stage to represent a Standard Oil station. The first act portrayed the regular Esso customers being informed by an attendant that in line with Company policy Esso had been increased to 80 Octane rating together with other improvements. The interview closed with the suggestion to the customers that he spread the word to his friends. The second act showed the regular leaded users being converted to premium fuel. Following the playlet, a talk was given stressing the five talking points of Esso.

The first meeting (at which accompanying pictures were taken) was held at the John Marshall Hotel in Richmond and attended by over 100 officials and employees of the Standard Oil Company. An incident which took place here is typical of the whole-hearted cooperation our fieldmen are ready to give our licensees. Mr. Cronin (Baltimore Division) had been selected to take part in the show and a wire was sent him to be in Richmond in the morning. Unfortunately the wire failed to reach him with the result that on the day in question he was in Charlotte, over 300 miles away. When finally reached, he started by motor but the car broke down about 50 miles out of Richmond. Another car was dispatched, together with the script of the act and it was necessary for him to get to town, learn his part, dine and prepare for the performance, all in the space of three hours. We learn that notwithstanding, the act was put on in a manner that brought praise from the audience.

At the close of the performance, talks were given by Mr. Costello of our own company, Mr. F. M. Brown, Merchandising Manager, and Mr. Walter Phillips, Lub-



rication Manager of the Standard Oil branch. Also Mr. Shank, our Baltimore Division Manager, and Mr. Skehan, Standard's Division Manager, spoke briefly.

The same program is to be carried out in all the large cities of the state as well as by other divisions of Standard, including North and South Carolina, Maryland, District of Columbia and Delaware and will be continued through January.

The sets were built by the General Outdoor Advertising Company and so constructed that they could be readily packed for easy transportation to the various meetings.

WHERE THE SUN STAYS OVER THE MOUNTAIN

(Continued from page 11)

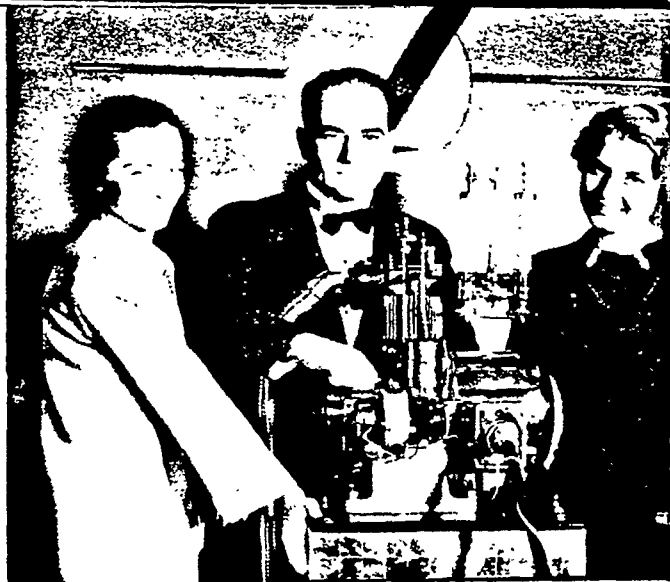
or just 100 miles below the arctic circle, the Imperial Oil Company, Ltd., operates a small refinery. The picture shown here of the "midnight sun" was taken at Great Bear Lake which is in approximately the same latitude as Fort Norman. It was taken on June 23rd, 1935, and shows the sun in its orbit from 9:30 p.m. until 2:30 a.m. The lense was exposed every 15 minutes during the five hours, thereby showing 21 positions of the sun. Where it shows at its lowest point on the horizon, or the eleventh exposure, it marks 12 o'clock midnight. Were a similar picture taken in December, the arc would be reversed and of course the sun would show at its highest point at noon at which time of the year there is only about two hours of sunshine.

Edmonton is the "hopping off" place for this whole Northern district as may be seen by a glance at the Canadian Airways, Ltd., map. The population is about 7500 and being the distributing point for a little short of 80,000 square miles, a very large quantity of Ethyl is used as most of the travel is by plane. The temperature ranges from 98° in the summer to 52° below zero in the winter but despite this, wheat is grown for hundreds of miles north of Edmonton and in fact the world's championship for wheat growing has been won in the Peace River district, 400 miles to the north, for some years past.

One of the illustrations show the Imperial Oil Ltd., exhibit at the Edmonton Fair this year with Mr. McFarlane's demonstrator which was employed with very satisfactory results.



• ASSOCIATED'S BOOTH at San Francisco Auto Show with crew. Messrs. Chenault and Martin, first and fourth from left.



• MR. MARTIN demonstrating—and he gets paid for it.

Aviation Ethyl at the San Francisco Automobile Show

• THE ASSOCIATED OIL COMPANY's desire to increase the sale of Aviation Ethyl Gasoline and stimulate the public's interest in its Motor Check System again made itself evident at the San Francisco Automobile Show. In years past the Associated Oil Company has not taken booth space at the Show, but this year its executives believed the new fuel and the motor check system would combine in presenting an attractive and unusual exhibit.

Mr. Jack Martin was called into conference and plans were made to present to the public the story of Aviation Ethyl Gasoline and Associated's Ethyl Motor Check Service. A program was arranged so that one part of the exhibit would not conflict with the other. First, the merits of Ethyl Gasoline were discussed and demonstrated by Mr. Martin and Mr. Hume Chenault, both of our Los Angeles office. After this, a representative of the Associated Oil Company briefly discussed each of the steps taken at the Motor Check Stations. These were illustrated in pantomime by another representative of the Associated Oil Company with the assistance of apparatus and a chassis. Upon the completion of this portion of the demonstration, members of the audience were requested to ask questions and remain for a discussion of specific problems. Two young ladies, one stationed at each end of the booth, dispensed motor check invitations and literature. Between demonstrations, pictures of recent football games were run in a space immediately adjoining the main exhibit, and these were discussed by an unseen announcer, giving the effect of talking pictures. Including our two representatives, seven persons were on duty at the exhibit the majority of the time.

Crowds of nearly two hundred were reached by the evening programs, and it is estimated nine thousand persons witnessed the demonstrations between the opening of the Automobile Show November 2nd and its close, November 9th. Comments made by the directors of the Automobile Show indicate the entire exhibit drew more than a fair share of attention and created much interest in Aviation Ethyl Gasoline. An appreciable increase in the number of cars received at the San Francisco Motor Check Station was experienced, and investigation showed many had recently become Ethyl Gasoline customers because of their visit to the Show.

ASSOCIATED AVIATION ETHYL IS SURE BET

*Eldon Wolfe Willing to Wager Two-Cent Difference
on Performance Increase*

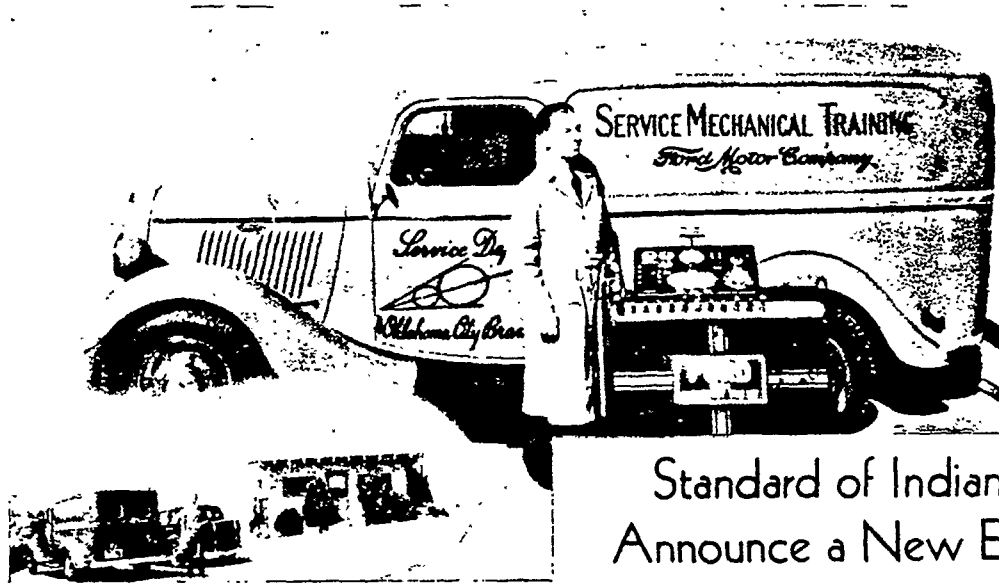
Many Smiling Associated Dealers are becoming more and more enthused every day as Aviation Ethyl sales continue upward and customers flock in with glowing testimonials of performance and mileage.

But here is one who is so sold on the Fuel of the Future that he offers to wager any customer the two-cents difference in cost that Associated Aviation Ethyl will prove a bargain many times over. He is Eldon Wolfe at Aberdeen, and we reproduce his letter:

"I am not a gambler on anything but Aviation Ethyl, but I will bet with anybody on Aviation Ethyl and always win another satisfied customer."

"My bet is to put Aviation Ethyl in their tanks with the understanding that it has to prove to their satisfaction that it is worth the two cents extra. If it does not, they pay me for Flying A."

"I have built my Aviation Ethyl sales up over 300 per cent and am still going strong."



Hamilton with Ford Training School

• IT WAS quite a revelation to us in Oklahoma to observe the lengths to which the Ford Motor Company goes to train their service men and salesmen in all technical details of their products. Not only were the mechanical parts discussed but even cooling, lubrication and fuel systems were thoroughly covered. Our Mr. D. E. Hamilton, automotive representative, made this observation as a result of proffering his service to the Ford branch staff at Oklahoma City, where a primary meeting was held for the branch service department. The information contributed by Mr. Hamilton was considered of such merit that it was agreed that he should impart this knowledge to all service men in the Oklahoma territory. To this end he accompanied the Ford Service Mechanical Training School in a V-8 Ford de Luxe Sedan, equipped with a 600 Series gasoline demonstrating motor and portfolio with cuts of the V-8 engine, on a tour contacting more than 1590 service men at 54 schools in 18 towns.

The branch service school instructor and zone service managers conducted the schools, holding two night classes of approximately three hours duration in each town. This instruction was followed by a written examination to crystalize the technical information imparted. Mr. Hamilton says it was gratifying to work with men of such calibre, who have been in service work for many years and have developed their technique to such a high plane as to get the maximum performance and economy out of the V-8.

The two views show the Ford Training Truck and a station in the Arbuckle mountains at Turner Falls, Okla., with the Training Truck and our own demonstrating car parked side by side. One of the Ford instructors is shown standing near by.

Standard of Indiana Announce a New Ethyl

• THE Standard Oil Company of Indiana on December 1st introduced in their territory a new Ethyl Gasoline to be known as Solite with Ethyl. The name Solite replaces the former Red Crown Ethyl in the Standard Oil Company of Indiana's line of motor fuels sold at service stations. Solite was the brand name for the company's premium gasoline a number of years ago but was withdrawn early in 1931. At that time Solite did not have Ethyl fluid in it and sold as high test gasoline. The new Solite Ethyl now becomes the company's first grade motor fuel; the Standard Oil Red Crown, the second or regular grade and Standolind, the third grade. Announcement of Solite with Ethyl was made during the company's regular Sunday evening radio program in conjunction with Jack Hylton's orchestra. A newspaper announcement followed the radio announcement on December 2nd and in a very formal type of advertisement.

The Standard Oil Company of Indiana announces that its new Solite Ethyl has been introduced to satisfy the demand for the very best and calls this new fuel a superlative new gasoline at two cents a gallon more than regular and worth it. The anti-knock rating on the new Solite Ethyl is the very top for this class of motor fuel. The new Standard Solite Ethyl will continue to carry the crown shaped globe in white which has previously been used on Standard Red Crown Ethyl pumps. In conjunction with the announcement of the new Solite with Ethyl, the Chicago division of the Ethyl Gasoline Corporation immediately made arrangements for a number of sales promotion meetings to be held for Standard Oil service station men throughout their territory. These meetings will be continued through the month of December and it is expected that following them there will be a large number of service demonstrations on the new product.

The introduction of the new gasoline is felt to be of major importance in a move towards premium fuel sales volume for 1936. Even at this early date, (Dec. 13th) brief surveys indicate that the new fuel is already receiving wide public acceptance.

Newsbriefs



• We have just learned from our Dayton correspondent that an impending event has cast a gloom over the whole Division with the probable exception of the one chiefly involved. It seems that Miss Cecilia Jane Barkmeyer, senior secretary of the Dayton office, has announced her engagement. The lucky man is Mr. Thomas M. Ryan a life long resident of Dayton and instructor in one of the City's high schools. The announcement came as a surprise even to Miss Barkmeyer's intimate friends, several of whom had predicted that Cecilia was too interested in her work to ever consider marriage. Before this goes to press she will be Mrs. Ryan and the young couple will have received the best wishes for happiness and success from all. The wedding is set for December 28th and their honey moon will be spent in the east.

• And we have just learned, as we go to press, that the beautiful diamond Miss Patricia Sevier received on Christmas did not come from Santa Claus but from Mr. John Appert of Allendale N. J. We don't know the date set for the wedding but are reminded that 1936 is leap year. In case you don't know it 'Pat' is in Russell Weston's office and is Edith Badeau's sister-in-law.

• David W. Beggs, Jr. joined the field staff of the Chicago Division on October 21st, 1935. He comes from Columbus, Ohio and at the present time is residing in Evanston, Ill. with his wife and son. Mr. Beggs attended Williams College and the University of Ohio. We welcome him into the organization and wish him the best of luck in his new work.

• Here's proof they read the "News"—this is a memo from our Dayton correspondent: "Colonel Harry Mack of the Dayton Division would like to have it known that it was 'Brigadier General Mack' who backed into a cactus in California."



• How the mighty have fallen! The great exponent of bachelorhood has finally betrayed his diminishing army of followers. Louis Shank, czar of Baltimore, has been successful in his latest selling campaign and is engaged to a very charming young lady. The future Mrs. Shank is Miss Lillian M. Swift of Iowa City, Iowa, who is now with the public school system in Baltimore. We're wondering what all this will do to Louis' ping-pong game, of which we have heard so much.

• Another assault on the benign order of bachelors of the Tulsa Division is now in full swing. The quintet of discriminate men, represented by Hamilton, Hendrick, Peters, Kuhe and Meurer, is about to be disrupted by the last named, who some time this spring plans to trade his constitutional rights of free speech and pursuit of liberty, for an option on matrimonial bliss. In other words, a very charming and beautiful lass by the name of Frances E. Martin of Tulsa and our Carl, have announced their engagement.

• On December 3rd, 1935, a daughter was born to Mr. and Mrs. George Chave. Mrs. Chave was formerly Mr. Harry Kaley's secretary in the New York office but resigned last June.

• Coached by George Gier of our Tulsa Testing Laboratory, the Marquette (Okla.) High School football team have just completed a very successful season with a 6-6 tie game with the alumni eleven. As head coach for this group of young athletes, George has spent all of his leisure time with them during the past football season.

• FLASH! Born November 30th, 1935, to Mr. and Mrs. Douglas P. Jeppe of Batesburg, South Carolina, a daughter by the name of Joyce Covar Jeppe. No other specifications as to weight, length, etc. available at this writing. Our heartiest congratulations to Mr. and Mrs. and Miss Jeppe.

• We understand that on December 4th, 1935, Bill Schulze, formerly of the Detroit Laboratory but now located at the San Bernardino Laboratory, became the proud father of a baby boy. As a matter of record we would be glad to have the usual statistics. Our best wishes go to the Schulzes.

• We note the following item which appeared in a Wilmington Delaware paper: "J. David Chalfant, (chemist for Ethyl Gasoline Corporation) has a small snow-white French poodle which weighs less than five pounds. Yesterday she was bathed and then permitted the run of the grounds. Finding a skunk near the house she promptly chased him into the cellar. The skunk objected to this chasing, in its skunkish way. Mr. Chalfant is pleased that he has an oil heater in his cellar and doesn't have to go down often to attend it. The skunk was allowed to escape. The dog is not permitted in the house."



CHICAGO DIVISION SPORTS PAGE

"OR OFF THE RECORD" WITH THE FIELD STAFF

• MAYBE we ought to head this page "Big Fish of the Chicago Division", but one at least, we note is a golfer, and we know the division manager wields a mean niblick and is one of the best mixers we have. Ass't. Manager Wyrick, Guy Donohue, Bill Heck, Jack Steelman, Chuck Smith and Art Wilt are other fieldmen who do not put themselves on record as having a hobby but we know they're sportsmen all. At some later date, however, we hope to complete this rogues gallery.

Well, here they are: (1) Il Duce with a couple of big ones? No, it's only Ben Crane proclaiming his success. And then we find (2) Mrs. Hedden and Bond, of Madison, Wis., with the minnow they landed last summer. "Persistence wins in fishing" says Bond who learned this in his courting days. (3) Claire Dees, of Minneapolis, shows you a nice catch of bass from one of the northern lakes in his territory. He admits they are plentiful up

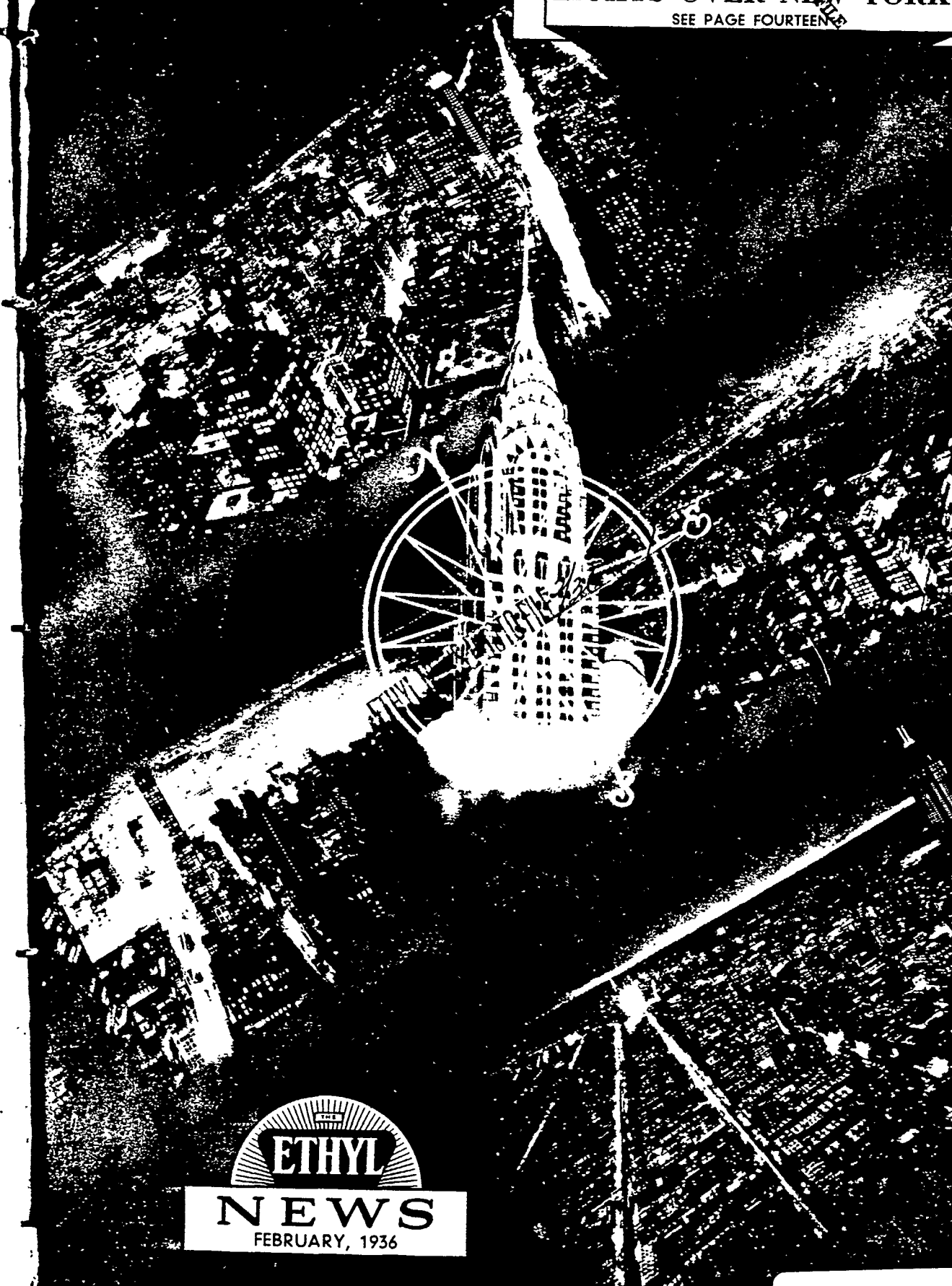
there. (4) Lowell Dollahan of Grand Rapids can just about lift the 25 pike he took from Lake Kabetogawa, Minn., in one half day's fishing last September. (5) Balancing himself on the end of the dock we see Fred Naylor holding one hundred pounds of fish in one hand, caught in Minnesota during a day's fishing. These are only the ones he kept. All the little ones he threw back. (6) The lone golfer, who must feel like a fish out of water with this aggregation of nimrods, is none other than Chuck Colvin who is ready to match cards with George Warren of Atlanta. You'll note he has just finished a demonstration and from appearances we believe he's "sold" his audience. (7) And here we have the biggest fish of all, Russ Burroughs, but he landed himself without any hook or tackle. He's the only one in the Division who can catch them with his hands.



ETC 21107

LIGHTS OVER NEW YORK

SEE PAGE FOURTEEN



NEWS

FEBRUARY, 1936

ETC 21108

STANDARD OIL COMPANY
NEW YORK, N. Y.

To All Members of The Sales Department

- WITHIN the past several months considerable publicity has been given to various refining methods which will improve the anti-knock quality of gasoline. Such terms as catalytic reforming, catalytic desulphurization, polymer production (polymerization) have become words of common usage in the oil refining industry and claims made for these processes and the large quantities of excellent anti-knock gasoline which they will produce may have led some members of the Sales Department to wonder whether or not these processes might entirely supplant the use of lead by refiners in this country.
- THERE are altogether too many unknown factors to permit anything except a guess as to our future. As against that, however, our business was started with many predictions for its failure. It has increased year after year in spite of new refining processes, blends of gasoline with other products, etc., which were going to "put us out of business".
- IT has never been our policy to make derogatory statements about competitive methods of securing anti-knock value, nor can we make predictions as to future attainments in refining practices. We do not look upon improved refining methods as competitive, it being our feeling that as improvements are made, the use of our product will supplement them in giving the public greater value for its money in gasoline. We believe that we and our customers have a common goal, namely, improvement in motor fuel, but they, however, are the ones who, on a competitive basis, will decide the future of our business.
- IF the past is any indication we feel that as we look ahead we may have every confidence in the fact that until the oil industry produces a knockless fuel, there will always be room for an additive to improve the anti-knock quality of motor fuel and that the use of lead will continue.
- FROM a merchandising standpoint, we cannot and should not attempt to stand still. The day of the man "who built a better mouse trap" has gone and in today's competitive markets good products must be merchandised and sold. Ours is supported by a substantial advertising campaign. This, coupled with conscientious work on the part of members of our Sales Department, can have considerable influence in making our economic future more secure.

J. C. Taylor

To A
The :

Unless otherwise in-
dicated, all artwork and
photographs destroyed t

May 1957.

• WITH
refining
catalyti
have be
these pi
produce
these pi

• THE
to our f
for its f
of gaso

• It h
method
ments i
petitive
suppler

that we and our customers have a common goal, namely, improvement in motor fuel, but they, however, are the ones who, on a competitive basis, will decide the future of our business.

• If the past is any indication we feel that as we look ahead we may have every confidence in the fact that until the oil industry produces a knockless fuel, there will always be room for an additive to improve the anti-knock quality of motor fuel and that the use of lead will continue.

• FROM a merchandising standpoint, we cannot and should not attempt to stand still. The day of the man "who built a better mouse trap" has gone and in today's competitive markets good products must be merchandised and sold. Ours is supported by a substantial advertising campaign. This, coupled with conscientious work on the part of members of our Sales Department, can have considerable influence in making our economic future more secure.

icity has been given to various
ality of gasoline. Such terms as
er production (polymerization)
g industry and claims made for
i-knock gasoline which they will
rtment to wonder whether or not
y refiners in this country.

ermit anything except a guess as
is started with many predictions
f new refining processes, blends
n "put us out of business".

r statements about competitive
t predictions as to future attain-
roved refining methods as com-
ade, the use of our product will
ts money in gasoline. We believe

J. C. Taylor



Vol. 3, No. 2

ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

FEBRUARY, 1936

Published monthly by the Ethyl Gasoline Corporation for the entertainment and benefit of the members of its organization. Address all news items, correspondence or other material to the Editor, W. Cary Harris, 35th floor, Chrysler Building, New York City.

W. CARY HARRIS - - - - - Editor

Associate Editors

EDWIN DOWNS

RUSSELL B. WESTON

CORRESPONDENTS

Atlanta Division	GEORGE W. WARREN
Baltimore "	L. W. SHANK
Boston "	DONALD S. FLYNN
Chicago "	A. B. WYRICK
Dayton "	VINCENT KEENAN
Kansas City "	C. M. BERRY
Los Angeles "	R. G. LOSER
New York "	R. C. MURPHY
Toronto "	J. N. FITZGERALD
Tulsa "	HARRY KUHE
Engineering Dept.	JULIAN J. FREY
Manufacturing Dept.	ARTHUR P. STOVER
Gasoline Testing Dept.	LESTER B. ROBERTS
Export Dept.	HUBERT FOSSETT

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH

How Big Is Business?

By BIRD REES

✓
• MOST of the common fallacies and misunderstandings about business—its size, distribution, ownership, earnings—result from insufficient information. The most effective and enlightening answer to much of the current irresponsible preachings of demagogues and the uninformed is to be found in official facts published by the government and other recognized authorities.

On July 1st, 1934, there were nearly two million active industrial and commercial concerns doing business in the United States. About 20% had capitals of \$10,000 or more; approximately 7% had at least \$75,000; and less than 3% had a half-million or more. Census figures show about 606,000 individuals qualify in managerial occupations. There are some 312,000 manufacturers whose concern and responsibility are to bring the abilities of 14,000,000 workers to the full flower of their serviceability.

Incomes by partnerships and individually owned business are reported on individual income tax returns, which makes them too complicated to compute for the purpose of this article. Incomes from individual returns "from business" total 1.4 billion dollars, and "from partnerships" 600 million dollars. There were 504,080 corporations and 214,881 partnerships who reported on incomes of 1933 for Federal income tax purposes. Of the total corporations making returns, 109,786 reported net incomes totaling just under three billion dollars; 337,056 showed deficits of about five and a half billion dollars; the remaining 57,238 were inactive—returns showed no income data. The total tax paid was \$423,068,134, an average of 10.6% of net income. Compared to the previous year, net income increased 33% by numbers and 38% by dollars. Deficits decreased; 8.7% by numbers and 29% by dollars.

Whenever active business men are called upon to defend business against common fallacies and misunderstanding, basic facts are essential material to have in mind.

ETC 21111

MEET MR. LEWIS



✓ • OSCAR B. LEWIS was born in Brooklyn, N. Y. on January 19th, 1898. He received his elementary education at the public schools of Cranford, N. J. after which he entered Dartmouth College in the class of 1919. When the United States entered the World War, Mr. Lewis left college and enlisted in the Aviation Service. His ground school work was completed at Princeton, N. J.; primary training at Memphis, Tenn. and advance training at Ellington Field, Houston, Texas. Upon completing his course in aviation he was commissioned a Second Lieutenant and detailed as an instructor at Ellington Field where he remained until his detachment was mustered out of the service.

Prior to his association with the Ethyl Gasoline Corporation, Mr. Lewis was employed in Texas with an independent producer and also as scout for the Humble Oil & Refining Company. Transferring from Humble to Standard Oil Company of New Jersey, he entered the Bayway School and later joined the Standard Development Company. In February 1927 he came to the Ethyl Gasoline Corporation and engaged in promotional work in New York and New England. The introduction of Ethyl Gasoline in England took him to that country and while there he supervised the establishment of blending plants and other details connected with the sale of Pratts Ethyl Petrol. Returning to the United States he resumed his duties in the Mid West but in the latter part of 1929 he was transferred to Baltimore and shortly thereafter appointed Division Manager. In July 1935 he came to New York to take up the duties of Assistant Sales Manager.

Mr. Lewis was married while in England and now makes his home with his wife and two children at Mamaroneck, New York.

Manufacturers Announce H. C. Farm Tractors

• THE Oliver Farm Equipment Company, with headquarters at Chicago, has announced a new model Farm Tractor. It is known as the "Oliver Row-Crop 70". The new tractor is designated as the Model "70" because of the fact that the engine is designed to operate exclusively on 70 Octane Gasoline. This represents quite a radical departure from the conventional method of naming tractor models. To date most manufacturers have named their various models according to the horsepower rating of the machine. For example, a "Model 15-30" would mean that the tractor had a rated Drawbar Horsepower of 15 and a rated Belt Horsepower of 30. Some manufacturers did not rate their machines and merely designate their various models with letters, as "Model W", etc.

The new Oliver "70" possesses several features that are entirely new to the Farm Tractor industry. It is powered with a six cylinder High Compression valve-in-head Engine. The displacement of the engine, which is Oliver designed, is 201 cubic inches. The standard compression ratio is 6.5 to 1. The combination of a variable speed governor on the engine and a 4-speed transmission gives the machine much greater flexibility and operating economy than can be obtained by the conventional tractor practice of using a constant speed engine and a 2 or 3 speed transmission. Another feature of the Oliver "70" that is entirely new to the industry is the "streamlining" of the chassis. This "eye appeal" is having a noticeable effect on sales. In line with the general automotive practice followed in its overall design, the Oliver "70" is equipped with a self starter and lights as standard equipment. A Radio is available as an extra, and all of the demonstrators are equipped with radios. Rubber



tires allow it to operate on the highway as well as in the field and supplemented by a rubber tired trailer, it will in many cases take the place of a truck.

In order to offset any possible sales resistance against an exclusive gasoline burning tractor that might be promoted by their competitors who still market kerosene burners, Oliver offers as optional equipment a low compression cylinder head and a hot manifold which equipment enables the tractor to operate satisfactorily on low grade fuels. It is of interest to note that to date not a single low compression unit has been sold. The standard High Compression model has constituted 100% of Oliver's production. This means that so far as Oliver is concerned High Compression has been enthusiastically accepted by the American Farmer.

* * *

The Cleveland Tractor Company whose factory and main offices are located in Cleveland, Ohio, has also announced High Compression Tractors. This company manufactures crawler tractors exclusively, one of which is shown below. They have six models, namely, "Cletrac 20", "Cletrac 25", "Cletrac 35", "Cletrac 55", "Cletrac 80" and "Cletrac Diesel 80". The model numbers refer to the approximate Drawbar Horsepowers.

All models are powered with six cylinder engines, with the exception of the "Model 20" which is powered with a four. Self starters are standard equipment on all models and headlights are available as an extra. With the exception of the "Cletrac Diesel 80" all other models have always been marketed as straight gasoline burning tractors. However, the compression ratios were sufficiently low to accommodate third grade gasoline. From now on all models will have a compression ratio sufficiently high to take full advantage of the antiknock value of 70 Octane Gasoline. High Compression engines

(Please turn to page 11)



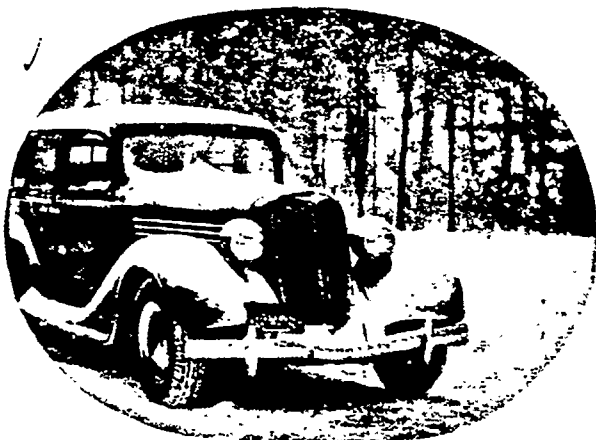


• THIS framed display board was arranged through the efforts of Mr. A. H. Bingham of our Dayton Division. It is shown at the Cleveland Branch of the United Motors Service where tune-up work is being done on a large scale. The board will later be moved to United Motors branches in Canton and Youngstown.



• THESE are strange sights for South Carolinians, the like of which have rarely been seen. One shows a cotton field literally incased in ice and a peach orchard firmly in the grip of old man winter. The car might well be parked up New England way but it's in Raleigh. Another view is of a cypress swamp near Sumter, S. C. Mr. St. Germain, who forwarded this snapshot, says "It's unheard of for one of these to freeze solid like this." The other pictures were contributed by Mr. Jeppe, South Carolina representative.

"WATCH THE FORDS GO BY" and when they've served their time on the road some still keep going. This old "Lizzie" is doing her turn as a sawmill near Liberty, S. C. She doesn't get anywhere but goes on just the same. No Ethyl gallonage here.



Here and There

✓ The city of Chattanooga, Tennessee, in the past ordered their supplies of gasoline using the terms "high test" and "plain". Under these names some oil companies supplied Ethyl Gasoline and leaded non-premium gasoline, while others delivered regular gasoline for "high test" and third grade for "plain". Realizing the great difference between the gasolines, the purchasing agent, at the suggestion of Mr. Sidney Pruitt our Tennessee representative, makes sure of his quality by ordering Ethyl Gasoline and leaded non-premium gasoline by name. The city consumes 200,000 gallons of leaded regular and 100,000 gallons of Ethyl yearly.

✓ A meeting was held for the members of the Association of Former Students of the Montreal Technical School. Thirty-nine were present and the lecture and demonstration were well received. Mr. Conner, our Montreal representative informs us that some unexpected assistance from the superintendent of the garage of the City of Verdun Roads and Department was received during the discussion afterwards. It seems that he was very much impressed with the demonstration which was put on for him during the Fall when the demonstration campaign for the McColl Frontenac was being carried on. The Roads Department have now changed to Ethyl and are well pleased with the results. The Verdun Fire and Police Departments were already using Ethyl at the time of the campaign.

✓ From the sales figures for the first ten months of 1935 it is evident that the Los Angeles Division is having great success in their efforts to sell Ethyl Gasoline. For the period they not only matched the gain of all other Divisions combined but had 5,033,112 in addition.

✓ The Dayton Division anticipate the highest total first quarter gallonage in its history this year. Due to a recent change in the date requiring new license plates for cars and trucks in Ohio, the storing of 50,000 cars as of January 1st has been eliminated. These Ohio cars can now continue to run through the winter months and 1936 license tags are not required until April 1st. The trend to advance the licensing date has been noticeable in several states in recent years. Ohio now joins its neighbor, West Virginia, in permitting these cars to operate through the winter.

✓ Mr. Roe Murrell, Maintenance Superintendent of the Central Truck Lines, operator of a fleet of trucks between Atlanta, Georgia and Tampa, Florida, was a recent visitor at the Detroit Laboratory. He reports the day spent with Mr. Julian Frey and Mr. Jack Taylor most interesting and profitable and his only regret was that more time was not available. The Central Truck Lines equipment has been entirely high compression by our Messrs. George Rosser and John Murphy. This fleet uses about 800,000 gallons of Ethyl Gasoline annually.

✓ The Columbia Refining Company, licensed Pennzip jobbers in Cleveland, Ohio, are doing a splendid job of increasing their Ethyl Gasoline sales. Mr. A. H. Bingham, our Cleveland representative, has held additional meetings for this company's employees and this, together with the frequent issuing of mimeographed Pennzip Ethyl Gasoline sales bulletins by Mr. Burt Zimmerman of Columbia, has helped to put the program over. They have shown an increase of 6.65% in Ethyl sales for December of 1935 as compared to the same period a year ago.

✓ At a meeting conducted for the office employees of the Rock Island Refining Company and their jobbers and dealers in the vicinity of Duncan, Oklahoma, the demonstration and talk by our Mr. J. E. Hendrick of the Tulsa Division, was

followed by a Dutch Treat lunch and entertainment. An amateur magician performed and we quote from Mr. Hendrick's report: "I never recall having left various articles inside the demonstrator while overhauling it, so you can imagine my surprise when this gentleman began pulling neckties, handkerchiefs, cigarettes and delicate articles of ladies wearing apparel from the intake manifold. So potent was his magic that I wondered if the effects of my program and perhaps the motor itself, would not disappear completely."

✓ The automotive instructor at the Armstrong High School in Richmond, Va. attended the Automotive Teachers School conducted by General Motors Corporation this past summer. While there he enjoyed the demonstration and talk on Ethyl Gasoline given by one of our representatives. It was therefore easy for Mr. McCooley of the Baltimore Division, to arrange a like meeting for the automotive classes both in the day and night schools.

✓ Mr. Louis Slack of our Dayton office has made good use of a supply of Chevrolet bulletins. Two hundred of these, which originally were introduced in the Kansas City Division, have been distributed to Chevrolet agencies as well as the Louisville, Kentucky factory branch. Mr. Slack has requested an additional supply and it is his intention to cover every Chevrolet agency in the State of Kentucky with this helpful sales information.

✓ This year gives every indication of establishing a record for the sale of license plates in North Carolina, reports Mr. Lowell Mason of our Baltimore Division. There are two reasons for this prophecy. First—much improved business conditions in this state and, Second—the drastic reduction in the cost of the license tags. The tax has been reduced from 55¢ per hundredweight to 40¢ for a like amount. This means a saving of more than \$1,500,000 to the motorists. Inasmuch as the saving is only three elevenths of the former cost it is evident motorists contribute heavily to the state coffer in this state as in others.

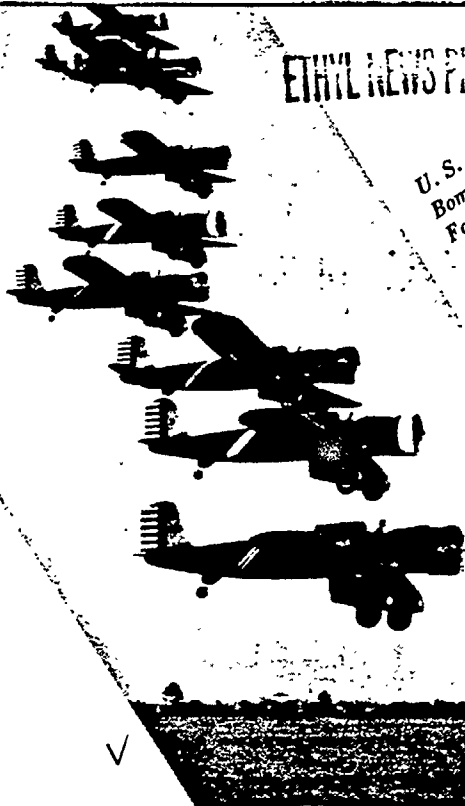
✓ At a recent sales promotional meeting held at United Motors Branch in Cleveland, Ohio, a total of 3,000 dealers, car owners and mechanics listened to Mr. Ray Faller of the Dayton Division outline the advantages of high compression and the merits of Ethyl Gasoline. Both Sales and Service Department at this United Motors station are completely sold on the merits of Ethyl Gasoline and are doing a splendid job to convert car owners to its use.

✓ Mr. W. C. Petty, our Mississippi representative, sends us the following cheery information: "Standard Oil Company of Kentucky reports that Crown Ethyl sales in Mississippi for November 1935 are 160% greater than for the same month in 1934. The most substantial gain was through their company stations where a 100% gain was noted. Increase in dealer sales and additional dealer outlets accounts for the balance."

✓ Mr. John Keyes of the Baltimore Division, held a meeting recently for the Kiwanis Club in Norfolk, which is one of the three largest clubs in Virginia. There were about 85 present and it was one of the most enthusiastic audiences Mr. Keyes has ever had. About 30 of them stayed on after the meeting and asked questions. A Reverend Wagner asked for a small amount of Ethyl Fluid, saying he wanted to use it in his sermon Sunday night; his idea being to compare gasoline without lead to the old type of religion which he said was full of knocks and heat. The new religion, which is full of love, would be compared to gasoline with Ethyl Fluid, which does not knock and which is cool.

ETHYL NEWS PHOTO FILE 2/36 No. 3

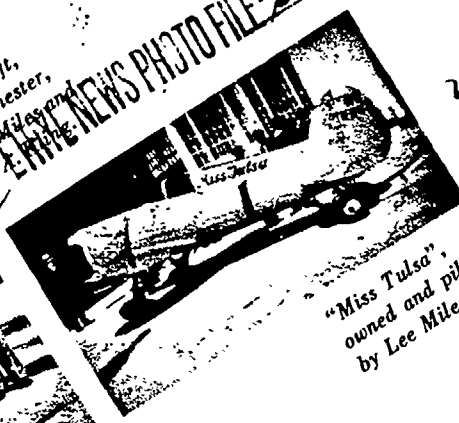
U. S. Army Bombers in Formation Flying.



From left, Art Chester, Lee Miles and R. A. Kling.

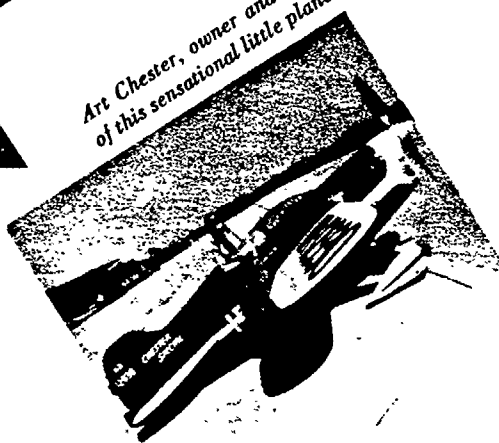


ETHYL NEWS PHOTO FILE 2/36 No. 4



"Miss Tulsa", owned and piloted by Lee Miles.

Art Chester, owner and pilot of this sensational little plane.



ETHYL NEWS PHOTO FILE 2/36 No. 2

ANNUAL ALL-AMERICAN AIR MANEUVERS AT MIAMI

ETHYL NEWS PHOTO FILE 2/36 No. 5

• MIAMI'S eighth annual air pageant was held December 12th to 14th with some 500 airplanes in attendance. Of this number at least half were military planes of various types. Aside from the opener consisting of 92 army ships in formation-flying, the most outstanding events staged by service flyers, were exhibitions by the "Hell Divers", a trio of Navy men from Pensacola, three Army pilots from Maxwell Field, Alabama, known as the "Men on the Flying Trapeze", and a third group of excellent stunt pilots who called themselves the "Three Mugs of Beer". Mention should also be made of the work done by bombardment, attack and pursuit ships of the Army G. H. Q. Air Force.

An interesting, though unscheduled event, was the flight of Captain Len Povey, Chief of Cuban Aviation Instruction, who attended with a delegation comprising a dozen or more planes of Cuba's Air Force. Included in this group was Augustin Parla, the Island's Lindbergh, who is now Inspector General of Airports for Cuba. He was the first pilot to fly solo from Key West to Havana, which feat was accomplished back in May, 1913. Another outstanding performer was Major Al

Williams, who gave as fine an exhibition of stunt flying as has ever been seen at Miami and which gained for him the title of "Air Dare-Devil No. 1".

The Col. E. H. R. Green Trophy Race brought out three unusually small fast ships piloted and owned by those well known flyers, who have become a fixture at all the large meets, Art Chester, Les Miles and R. A. Kling. Their respective ships were the "Chester Special", the "Miss Tulsa" and a tiny Keith Ryder plane. This latter ship was the victor in a hard fought duel with Art Chester, it finally winning with a speed of 239.994 M.P.H., only 2.289 better than Chester's mark. Incidentally, the fuel used by these three ships contained over 8 cc. of lead with an octane number of almost 100.

The Dominican Republic Trophy for fifteen miles went to Art Chester, who this time was successful in defeating his chief rival for the Green Trophy. It was another duel between the two and the average speed of the winner was 232.294 M.P.H. Others in the race finished in the order named: Lee Miles, Ray Barker, S. J. Wittman, Harold Neuman, Tex LeGrone and Larry Hughes.

2
"Tulsa",
and piloted
Lee Miles.

Photos Filed

ETHYL NEWS PHOTO FILE 7/36 No. 6

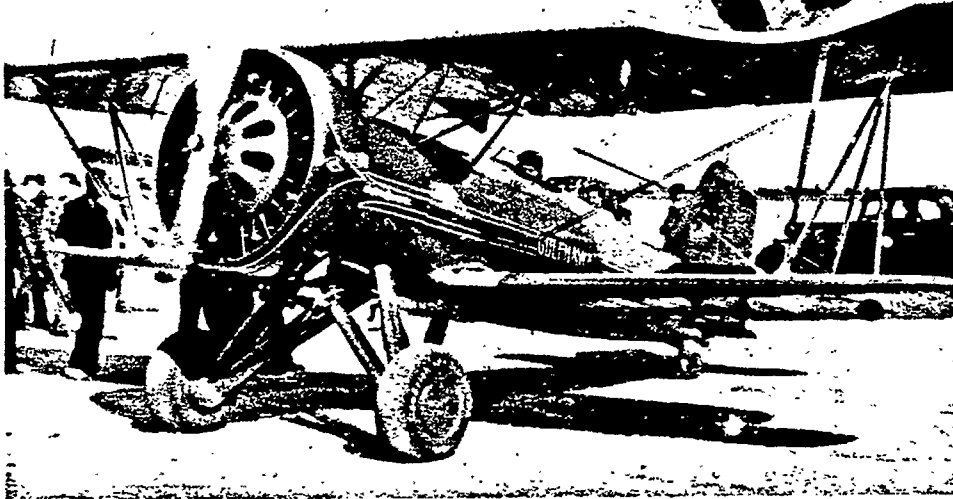
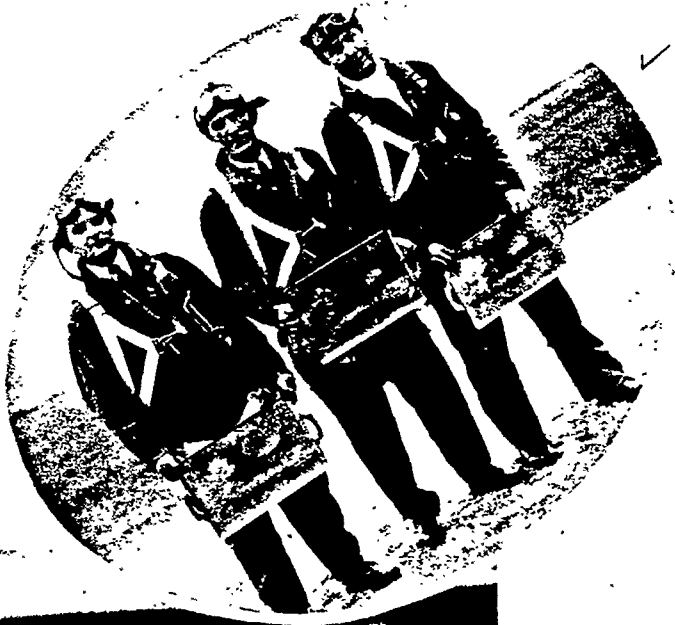


"Three Men on the Flying Trapeze." From left, Lieut. W. C. McDonald, Maj. Clair Chenault, and Lieut. J. H. Williamson.

See Aviation

THE ETHYL NEWS

ETHYL NEWS PHOTO FILE 7/36 No. 7



Maj. Al. Williams about to take off in his "Gulf Hawk".

ETHYL NEWS PHOTO FILE 7/36 No. 8

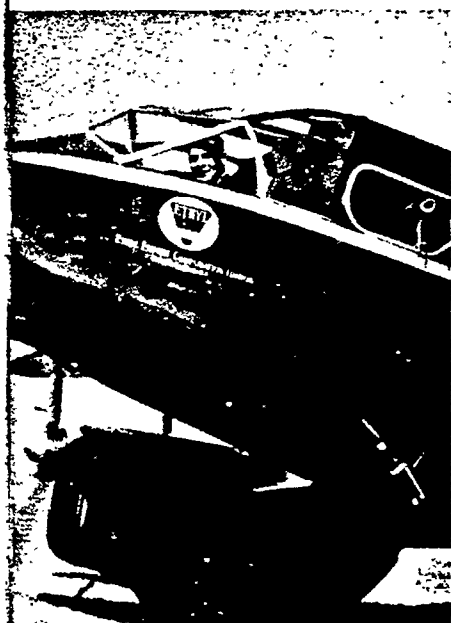
Space does not permit the listing of the many national and international aviation enthusiasts who attended the meet, but prominent among the group were Col. John Jouett, David B. Putnam, R. G. Irwin, R. S. Boutelle, Wiley Wright, Col. Jos. C. Stehlin, Chas. F. Horner, Col. Carroll Cone, Miss Annett Gibson, Maj.-Gen. W. H. Tschappat, Lt.-Commander T. A. Gray, Major Aldren Lt.-Col. George Kennedy, Brig.-Gen. Frank M. Andrews Commander of the G. H. Q. Air Force, and many others in both military and civil aviation.

Following are the specifications of the "Chester Special" and "Miss Tulsa" as furnished to Mr. Warren by their respective owners:

"CHESTER SPECIAL"		"MISS TULSA"	
Speed	255 mph	Speed	255 mph
Weight	765 lb.	Weight	750 lb.
Length	15'	Length	16'9 1/2"
Wing spread	16'8"	Wing spread	16'6 1/2"
Gas. consumption	40 gals.p.h.	Gas. consumption	40 gals.p.h.



ETHYL NEWS PHOTO FILE 2/36 No. 9



ETHYL NEWS PHOTO FILE 2/36 No. 10

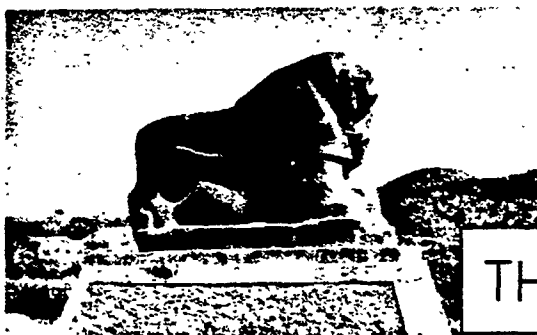
TOP LEFT, Air France Fokker, Akyab, Burma.

ABOVE, Pilot Lucke starts 20,000-mile jaunt.

TOP RIGHT, Mr. Lucke at the Zikkurat—Ur of the Chaldees, Iraq.

BELOW, Lion of Babylon, the head was removed by German excavating party before the war, is now in Berlin.

LOWER CENTER, Unusual view of Taj Mahal—Note tip of plane in upper right corner.



Returned
for 2/36



ETHYL NEWS PHOTO



THE CRUISE O

• On September 21st, Pilot D. W. Lucke, attached to our London office, and a companion, set out on a flight which was to take them to Palembang, Sumatra and return, a distance of 20,000 flying miles. The purpose was two-fold; to make an inspection of Ethyl Export Corporation blending plants between Tunis and Borneo and to demonstrate the practicability of an aerial tour as opposed to doing the job by boat and train. The trip from Heston to Paris and on to Pisa, Rome, Naples and Catania, Sicily, was uneventful but marked by the "hospitality and kindness" of the authorities at the various aerodromes. Crossing to the African Coast in good time a landing was made at Bengasi, where it was discovered that but three gallons of fuel remained in each tank—something to think about and a valuable lesson learned.

The next hop to Cairo followed a rather circuitous route in order to get a view of the Pyramids, and after a night there our fliers set out for an inspection of the Pipeline at Rutbah Wells. This took them down the Nile across the Suez Canal at El Kantara and over Jerusalem and the Valley of the Jordan. The Pipeline finally was located shortly after passing Amman. They



SPHINTS E 2/36 No. 12



No. C. 44
2/12/36



ETHAL NO.

2/36 "H"

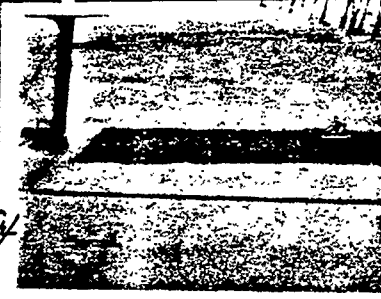


PHOTO FILE 2/36 No. 1



SE O THE G-ADAO

tached to
n a flight
atra and
purpose
l Export
d Borneo
erial tour
rain. The
e, Naples
ed by the
es at the
Coast in
ere it was
mained in
a valuable

circuitous
and after
tion of the
down the
and over
e Pipeline
man. They

marveled at the greatness of the engineering feat and considered the terrible difficulties and even suffering undergone by those engaged in its construction.

The route from Ruthbah to Baghdad was made easier by following the Nairn Desert Track and flying over Dibban, where an immense new aerodrome for the R.A.F. is under construction. Baghdad was soon in view and as there are two Ethyl blending plants in the vicinity, temporary headquarters were made there. Through the courtesy of the Anglo-Iranian Oil Company a ship was put at Mr. Lucke's disposal, enabling him to have the G-ADAO undergo a thorough inspection, thus saving valuable time. After two days occupied in visiting refineries, including those at Kerman-shah, Iraq and Abadan, the journey was continued to Calcutta by way of Rangoon, Karachi. Here unusual hospitality was shown by the officers of the R.A.F. Jodhpur and Allahabad, both noted for their excellent aerodromes, were the next stops and finally Calcutta. From here onwards the weather was exceptionally good. At a stop made at Akyab, Burma, the travelers saw the Air France Fokker which had crashed in a take-off

(Please turn to next page)

TOP CENTER, Keamari Storage Depot, Karachi
—Note drifted desert sand in foreground.

TOP RIGHT, At last we learn where old GOP has been these last three years—resting up in far-off Digboi, Assam. Mr. Lucke had this interview and says the old fellow is all pepped up and ready to go.

ABOVE LEFT, G-ADAO lands at Jodhpur.

NEXT BELOW, A dredger in the Suez.

JUST ABOVE, Trucking in Karachi.



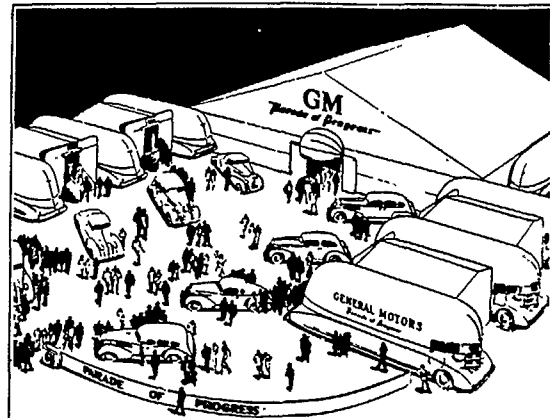
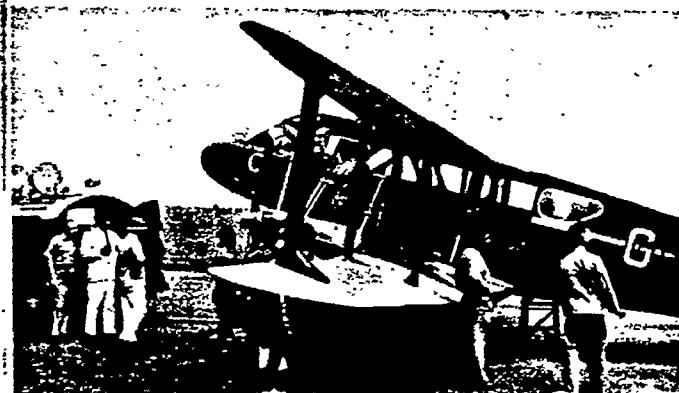
• ETHYL PLANE up for the night at Penang, where flyers spent several nights. Imperial Airway's "Dorado" is shown. It is the ship in which Capt. Armstrong, R.F.C., is experimenting between Penang and Hongkong. Mr. Lucke found this whole section extremely air-minded and many fine flying fields.

a short time before. It was being repaired in the open, a task fraught with tremendous difficulties in a country which suffers from the world's heaviest rainfalls. A night was spent at Penang and then a flight to Singapore where an inspection was made of the Seletar airport. With regrets, new made friends at Singapore were left behind and the fliers faced the most difficult part of the journey over the dense jungles of Sumatra to Palembang. The Equator was crossed, the crossing observed by due formalities, and the aerodrome at Palembang finally located, though with difficulty, as it has literally been hacked out of the jungle. Here a few days were spent as the guests of the Standard Oil Company and Mr. Lucke writes "We were amazed at the hospitality showered upon us by both the Dutch and American communities". The return voyage finally began after two auxiliary fuel tanks had been installed with the hope of an increase in daily mileage.

On the return journey, very much the same route was followed as far as Algiers, where it was decided to continue by way of Spain. "We landed in Spain at Alciante," says Mr. Lucke, "where for once, customs, etc., caused no trouble and in fact took less time than refueling." From there they made for Marseilles to find the first really bad weather encountered since leaving Akyab. After an enforced delay of two days, a hop to Le Bourget and then to the home field at Heston, brought the trip to an end on November 18th.

In conclusion, Mr. Lucke remarks, "The machine,

• FUELING at Seletar Aerodrome, Singapore. Inspection of this field was very interesting, also the new Civic Aerodrome under construction. It affords landing for both land and water craft and only two miles from the center of town. The fliers were entertained at the Royal Singapore Flying Club with a flight in a club plane over the harbor.



The Parade of Progress

• ON JANUARY 27th a unique caravan left Detroit on the first leg of a 20,000 mile trek designed to carry the wonders of modern science to millions of people throughout the land. This unusual exhibit, developed and put in motion by the General Motors Corporation, rounds out the great educational program which the company has been conducting in recent years. It is a contribution to a new age of scientific progress for the comfort and welfare of 126 million Americans. One of the chief purposes of this extraordinary undertaking is to acquaint the public with the manner in which industry and science work together, even during depression years, to lay a foundation for greater advancement. Examples of the results accomplished by such research are presented with the belief that these accomplishments will inspire increased confidence and add to the momentum of business recovery.

(Please turn to page 12)

throughout the flight, required practically nothing more than routine inspection, the only repairs being on a distributor and a punctured tire. The flying time was about 165 hours and average ground speed 136 M.P.H. with petrol and oil consumption of 9.8 gallons and 0.5 per engine hours respectively. Oil temperature under the hottest conditions varied between 81° and 91° Cent. Petrol consumption could be cut down to 7.5 gallons per engine hour by flying at 12,000 feet and at 1,900 R.P.M. with use of mixture controls. Oil pressures remained throughout at a constant minimum of 40 pounds." Photos contributed by Mr. Lucke.

Motorists Are Changing to Giant Ethyl Every Day

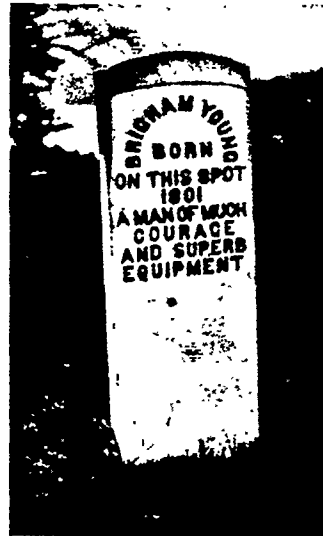
(Reprinted by courtesy of "W Reminder" Wadhams Oil Company publication of Dec. 15th.)

• OFF TO A flying start, in spite of the mild weather, Giant Ethyl already has been widely and favorably accepted by Wisconsin and Upper Michigan motorists. Not only have sales shown a substantial increase to prove that Giant Ethyl is a favorite, but comments and letters have come flowing in from all over Wadhams territory. Motorists are finding, too, that for breaking in these new 1936 cars, there is nothing finer than Giant Ethyl! It prevents that enemy of both new and old motors, dilution, and helps in the all 'round breaking in of the motor.

The factor of new cars and their higher compression ratios are becoming increasingly important. In 1932, 1933 and 1934 the cars being manufactured and sold were successively increased in compression ratios in approximate figures of from 4.9 to 1 to 5.3 to 1 and 5.7 to 1. In 1933 and in previous years, the increased compression ratio, caused by deposits of carbon and the tendency to knock from many other causes of faulty adjustment, were largely or wholly overcome by the anti-knock quality of regular 70 octane gasoline—Mobilgas. In 1934 and again in 1935, when the average compression ratio was raised 5.99 to 1, knocking in engines became more prevalent. Compression ratios of some 1936 cars run as high as 7.1 to 1, with an average ratio of 6.1, so that from now on, there will be more attention devoted to knock and more discussion about it. There will be a necessity for more information on its causes and its elimination.

High compression motors with an accumulation of carbon and lacking precise mechanical adjustment need Ethyl Gasoline. There are many such cars on the road, and therefore, emphasis on Giant Ethyl right now is well placed. From the standpoint of easy starting, flashy acceleration and quick warm-up, Giant Ethyl should be used by every car owner coming in to a Wadhams station, because Giant Ethyl is the best winter gasoline they can buy. It will more than pay for itself by saving the battery and eliminating tow bills.

• AN INTERESTING observation on the result of holding the annual automobile show in the fall rather than at the accustomed time is noted by the estimated output of cars for the year 1935 as announced prior to the showing, and at the close of the year. On the first of November, experts generally placed the figure at approximately 3,800,000 units. At the end of December, however, the estimate was raised to 4,150,000. Of this total, 3,400,000 represented passenger cars and the balance of 750,000, commercial vehicles, with a combined wholesale value of \$2,186,400,000.



• OVERLOOKING beautiful Whitingham Lake in the State of Vermont, stands this stone which bears a glowing tribute to that famous American of the last century who devoted his life to the colonization of the West.

N.C. 2/7/36.

Sleep Cost Millions

• MR. HARRY L. HORNING, formerly head of the Waukesha Motor Company, manufacturers of the knock-testing motor recommended by the C. F. R. Committee, who recently died, was fond of recounting the story of how he "lost millions by two pages". Searching for a compound to mix with gasoline to stop the "ping" in engines, Mr. Horning obtained a book on chemicals. "I went to bed one night and started reading the book," he would say. "I got as far as Page 273 and fell asleep. Just about that time General Motors came out with Ethyl Gasoline. I went back to my book and on Page 275 found tetraethyl lead, one of the compounds I was looking for. General Motors found it before I did because I fell asleep."

H. C. FARM TRACTORS

(Continued from page 3)

will be standard equipment. Cletrac engineers state that the higher compression engines give 15% better operating economy than the discarded low compression ones. High Compression cylinder heads are available through service for all models except the "55" which has a valve-in-head engine, and High Compression Pistons are available for this model.

Several other tractor manufacturers are planning to market high compression equipment in the near future. At such time as these other companies release information on their contemplated new models the data will be sent out from the Detroit Laboratory. It is both probable and possible that during the next twelve months every tractor manufacturer in the country except one, will offer high compression as either standard or optional.

PARADE OF PROGRESS

(Continued from page 10)

✓ Visiting towns and cities throughout the country during the balance of the year, the "Parade of Progress" will show the various contributions of industry to individual and community welfare. The housing exhibit, with its "Home of Yesterday" and its "Home of Today" will portray progress in living conditions—expressed in human comfort, more attractive surroundings and freedom from drudgery. The modern home exhibit will contain those conveniences and refinements which, today are available to large sections of the population but were not possessed even by the very wealthy at the beginning of the century.

The caravan performances will show that industrial research continues to develop new products and through new processes bring established products within the reach of nearly everyone by lowering prices. Progress in transportation, dependability, style, comfort and economy will be shown in various effective ways. Industry's endeavor to be guided by the desire of the consumer will be expressed in the customer research exhibit.

Automotive service from the safety viewpoint will be featured in the modern service station set up as an exhibit in the caravan, an exhibit of motoring aids anticipating public needs and demands. The very movement of the caravan itself is planned as a demonstration in safe driving and throughout the exposition various contributions will be made toward solving the serious problem of highway safety.

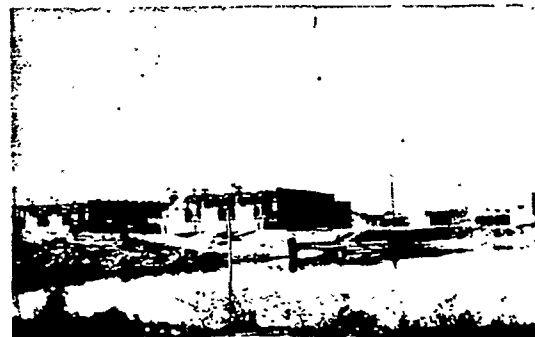
The exhibits will be transported in a fleet of 28 automotive units. Eight of these being huge red-and-silver streamliners, measuring 33 feet from bumper to bumper, 11½ feet from road to roof and 8 feet in breadth. On the road, the caravan, which includes, in addition to the unusual streamliners, three tractor-and-trailer units almost as large as the streamliners themselves and a selection of 1936 General Motors passenger cars. It requires a crew of 40 men to operate the vehicles and put on local performances. One of the tractors will house a Winton Diesel engine for lighting the tent and the exhibit trucks and to operate the exposition machinery. In size and scope, the "General Motors Parade of Progress" will be unique among traveling industrial expositions.

As in past exhibits by General Motors, Ethyl is identified as a product of the General Motors Research Laboratory. We are represented in the research unit of the Parade of Progress by a display including our demonstrating engine. Our Mr. Frank Cronin will be in charge of our portion of the Exhibit. He will be in attendance during display hours and will give several lectures each day during the mass meetings. A General Motors institutional film, which will be shown at these meetings, devotes a generous portion to research on fuel problems and points out the part which Ethyl has played in the development of modern engine design. A short film will also be used, devoted entirely to Ethyl. It is needless to say that the Caravan will be powered by Ethyl Gasoline.

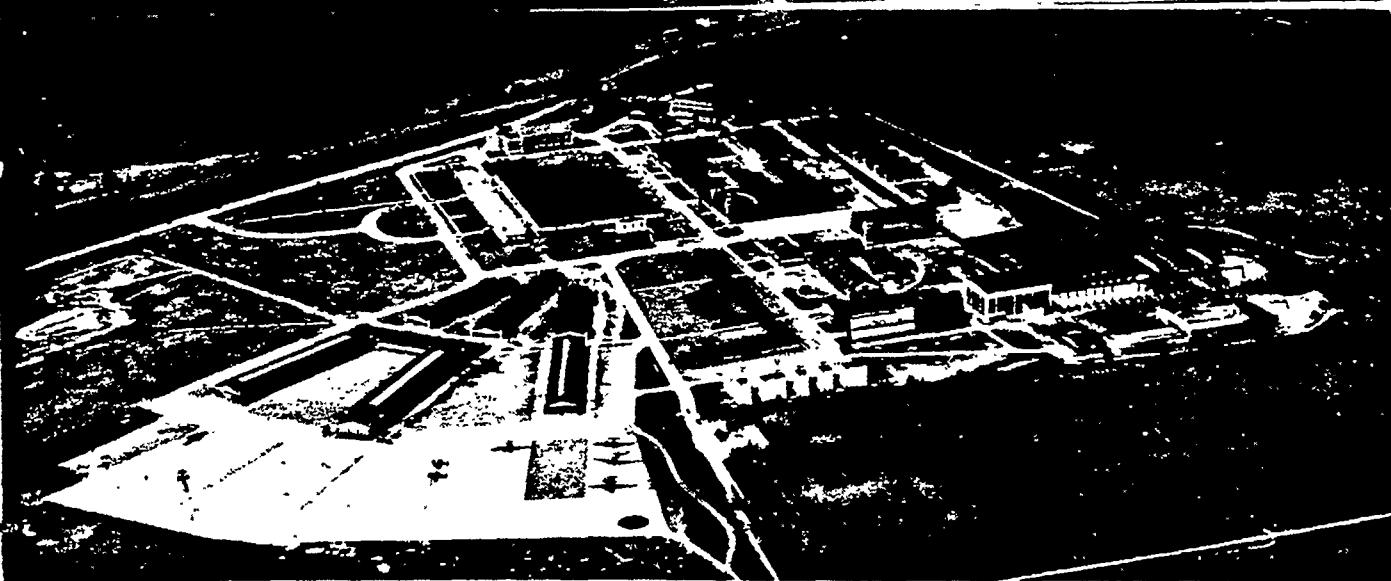
PAGE TWELVE



• On November 30th the Gulf Refining Company opened this Super Service Station on Monroe Avenue, Rochester, N. Y. Our representative, Mr. M. P. Murdock, informs us that the No-Nox Ethyl Aviation sign arranged by Mr. Dolan of Gulf Refining in Rochester is creating much favorable comment. This station is showing a high Ethyl percentage as the men realize the advantages of Ethyl for the high compression cars of today. ✓



• AN UNUSUAL view of the extraction towers at the Ethyl-Dow plant, Kure Beach, N. C., taken from south side of the "pond" by Mr. St. Germain, who recently spent a day inspecting the plant. In the absence of Mr. Dressel, Mr. Shigley, his assistant, did the honors. An interesting prediction of Mr. Shigley's may bear repeating. He said that should Ethyl fluid continue to require the same ratio of ethylene dibromide in the future and the consumption of gasoline continue as now, the life of the plant would be limited to 2,000,000,000 years. In that time all the bromine will have been extracted from the water in both oceans. ✓



ETHYL NEWS PHOTO FILE 3/26 No. 19

MATERIAL DIV. U. S. ARMY AIR CORPS.

"It is the aim of the Army Air Corps to provide the United States with an Air Army second to none."

• DURING the years immediately following the close of the World War, such tremendous strides were made in the development of aviation it soon became evident that old McCook Field at Dayton, Ohio, could no longer meet the demands of the U. S. Army Air Corps. The citizens of Dayton at once saw the two-fold opportunity to serve their country and establish a fitting memorial in honor of the Wright brothers. Accordingly a large tract of land was purchased in the name of the City and presented to the government for use in aeronautical development. Thus Wright Field came into being and was dedicated in 1927. This field is devoted chiefly to testing of new and experimental airplanes and equipment. Flying is not taught here and only experienced pilots operate the planes.

THE MATERIAL DIVISION

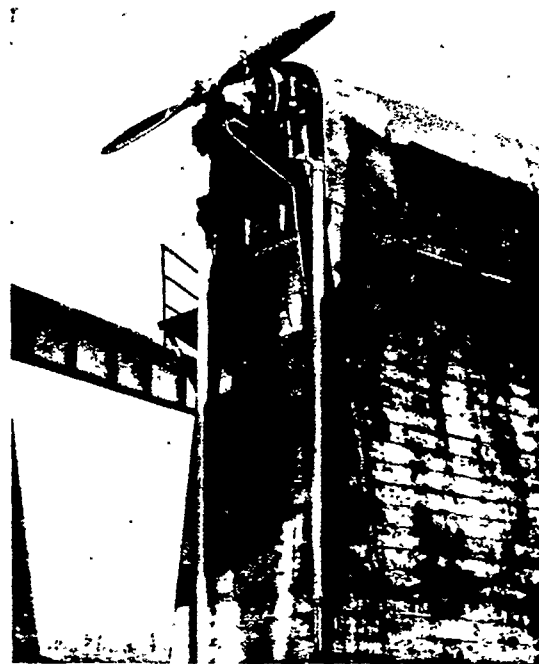
"And what," you may ask, "is the Material Division?" The Air Corps has three principal functions: (1) *Training*—the art of flying and navigation and related subjects such as aerial photography, flight tactics, etc. (2) *Operations*—the formation of flying squadrons and groups from the ranks of trained pilots such as Pursuit, Bombardment or Observation which make up a well-rounded Air Corps. (3) *Engineering and Supply*—it supplies all equipment and material necessary for this branch of the service. This latter is the special function of the Material Division. It covers everything for the operation of aircraft from raw materials to the complete plane, from instruments to flying goggles. In short, this department is charged with the task of having ready for immediate production and service the most advanced types of aircraft, engines, armament and other equipment in their field for national defense.

Of the many departments of this work, some are of particular interest and might bear brief mention, especially the work done in the testing of fuels which may be interesting to our own organization. One of the un-

usual features is the Propeller Unit, which is concerned with the design and testing of this piece of equipment. It is the largest propeller test rig in the world and is capable of testing propellers for endurance up to 45 feet in diameter and at 4300 R.P.M. The *Dynamometer Laboratory* is fitted with the latest equipment for the performance testing of the aircraft engine and each of its units. There are eleven stands for testing all types of engines from the largest air and liquid cooled to the smallest single cylinder motor. There is also a "cold room" in which liquid or air-cooled engines are tested for starting and operation characteristics at temperatures as low as 50° below zero.

Engineers working in the cold room wear electrically heated clothing and a telephone signal system is used for outside communications. In case inflammable vapor

(Please turn to next page)



PROPELLER TEST RIG

ETHYL NEWS PHOTO FILE 3/26 No. 20 PAGE THIRTEEN



• THE above night views of New York were taken from our office windows in the Chrysler Building by Miss Dorman of the Statistical Department. An exposure of about thirty minutes was required for each picture. The view at the upper left is looking north up Lexington Avenue and shows the twin towers of the Waldorf Astoria with the illuminated tower of the General Electric Building just beyond. The upper right is a view to the northwest over the top of the Graybar Building with lighted pinnacle of the New York Central Railroad Building, and to the left of it the top of 30 Rockefeller Plaza, the tallest building in Radio City. Below, to left; is to the southeast towards Brooklyn, the lights of which may be seen in the right distance. The two white lines crossing the East River mark the ferry to Williamsburg. In the foreground stands the Daily News Building on East Forty-second Street and lights in the distance are Long Island. At the lower right is a view to the west, looking through Forty-third Street. The tall building is the Salmon Tower at Fifth Avenue and Forty-second Street and in the distance is the clocktower of the Paramount Building on Broadway at Times Square. In the extreme distance at the right are some of the lights on the New Jersey shore.

The cover pictures were taken from the Chrysler Tower by the DeLano Studios expressly for the "News". They show a general panoramic view of the city to north, east, south and west. Should any of our organization desire copies of these cover pictures for framing they may be secured at 50 cents apiece.

WRIGHT FIELD

(Continued from page 13)

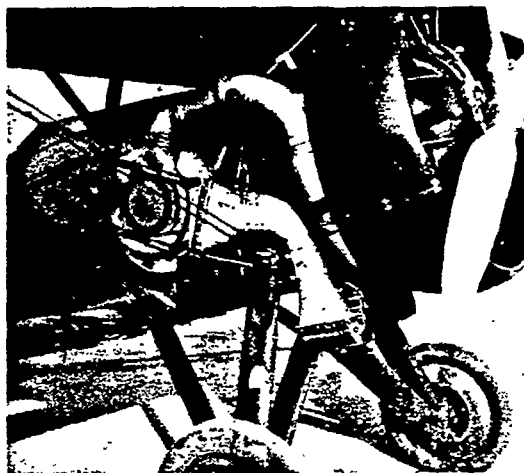
or carbon dioxide seep in, automatic alarm bells give warning both within and without. From the exterior the torque stands resemble a series of square concrete stacks, 40 feet high and joined by enclosed passages. These stacks are open to the sky to reduce the deafening noise of high-powered engines run at full throttle. So loud is this that pilots 600 feet over-head often hear it above the roar of their own motors. Centered between these stacks are seven torque stands, six for testing engines and one for propellers. Each engine support pier is a block of concrete sunk 20 feet in the ground and encased in cork to prevent vibration. Engines are endurance tested for periods as long as 150 hours. A fuel test laboratory contains six single-cylinder engines to aid in improving standards of fuels and lubricants. As a result of several years of the research the fuels and lubricants used by the Air Corps are of higher quality than ever before obtained and not surpassed by those used by any other military organization. Various engine developments have been accomplished and experts in

PAGE FOURTEEN

ETHYL NEWS PHOTO FILE 7/36 No.

carburation, ignition, cooling, fuel systems and super-charging are constantly at work for improvements in their respective fields. The substitution of Prestone for water in engines made possible reduction in the size of the radiators by 60° and gave a new lease of life to the liquid cooled engine which was first being supplanted by air-cooled types. The high powered air-cooled engine had achieved greater success in the United States than anywhere else. Attention however, has again swung to the liquid cooled type which Prestone, supercharging, propeller gearing and due to its better stream lining and visibility promises to take a prominent place in the aviation field once more. These are but a few of the many developments which are constantly going forward at the Material Division at Wright Field.

Photos, courtesy U. S. Army Air Corps.



Radial Engine with Side Type Turbo-Supercharger

ETHYL NEWS PHOTO FILE 7/36 No. 22

ETC 21124

736 No. 21

A LETTER THAT SPEAKS FOR ITSELF

FORM 711 4-30 2 1-2 11



R. J. SCOTT
CHIEF ENGINEER

CITY OF LOS ANGELES FIRE DEPARTMENT

OFFICE OF THE CHIEF ENGINEER
217 SOUTH HILL STREET

December 12th, 1935.

Mr. S. M. Wagner,
Ethyl Gasoline Corporation,
628 Edison Building,
601 W. 5th Street,
Los Angeles, Calif.

Dear Sir:

As your Mr. Carl Abell completes his series of lectures and demonstrations to the engineers of the Los Angeles Fire Department, I believe an acknowledgment of appreciation is very much in order.

I believe he has talked to a very receptive group, and the interest manifested in the matter of motor fuels and their characteristics should have been very gratifying to him, encouraging him in the knowledge that his time was not being wasted.

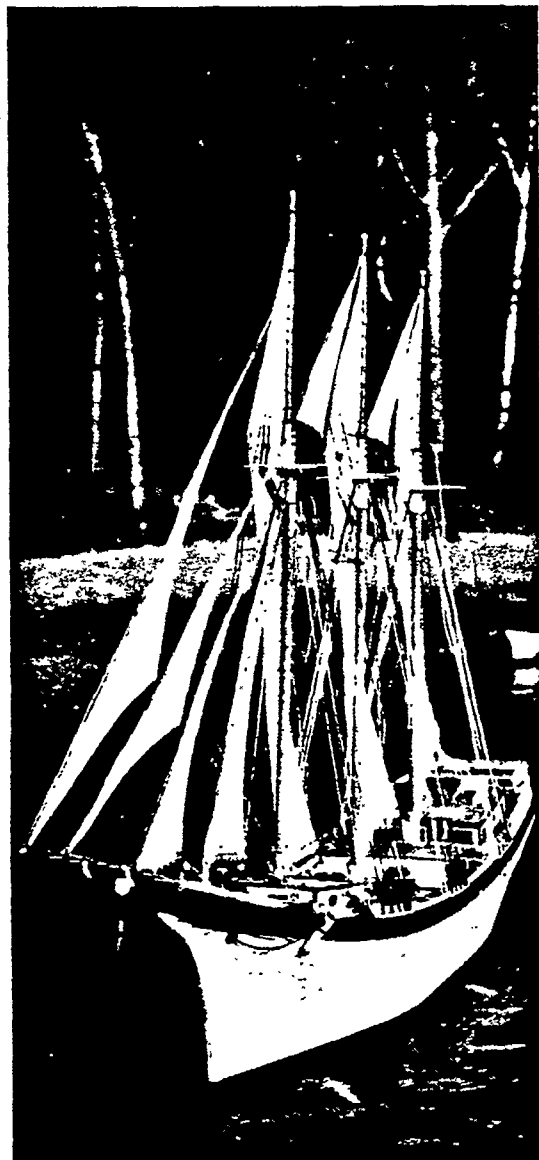
From our point of view, we feel that the Department has been the gainer. The fund of information possessed by Mr. Abell is impressive, he has a pleasant, convincing manner of address, and his material equipment for demonstration purposes is all that could be desired. I believe that his services with us were well worth while from all points of view; therefore, I thank you very cordially for the authorization that made this detail possible.

Yours very truly,

R. J. Scott
Chief Engineer

*Returned
Loser
copy to Scott*

Newsbriefs



✓ • THIS ship model was designed and built by Captain Herbert A. Whitney of Hulls Cove, Bar Harbor, Maine. It is an exact replica of a schooner of which he was at one time the skipper. The aim of the builder was to create an example of the typical New England schooner which is fast disappearing. Evidence of the minute detail which went into his model will be understood when we point out that Captain Whitney began this work in 1904 and it was finally completed only last year. The length over-all is 118 inches; beam 19 inches and the masts are 65 inches high. Captain Whitney is the father of Mrs. Madelaine Rose of the Purchasing Department.

PAGE SIXTEEN

• LAST MINUTE FLASH! Winchell on the job—Happy event in the household of your New York correspondent Dick Murphy. A baby girl, 8 pounds, born January 28th in the afternoon. The candy and cigars were much appreciated. Heartiest congratulations.

Editor's Note: This is the first 1936 model.

• Mr. R. W. Hogan has joined the Baltimore Division and will be located at Roanoke, Va. about February 1st. John Keyes, now located at Roanoke, moves to Baltimore and will work in the Maryland-Delaware-D. C. territory.

• THE BALTIMORE DIVISION bids Frank Cronin goodbye with deep regret but wishes him all the luck in the world. Frank joins the General Motors Caravan in charge of the Ethyl Exhibit.

• THE rotation of weekly reports in the Atlanta Division often brings to light gems of literature that might otherwise be buried for years. It also serves to clarify certain characteristics that are decidedly noticeable. Take Bill Petty, Mississippi representative, for instance. Quoting from his weekly report: "Drove to Louise (?) contacting Mr. Blank of the service station by that name. As he is stone deaf this contact took a good deal of time but Mr. Blank was finally able to read my lips and we got along well after this." Nice work, Bill, you of the expressive lips. Girls, take notice.

• JOE ST. GERMAIN is nothing if not neat, prim and methodical. He really must have things just so. Therefore it pained him no end to see the muffler, exhaust hose, etc. for his motor carried in an ordinary soap box in the back of his car so he had a special box built and daintily covered with leather. It was his pride and joy. While in Charleston, S. C., where the old pirates are reputed to have buried much treasure, some dusky gentlemen saw this swell box in Joe's car. The old buccaneer spirit getting the best of them, they broke in and got away with it. This made Joe plenty mad but fortunately three hours later the police found the beauteous box and its contents rudely heaved on a junk heap in a vacant lot. Joy over the return of the treasure, however, is offset by the lack of appreciation of it. Cheer up, Joe, the next guy to steal it may really appreciate your handiwork.

• NEW EASY WAYS TO DECREASE EXPENSE ACCOUNTS are submitted by two of our representatives:

First Lesson by Joe St. Germain, Baltimore Division. Never buy a lunch; give a talk before a luncheon club and get one free. For example, a typical weeks' program:

Tuesday—Rotary Club, Wilmington, N. C.	
Wednesday—Kiwanis Club,	" "
Thursday—Lion's Club,	" "
Friday—Exchange Club,	" "

Second Lesson by Jack Pruitt, Atlanta Division. Never buy a tow car when a push from a taxi will do. For example we quote from Jack's weekly report: "I got in touch with the Olds Service Manager to ask him if I could leave my car somewhere in order that he could get to work on it early the next day He suggested a storage garage near where my car stopped, SO I TOOK A TAXI AND HAD HIM PUSH ME THERE! Taxi—30¢; Tow truck—\$?"

ETC 21126

[illegible]



ETC 21128

ETHYL
NEWS
MARCH, 1936



ETC 21129

DOC RANKIN

To All Members of The Sales Department

- WITHIN a few years our field organization has grown from a relatively small body of men to where it now consists of nearly one hundred field representatives working under nine division managers with division offices located at strategic points throughout this country and Canada.
- STATISTICS showing the amount of work done by the field staff indicate that the effectiveness of our efforts in the field has increased year by year. We have been fortunate in having a relatively small turnover in personnel and have been able to increase our staff rapidly, yet absorbing new men without lessening the effectiveness of the work done by older employees. One of the chief factors in welding our organization together has been frequent division meetings, at which time employees have been able to get together to discuss their mutual problems.
- ALTHOUGH conditions vary to some extent in our divisions, still there are a large number of problems which since the beginning of our business have been faced almost daily by the entire field organization. Recently, however, changes in company policy—most important the use of lead in regular gasoline—have brought a number of new problems in the field. To meet these changed conditions, I believe it would be advantageous if those in one division could hear first hand how problems are being met in others, at the same time receiving information on the work of departments other than sales.
- WITH this in mind, we have decided to depart from the normal custom of holding division meetings and to have instead a national convention of the field staff, the first four days of the week beginning May 18th having been selected. The meeting will be held at Detroit where advantage can be taken of not only our laboratory facilities but also those offered by major automobile companies.
- AN exchange of ideas will be beneficial to all present and I feel sure that all field representatives will look forward with anticipation not only to increasing their own knowledge of our business but also to an opportunity to become more closely acquainted with their co-workers and with company executives.

J. C. Taylor

To All / The Sale

Unless otherwise indicated, all artwork and photographs destroyed
May 1957.

- WITHIN a few men to where it nine division man country and Can

- STATISTICS show effectiveness of our in having a relative staff rapidly, yet done by older em has been frequent together to discuss

- ALTHOUGH cor number of problem daily by the entire most important the problems in the fi

tageous if those in one division could hear first hand how problems are being met in others, at the same time receiving information on the work of departments other than sales.

- WITH this in mind, we have decided to depart from the normal custom of holding division meetings and to have instead a national convention of the field staff, the first four days of the week beginning May 18th having been selected. The meeting will be held at Detroit where advantage can be taken of not only our laboratory facilities but also those offered by major automobile companies.

- AN exchange of ideas will be beneficial to all present and I feel sure that all field representatives will look forward with anticipation not only to increasing their own knowledge of our business but also to an opportunity to become more closely acquainted with their co-workers and with company executives.

relatively small body of natives working under points throughout this

staff indicate that the we have been fortunate able to increase our ctiveness of the work organization together ave been able to get

ill there are a large ve been faced almost in company policy—ht a number of new e it would be advan-

J. C. Taylor



Vol. 3, No. 3

ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

MARCH, 1936

Published monthly by the Ethyl Gasoline Corporation for the entertainment and benefit of the members of its organization. Address all news items, correspondence or other material to the Editor, W. Cary Harris, 35th floor, Chrysler Building, New York City.

Ethyl's Contribution to Education

W. CARY HARRIS - - - - - Editor

Associate Editors

EDWIN DOWNS

RUSSELL B. WESTON

CORRESPONDENTS

Atlanta Division	GEORGE W. WARREN
Baltimore "	L. W. SHANK
Boston "	DONALD S. FLYNN
Chicago "	A. B. WYRICK
Dayton "	VINCENT KEENAN
Kansas City "	C. M. BERRY
Los Angeles "	R. G. LOSER
New York "	R. C. MURPHY
Toronto "	J. N. FITZGERALD
Tulsa "	HARRY KUHE
Engineering Dept.	JULIAN J. FREY
Manufacturing Dept.	ARTHUR P. STOVER
Gasoline Testing Dept.	LESTER B. ROBERTS
Export Dept.	HUBERT FOSSETT

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH

• MORE than 500 educational demonstrations were conducted in the schools and colleges of the United States and Canada last year by representatives of the Ethyl Gasoline Corporation. In California, 107 lectures were attended by 13,144 students. Seventy-five demonstrations were given in the Chicago area. Wisconsin reports a total of 61; Southern Illinois, 39; and North Carolina, 30. The emphasis of school authorities on industrial science is a new trend in education. The student's interest in scientific studies is aroused by showing the application of theoretical knowledge to the familiar objects of everyday life. Graduate and undergraduate students in chemistry, physics, engineering, automotive and aviation engineering were initiated into the chemistry of petroleum and gasoline as well as the use of gasoline in the internal combustion engine during demonstrations at the following educational institutions:

Johns Hopkins University, Goucher College, William and Mary College, Georgetown University, Duke University, Loyola College, U. S. Naval Academy, Maryland College for Women, Virginia Polytechnic Institute, North Carolina State College, South Carolina State Agricultural and Mechanical College, Mississippi State College, Ohio Northern University, Case School of Applied Science, Ohio State University, Lathrop Polytechnic Institute, Montana State College, North Dakota Agricultural College, Aeronautical University in Chicago, the Wilbur Wright Technical School, Detroit. Also the Universities of Illinois, Louisville, South Carolina, Kentucky, North Carolina, Virginia, Delaware, Maryland, Georgia and Mississippi.

Student officers at the Tank School at Fort Benning, Ga., attended demonstrations, as did young men at the Citadel, military college of Charleston, S. C. Cadets

(Please turn to page 3)

PAGE ONE

ETC 21132



• Boys at the Basin Camp on Deer-lodge National Forest near Butte.

• CAMP at the Forest Service Remount Depot near Huson, Mont.



Ethyl Educational Program for Montana CCC Camp

✓ Most of us sitting comfortably in our homes are either ignorant of, or give little thought to, the wonderful work being carried on by members of the CCC Camps as they battle fires that threaten valuable timber in our national forests. These boys are organized in companies so as to move quickly to a blaze when the alarm is given and have received special training for fire-fighting duty. A quarter of a million man-days of this work has been performed by the camps attached to the Fort Missoula district, which is equivalent to 600 men fighting fires every day of the year.

The truck equipment used by the various units must be capable of maintaining high speed with heavy loads over bad mountain roads. The efficiency of these mountain CCC units has been aided by an educational program on motor fuels conducted by our field representative, Mr. A. J. Steelman. Company commanders have been interviewed and as a result our motor demonstration and talk is to be given under the guidance of the various educational advisers, to twenty-two camps throughout the state.

The first of these meetings was held at Fort Missoula under Lieut. J. N. Conrady and his educational adviser. It consisted of a talk on the development of motor fuels and modern engines and closed with a demonstration. The feature of the meeting was the quartz window demonstration, the men forming in line so that each might view the phenomenon of combustion. A great deal of enthusiasm was displayed. When the present program is completed the camps in Wyoming will be given a similar opportunity.

Photographs were reproduced through the courtesy of Mr. K. D. Swan, U. S. Forest Service.



• INSTALLING gasoline tank at Forest Service Remount Depot.

A New Book by Prof. Furnas Features Ethyl

✓ • ETHYL continues as a topic in the literature of science. A new book which is being widely read, "The Next Hundred Years," by Prof. C. C. Furnas of Yale University, was a selection of the Book-of-the-Month Club. It contains a discussion of Ethyl Gasoline and the quest for bromine from the sea (P. 285-287), mentioning the voyage of "the good ship Ethyl" in 1925. Professor Furnas points out the very considerable amount of mineral matter to be found in the ocean. He says: "It contains 3.0-3.6 per cent of solid matter, about 80 per cent of which is common salt and the rest is a little bit of nearly everything." He makes the oft-repeated statement that if all the gold were recovered from the sea we could literally walk on golden streets. "The Spaniards sailed over far more gold than they ever stole from the Incas," says Prof. Furnas. He then describes previous efforts for recovery of this great wealth—frauds perpetrated by unscrupulous promoters and finally the really scientific work accomplished by the German, Haber, following the World War. However, one fact is made clear, that our own engineers, together with the Dow Chemical Company, succeeded in tapping the huge reservoir of wealth for the first time in history, on a commercial basis.

"In 1925," writes the professor, "the good ship Ethyl put to sea from Wilmington, Delaware, on the trail of the bromine molecule. She was financed by the Ethyl Gasoline Corporation and the E. I. duPont de Nemours Company and had a complete small-scale chemical engineering plant on board. She was out to determine the feasibility of extraction of bromine from sea water. The voyage was a complete success... Bromine is essential to our modern life. It is found in photographic emulsions, dyes, disinfectants, numerous medicines and headache powders. It is necessary in the form of ethylene di-bromide for the 'ethyl fluid' which is used to make anti-knock gasoline. With practically all motor fuel using a certain amount of bromine, the demand for this vilest of the elements was obviously mounting. The results compiled from the cruise of the Ethyl had shown that it was actually feasible to extract bromine from the sea. There the matter stood for several years and the sea was still a dead number as far as chemical production was concerned. It almost seemed as if the voyage of the Ethyl had been forgotten, but the engineers were at work quietly and effectively. On January 10th, 1934, the Ethyl-Dow Company opened the flood gates of a new plant on a neck of land near Wilmington, North Carolina, and started extracting bromine from sea water. They handle 26,000 gallons of water a minute, take out 95 per cent of the bromine present, producing about half a million pounds of it a month. The raw material costs nothing, for no congressman has thought up a way of putting a tax on the high seas. From the beginning of terrestrial time down to that day

(Please turn to page 11)

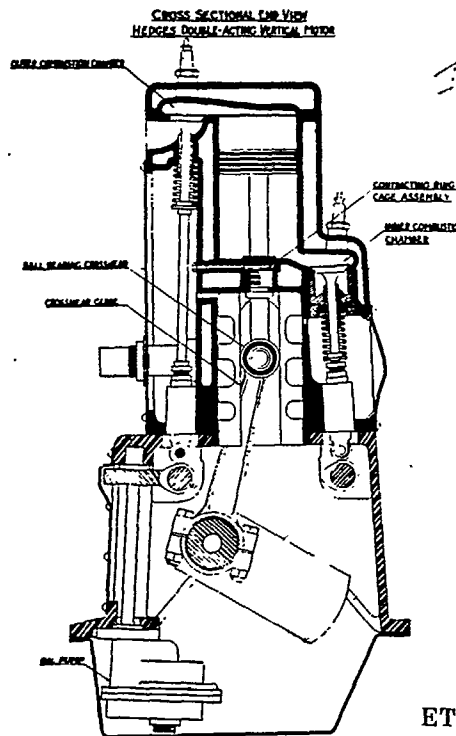
A Unique Motor

• MR. A. H. CHENAULT, of the Los Angeles Division, writes that his attention has been called quite recently to a new type of engine which, though at the present time has many "bugs," may develop into an important factor in its field. It is designed to use Ethyl Gasoline, and the experimental work is being done on Associated Aviation Ethyl. Built by the Hedges Motor Company of Seattle, Washington, it is called the Hedges Double Acting Motor.

The accompanying diagram shows the principle of the engine and the difference between it and the conventional type. It is similar in design to a steam engine in that it has a cross-head, a packing box around the piston rod and a short piston in common with that of the steam engine. There are valves and sparks plugs on each side of the piston which is used in both directions for the power stroke. The particular engine which Mr. Chenault saw, had the following specifications:

Peak horse power.....	180 h.p. at 2250 r.p.m.
Bore and stroke.....	3 1/4" x 3 3/4"
Total weight.....	280 lbs.
Compression ratio.....	5.5:1
Overall dimensions.....	52" long, 20" wide, 13" thick
Overhead camshaft.....	Dual ignition
Other features.....	Aluminum cylinder block, cylinder head and pistons

Even the above engine has remarkable horsepower weight ratio, but Mr. Hedges, the designer, claims that this one was built especially heavy for truck service. He says that for airplane use he can build a 1,000 H.P. motor that will weigh only 750 pounds. He has been building this Double Acting engine in small sizes for motor boats for several years and states that it has operated very successfully.



ETC 21134

Here and There

• Mr. J. E. Hendrick (Tulsa Div.) was on the schedule of the 1936 Convention of the Oklahoma Education Association and gave a talk on February 7th before the Science section. The program listed the event as follows: "The Internal Combustion Engine and Antiknock Fuels—A lecture and demonstration by J. E. Hendrick of the Ethyl Gasoline Corporation." Two-hundred-twenty-five Science teachers attended and many of those present said that it was the most interesting of all the lectures they had heard. Some idea of the effectiveness of the meeting can be gathered by the fact that during the lunch hour following, representatives of approximately thirty schools and colleges requested meetings.

• An interesting item from the Tulsa Division notes that on January 24th the Manufacturing Department shipped five cars of fluid, weighing 359,669 pounds to mixing plants in Texas and Louisiana. The following day an additional car was sent making a total of 399,297 pounds in the two days for one Division.

• The American Petroleum Institute's bulletin issued February 8th on the subject of reducing motor taxes says: "Relief measures under consideration in several states include elimination of motor vehicle sales taxes and postponement of registration dates, now January 1st, to a date later in the year. Such postponement already has been made in more than half the states . . . A recent study revealed that, on the average, 20% of vehicles have not been registered (due to bad weather) between January 1st and April 1st, their idleness resulting in a serious loss in tax revenues."

• The energetic educational program which several of our divisions have been carrying on with automotive classes in the high schools is still progressing. Mr. Lowell Dollahan, who headquarters in Grand Rapids, has just completed a survey of all schools in his territory and has scheduled meetings which will keep him busy for the next few months. It was very gratifying to find that in the course of this survey not a single principal who was approached was unwilling to arrange for Mr. Dollahan to speak to his students. Among the towns where the talks were arranged are:

Grand Rapids	Battle Creek	Bay City
Lansing	Kalamazoo	Muskegon
Saginaw	Big Rapids	Cadillac

• Word comes from Mr. L. L. Wilson (Kansas City Div.) that he has recently been cooperating with the Anderson Motor Company of St. Louis who were running tests on Ethyl for use in their trucks. An interesting incident which occurred during his work has just reached us. One of the trucking company's drivers was sent out on a run with instructions to wire in the results after he had gotten 150 miles out of the city. The wire was received in due course and read: "I have power to sell." The company is now operating on Ethyl for all their inter-city hauling and gallonage will be approximately 8,000 per month.

• A short time ago the President of the Perfect Oil Company of La Crosse, Wis., Mr. MacLaughlin, gave instructions that our story be told to the entire branch organization. Perfect Oil Company is a holding company of Wadhams Oil Company. Arrangements have accordingly been made and Mr. Bond Hedden will hold eight meetings extending over a period of two weeks. In this way these talks on Giant Ethyl will be brought to Perfect's entire personnel.

• The Massachusetts State Department of Education has made arrangements for a representative of our Boston Division to address a meeting of all the state trade school teachers. These meetings are annual affairs to keep the instructors posted on the latest educational methods and developments.

• Mr. Julian Frey of our Detroit Laboratory, spoke before the New England section of the S.A.E. on the evening of Tuesday, February 11th. Before Mr. Frey left New York for Boston to deliver his address, he received a letter from the Hartford section of the Society to the effect that his talk in Boston had been so interesting they would like a similar one given before their own group. Although the Hartford writer was somewhat previous, he displayed excellent foresight as Mr. Frey's talk was considered to be the year's best, to date.

• The Kansas City Branch of United Motors Service, Inc., high compressioned a 1935 car driven by Mr. H. E. Ashworth, Mid-west Manager of the Canada Dry Ginger Ale Company. The following paragraph was taken from a letter by Mr. Ashworth to United Motors Service which conclusively gives his reactions concerning the car after it had been high compressioned:

"I might add that I have been more than pleased with the performance of my car since the high compression work has been done. In fact, it is now outstanding, and never at any time—even when new—has it operated as well. You may rest assured that I shall enthusiastically recommend your high compression program to my traveling friends."

Mr. Ashworth further informed our Kansas City Office that he drives approximately 40,000 miles a year and mentioned that his territory driving was now looked forward to with pleasure.

• Our Mr. Nixon of the Kansas City office, held a number of meetings and gave demonstrations for various sales divisions of the Oliver Farm Equipment Company during the latter part of January. These were in connection with the general program which is being carried on by our Kansas City, Chicago and Dayton Divisions with the several farm equipment manufacturers. The attendance at these gatherings was very gratifying. At the Wichita, Kansas, meeting, where he was assisted by Mr. Stump, there were twenty-two dealers present. At Des Moines, eighteen dealers attended in addition to Oliver's entire personnel. The meeting in Charles City, Iowa, at the company's tractor plant, there were 36 dealers on hand and the Manager and Assistant Manager of the Omaha branch as well as the Division Manager. This Division includes Kansas City, Omaha and Minneapolis. There were also some 15 department heads in attendance. Mr. Nixon says: "At all of these Oliver meetings, great interest has been shown and many intelligent questions asked. I believe this work is doing a great deal of good."

• Here is an incident reported to us which is worth repeating. It seems that the superintendent of a large refinery on the west coast decided to turn in his old car for a new one of a different make. In looking the car market over, a certain salesman told him that the car he represented "could use any kind of gasoline—premium was not necessary." Whereupon "Mr. Purchaser" informed the salesman that "the only kind of car he was interested in was one of the modern type which could get all the good out of Ethyl" and furthermore if he bought a car from that agency they had better use Ethyl as the demonstrating fuel. This from an oil man who knows his gasoline.

• During a trip through Texas recently, Mr. Rollins (Tulsa Div.) was rather impressed by the number of different state license plates he saw. As an example he noted parked in front of the Roswell Hotel at Del Rio, where he drove in for the night, besides the 21 Texas cars, 3 from Iowa, 2 each from New York, Oklahoma and Illinois and one each from Indiana, Tennessee, Montana, Missouri, Kansas and Maine. In this instance it was of particular interest to him that the station where these cars were is a strong Ethyl booster so that it is reasonable to assume our story may get fairly wide distribution.

• The outlook for the coming year in the Canadian Provinces is most encouraging, according to word received from Mr. Fitzgerald, manager of the Toronto office. The latest reports on Ethyl gallonage, while not complete, are he believes, representative. Three of the largest oil companies show December sales increase averaging better than 45%. Particularly in Western Canada the 1936 improvement should be substantial as the purchasing power has greatly improved due to higher grain prices and a ready market for poultry and dairy products. Farm implement manufacturers, supplying the western Canadian farmers report a considerable increase in sales, tractors being up 40% over 1934 and motor cars 30%. On the whole it looks like a good year for the eastern manufacturing companies.

• Our Mr. W. G. Munding sends in news of a most successful demonstration for the student body and faculty of the Southwest Louisiana Industrial Institute at Lafayette, La. At the same time word comes that Mr. J. E. Hendrick, also of the Tulsa Division, made a satisfactory contact with a member of the Oklahoma State Board of Affairs. The result was that all gasoline bids for State institutions and the Highway Department now specify leaded gasoline.

• Reports from Mr. N. B. Hedden, who covers the territory in which the Wadhams Oil Company is staging a campaign on their new Giant Mobilgas Ethyl, are most encouraging. Giant Ethyl sales have not only showed consistent increase in recent months but showed a 23% ratio in the Milwaukee County district. This is the highest premium percentage so far obtained by this company since the introduction of their new product. It now becomes necessary for them to raise their quota in order to set a new goal for Ethyl sales. In the rural sections for the same period, ratios are running 15% as compared with 1% in the corresponding period a year ago. The over-all picture for the entire Wadhams operations shows close to 20% ratio on Giant Ethyl sales, an increase of 17% over the same period the previous year.

• Our Mr. B. G. Crane of South Bend, Ind., offered to buy two tires from the Standard Oil Company of Indiana service station in the South Bend Division who showed the highest Ethyl per cent during December. This tied in with Standard's new Solite with Ethyl campaign. The success of the drive may be judged by the following figures from five representative stations:

Station	A	Nov.	Dec.
	A	7.5%	22.1%
	B	10.2%	22.1%
	C	9.9%	20.9%
	D	11.1%	18.3%
	E	9.3%	16.7%

Mr. Crane has also been successful in having this Standard Division send out a number of sales promotion bulletins on the new product and in addition has prepared a booklet on Solite with Ethyl for service station attendants.

• While our Mr. John Rollins was giving a demonstration at a San Antonio service station the other day, he had an interesting experience which he sends to the "News." It seems a man who was parked across the street came over and asked what the engine was. Upon learning that it was an Ethyl demonstrator he became very much interested and stayed for four demonstrations. He then told his own story to the audience. His car was a 1930 Dodge which he had run 111,000 miles, 110,000 of which had been on Ethyl. The head had only been off once—at the end of 90,000 miles—and the valves when wiped off, were in good condition and the seats still in perfect shape.

• Mr. Lowell Dollahan, reporting from Grand Rapids last month in connection with educational work he has been conducting, writes as follows: "In Bay City (Mich.) I arranged meetings with the high school and will take almost a week to instruct the students in automobile engineering and gasoline refining. It so happens that Bay City has a loud speaker set-up for their school with a broadcasting room and loud speaker in each class room. It is decided that I will spend some time with the automobile classes and then later broadcast to the entire school. This talk will be received by over 2,000 students in physics, chemistry, etc., in the various class rooms."

• During some routine contacts in Halifax, N. S., our representative, Harold Murch, called upon a certain large automobile agency who evidently are 100% for Ethyl. He found that they not only used it entirely for their own equipment but recommended its use in the case of all car deliveries. It was also noted that sales out of their own pump showed 75% Ethyl.

• Ethyl Gasoline, as a contribution to science, industry and social utility was extolled by Dr. C. M. A. Stine, vice president of E. I. du Pont de Nemours & Company, in a recent address before the Wilmington, Del., Traffic Club, attended by representatives of the principal transportation interests of the country.

"The rise of the petroleum industry has had as its impelling force, the modern chemist," said Dr. Stine. "Old type gasolines 'knocked.' They gummed the motor and made it necessary for overhauls every 3,000 or 5,000 miles. They were unstable, quickly evaporated in storage. The best of the old-type lubricating oils would be utterly unsuited to the extreme pressures under which oil is used in many industrial applications today. Tetraethyl lead, a chemical product, solved the 'knocking' problem for all practical purposes and made possible the present-day high compression motor. Evaporation was retarded by the petroleum chemist, so that now even high-test gasolines may be left in storage for six months as compared to the old limit of two or three weeks. At the same time, the chemist put a check on the tendency of gasoline to form gum, an improvement that permits motors to be run in common practice up to 20,000 miles and more without carbon removal, and in recent tests up to 100,000 miles. The chemist treated lubricating oil and fitted it for gear loads double and quadruple what the untreated oil would carry. He made it possible to color and so distinguish petroleum products."

• Under the sponsorship of the Department of Justice the Baltimore Police are holding a school for a number of picked men of the force. When the subject of high compression pursuit cars and their fuels came up the school naturally turned to our organization for first hand information and Mr. Louis Shank was invited to be the speaker at one afternoon session. From the number of questions put to the speaker his talk evidently aroused a considerable amount of interest.



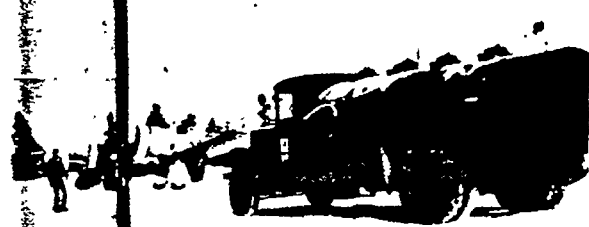
Photos filed

ETHYL NEWS PHOTO FILE 3/36 No. 1 to 9

- UPPER LEFT: Transport plane for transporting ground
- TO RIGHT: Old type bomber.
- IN CIRCLE: Mr. P. M. Perry, Ethyl representative at Concord Maneuvers.
- JUST BELOW: A B-10-B bomber "taking off." They are Martin ships, costing \$59,000 each. A crew of four men with three machine guns. A ton of explosive is carried.
- SECOND ROW, ABOVE, TO LEFT: Method of covering motors with heater on ground under tent.
- SAME ROW, TO RIGHT: New type sleeping-bag and "pup" tent.
- DIRECTLY ABOVE, TO LEFT: Bomber with canvas wing covers to protect against snow and ice.
- TO RIGHT: Ski landing gear.



ETHYL NEWS PHOTO FILE 3/36 No. 11



ETHYL NEWS PHOTO FILE 3/36 No. 12

• TOP LEFT: Pilots have just received orders to bomb Boston. Major Giles in center holding papers.

• ABOVE: Unloading bomber.

• LEFT: A-12 planes fueling.

BOSTON AND NEW YORK "DESTROYED" BY AIR CORPS—

• THESE startling headlines with account of the "attack" appearing in the newspapers called attention to the fact that the Army Air Corps, under Major Giles, was holding its winter maneuvers in the New England territory. Ten new Martin B-10-B bombers formed the nucleus of the attacking squadron, assisted by 10 "A-12" attack planes, to ward off any pursuit planes defending the cities. These latter planes were stationed at Mitchell Field, New York and Burlington Air Port, Burlington, Vt. Although many tactical problems on defense and offence were worked out, the chief purpose of the flights was to test the ships and men under the severe winter conditions encountered in northern New England. Of particular interest was the ability of motors to start, the planes take-off and landing on snow and ice-covered fields, operation of machine guns, bombing mechanism and the planes themselves.

Each evening three bombing planes on the line were set aside for starting trials. The first was permitted to stand all night without any covering, while the second and third were covered with a tent-like arrangement, containing a plumber's heater. (See illustration). In

starting the first plane, a mixture of ether and gasoline was used as a primer, whereas 92 octane Aviation Ethyl Gasoline was used in the others. In every instance the covered motors using gasoline only, started much more quickly than the planes using the gasoline and ether combination. Another interesting test run was to determine the efficiency of the new type ski landing gear as shown in one of the attached photos. The skis are constructed allowing the wheel to extend through them so as to carry the major portion of load when there is only a small amount of snow. However, when deep snow is encountered, the load is distributed over the entire skis' area. The Air Corps has found this arrangement desirable, because a take-off with skis alone reduces the speed of the planes to such an extent that an unusually long runway is required. The added weight and wind resistance, however, reduces cruising speed considerably.

A photograph is shown of the outdoor sleeping equipment tested by the Air Corps and the various members of the ground crew were required to sleep in them. They proved to be warm and comfortable, due to the sheep-skin lining of the bag, together with the air filled mattress. In similar manner, the new flying suits were found to be comfortable, even in sub-zero weather. As a whole, the tests were highly successful in showing the army what problems may be presented by extreme weather conditions and the best manner of overcoming them.

P - G - D M # L



Dayton Division Meeting

✓ ONE OF THE most successful division meetings in the history of the Dayton office was held on January 17th. The gathering opened promptly at 8:30 a.m. with suitable introductory remarks by Division Manager Mack, followed by the reading of answers to a number of questions supplied the men in advance. A general discussion of these answers was then in order. The exchange of views and various opinions which resulted, proved to be decidedly worthwhile. So much so, in fact, that no adjournment was taken for lunch, and coffee and sandwiches were sent in from a nearby restaurant. About the middle of the afternoon a surprise was sprung on the gathering by the sudden and unannounced appearance of five Ohio State Highway Patrolmen. There followed a thorough inspection of all company cars by the officers, which included checking of brakes, lights, horns, windshield wipers, rear view mirrors and other safety features. Also an examination of registration certificates was made. It was learned from the officer in charge that in every case the cars passed the safety requirement of the Department 100%. Mr. Mack, of course, knew of this impromptu inspection, but inasmuch as the field representatives were not aware of it, it was most gratifying to find that all cars met the rigid requirements of the Highway Patrol. After this was completed and the accompanying photos taken as a matter of record, the routine of the meeting was continued. The Division Manager outlined briefly, conditions he had observed on his trip to the West Coast as they pertained to Ethyl sales promotion, and ideas which could be employed at Dayton were discussed.

In the evening the entire group had dinner at a nearby hotel to which the field representatives' wives, who were present in Dayton, were invited, as well as the young ladies employed in the Dayton Division office. As a special feature, Col. Lynn Black, who commands the Ohio State Highway Patrol, was introduced by Gen. Mack. Col. Black told the assemblage of the work done by his department and touched at some length on the accident situation in Ohio. He pointed out that there were 17,000 miles of finished highway and that during 1934, 2,044 fatal accidents occurred within the boundaries of the State. The figures for 1935 were not as yet complete, but for the first 11 months, 2,154 fatalities



• TOP, FROM LEFT: Messrs. Newman, Dedo, Keenan, Faller, Bingham, Siebenthaler, Boehme, Distler, Slack, Manager Mack.

• ABOVE: State Highway Patrol, Sgt. C. J. McGuire, Officers B. Phalen, F. X. Piatt, F. C. Moon, T. Thomas.

ETHYL NEWS PHOTO FILE 3/36 No. 12

were reported. Ohio's highway death record is 12 per cent of the entire United States total. In speaking of the work of the patrol as it affects surrounding states, including West Virginia and Kentucky, he mentioned that he received his training as a "rookie policeman" while a member of the West Virginia State Police.

A good deal of Bill Newman's hitherto unsupported stories about the extraordinary size of the Cabin Creek owls was vouched for by Col. Black. Bill feels that any further statements of his should go unchallenged in view of the fact that he received such splendid support from the Colonel. It was also learned that the State Police of Kentucky are working along similar lines for promoting safety in their state and that an interchange of information between Ohio and adjoining states is maintained by two-way teletype communication and short wave radio. It is safe to say that this particular section of the Mid-West and the states in the division will be greatly benefitted by this safety campaign.

At the close of the meeting all expressed the opinion that much good had been derived from the discussions and exchange of ideas and that they were returning to their respective territories with a better knowledge of their associates' individual problems.

Baltimore Division Meeting

• ON FEBRUARY 7th and 8th the Baltimore office held its Division Meeting. The weather man did all in his power to interrupt the proceedings. Heavy snow both days made the trip to Baltimore and back to the respective territories difficult. Notwithstanding, the affair went off successfully.

The proceedings started Friday morning with the reading of papers by the Field Representatives. Later the meeting was turned over to Advertising Manager McElroy and Mr. Boynton Hayward of the agency, for the purpose of learning the details of our 1936 advertising program. Those present gained the impression that this promises to be the best advertising campaign that we have had. The meeting then adjourned for lunch at the Emerson Hotel.

In the afternoon, through the courtesy of the Baltimore Zone of Chevrolet, the Chevrolet Sales Promotion pictures were shown, followed by the new Ethyl picture. It was expected the Atlantic Refining Company picture, "Ted Husing's Parade of Champions," would be seen, but due to the storm the film did not reach Baltimore.

Friday night was devoted to merry-making, and the party, augmented by wives and sweethearts, gathered at the home of Mr. Louis Shank. The arrival of Mr. and Mrs. Russell Weston from New York completed the success of the evening.

Saturday morning, after the reading of the remaining papers, Mr. Weston gave a talk on Jobber policy and the making of Jobber Investigations. Many points were brought up for discussion and it was the unanimous opinion that this session would be of material help in future jobber work. Following Mr. Weston's talk, the Field Program for the year was presented and discussed. The meeting then adjourned and a luncheon, to which the ladies were invited, was served at the Emerson.

The dinner Saturday night was also at the Emerson, followed by a party in the Bubble Room of the Hotel Lord Baltimore, where the strains of Sleepy Hall's N.B.C. orchestra kept the party dancing till the "wee sma" hours. On Sunday everyone returned to his territory.

Some sidelights of the meeting: Paul McElroy proved to be an excellent story teller. He was kept on the jump, however, sorting his stories out so that Class A would not be told at a Class B gathering. In the end he was highly successful.

Russ Weston is still an inferior Ping Pong player in the opinion of the Division Correspondent.

Boynt Hayward has a positive genius for missing trains—especially sleepers. Paul McElroy also caught the disease.

Doug Jeppe continues to be the Fred Astaire of the Baltimore Division. He was the only man that didn't miss a dance on Saturday night.

The "News" In The Spotlight

• THE "ETHYL NEWS" is receiving gratifying recognition in the press of the country. The article entitled "Who Owns Our Wealth?" by Bird Rees, appearing in the January number, is being widely quoted by newspapers and other publications. Mr. B. C. Forbes, nationally known commentator of the Hearst Newspapers, discusses with approval, the facts presented by the "News" relative to the wide distribution of the national wealth. The Atlanta (Ga.) Journal, reprints a long excerpt of this article, expressing its appreciation of the high quality of the publicity material issued thereon by the Ethyl Publicity Service. Editorial comment is appearing and this cycle of news in which Ethyl figures, continues to win journalistic attention.

NEW BOOK FEATURES ETHYL

(Continued from page 5)

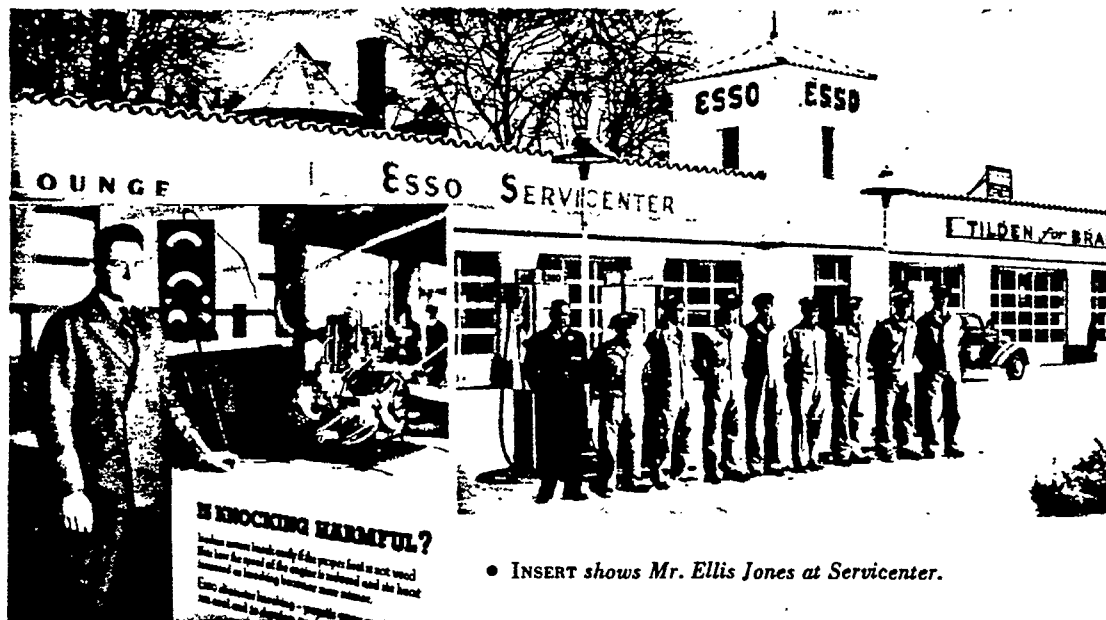
no one had ever put into operation for commercial production a plant for the bona fide chemical extraction of any one of the elements from the boundless reservoir. For thousands of years enterprising technicians had extracted low grade salt, laden with impurities, from sea water with the help of the sun's evaporative powers and seaweeds had been intermittently harvested and burned for the potash and iodine they contained, but none of these operations was chemical processing any more than fishing is.

"Now that the ocean water is being handled for the profitable extraction of one element, why not extract some of the other valuable elements, since bromine bears the brunt of the handling cost? That has brought the old corpse of gold-from-the-sea to life again, at least in semi-scientific circles, for after all, there is gold in 'them thar' waves. Bromine pays for handling the water. Any other recoveries of valuable minerals, after the additional out-of-pocket expense was taken care of, would be pure, unhampered profit. Now that bromine can pay its way, the path is open for the recovery of other elements if methods can be found that do not put on an *additional* expense greater than the value of the product. Perhaps here lies a partial answer to the question of depleting mineral resources."

We have only quoted at random from the pages devoted to the subject, but Prof. Furnas has told this particular phase of our story in a manner which leaves nothing to be desired. The book itself is a most entertaining volume and notwithstanding that it deals entirely with science will be appreciated alike by the technically-minded or otherwise.

A CORRECTION

• Last month we reported that the Central Truck Lines of Florida was high compressioned by Messrs. Rosser and Murphy of the Atlanta Division. We neglected to mention however, that Mr. Jack Taylor made a special trip from Detroit and was responsible for a large part of the work on this equipment.



• INSERT shows Mr. Ellis Jones at Servicenter.

Standard Oil Co. of New Jersey New Service Center

• JUST PRIOR TO the first of the year the Standard Oil Company of New Jersey opened one of the finest service stations in New Jersey of the type known as Servicenters. The building occupies an excellent corner at Central and Munn Avenues in East Orange and is located to draw from an unusually high type of trade, including not only residents of the vicinity but those using the main highway from Metropolitan Newark to the suburbs.

The grand opening was staged on December 28th with a parade in which music was furnished by the band from the Bayway Refinery. The world's heavyweight champion, James J. Braddock, was a guest and was in the line of march.

The station is unusual in several respects. It maintains a comfortable lounge for customers who are waiting for their cars and is operated 24 hours a day. The exterior lighting is exceptional, a combination of Mazda floodlights with mercury vapor lights giving a daylight effect. An exhibit of various Standard products and services was put on showing oils, greases, high pressure lubricants and our demonstrating engine. This feature of the opening was continued for nine successive days and a great many customers and company employees were reached.

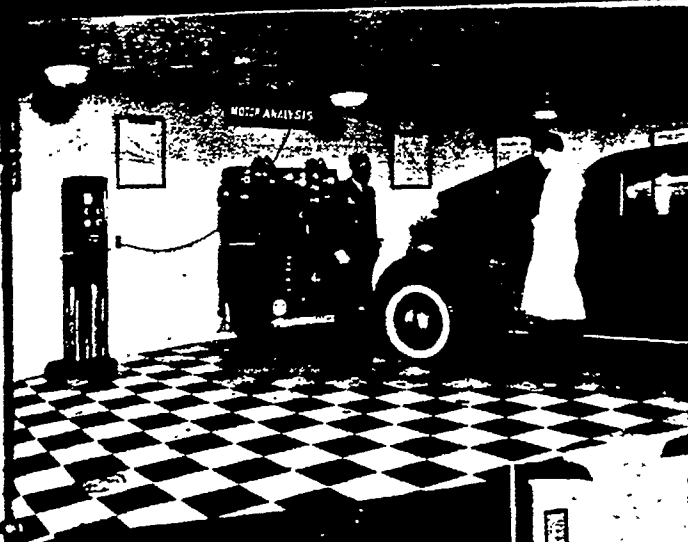
That the reaction to our demonstration was good is proven by the fact that the Esso ratio was about thirty-three per cent during the first week and has since passed thirty-five per cent. Another interesting feature of the station is that it combines in the same building a completely equipped brake testing and adjusting service, operated by an independent company in co-operation with Standard Oil.

PAGE TWELVE

Boston Division Meeting

• ON FEBRUARY 12th and 13th a meeting of the Boston Division was held with all members of the division attending. Activities really started the evening of the eleventh, when Mr. Julian Frey gave a very interesting talk before the New England Section of the Society of Automotive Engineers at Massachusetts Institute of Technology. All the members of the Boston Division were present at this meeting. On Wednesday, February 12th, the entire day was devoted to a technical discussion by Mr. Frey on new developments in the automotive industry and at the Detroit Engineering Laboratory. This session ended with a discussion of the slides we are now using, each man giving his own interpretation of the different ones and the reactions received from the audiences at the various meetings.

The second day of the meeting, February 13th, was devoted to field activities with the men reporting on one or more phases of work followed by a general discussion. Mr. Matt Taylor worked out a somewhat different method of presentation for these reports. Instead of preparing written papers on each of the various topics, the men made up outlines of their reports which were sent out before the meeting. This allowed them to devote more time to ideas and resulted in many valuable suggestions being offered and a broader discussion of the topics which arose. At the close of the meeting most of the men expressed the opinion that it had been the most successful ever held in the Boston Division. As a result of these sessions, it is expected that the Boston Division will soon put into effect several new policies which should materially better the quality of its work.



• ABOVE: Atlanta Branch United Motors Service. Mr. Crowe, Tune-up Expert, and Mr. Ray Wilson, Manager, inspect a H. C. job.

• ABOVE, RIGHT: Main window of Kansas City Branch, United Motors Service.

• RIGHT: Equipment at New Orleans Branch.



HIGH COMPRESSION AS A SERVICE FEATURED BY UNITED MOTORS SERVICE, INC.

• HIGH COMPRESSION as a repair service, has become a reality at United Motors Service branches throughout the country. Every day old model cars are entering these modern repair shops and emerging with greatly increased power, speed and mileage, because their motors have been high compressioned—not in a hit-or-miss method, but in an up-to-date, scientific manner.

Much of the credit for this remarkable work can be given to the service manager at Atlanta, Ga., Mr. Ray B. Wilson. He started this work on his own initiative about four years ago with the idea of passing the benefits of high compression to his customers. Our entrance upon the scene was in the early part of 1933 when Mr. M. M. Smith of the Atlanta Division, held an educational meeting and demonstration at this branch. Besides the entire service personnel of United Motors, a number of prominent oil men were present at the meeting and the advantage of high compression, made available by Ethyl Gasoline were shown. From this time on, the work proceeded without interruption. Whereas formerly each car had been checked—by estimation only—with the idea of taking off a small amount of metal from the cylinder head, now the depth gauge, the level and lightweight oil came into the picture. Each car was studied carefully and after the work of high compression had been completed, road tests were made. Customer reaction was also noted and it was the enthusiasm of these customers that finally gave the work its present impetus.

Tulsa Division contacts with United Motors Branches for the purpose of developing a program along the lines of work done at Atlanta, Ga., was undertaken. This activity was inaugurated at the New Orleans Branch in April, 1935, when Mr. Munding gave a demonstration to their personnel and was started at the Dallas Branch by Mr. Hamilton, who contacted them during the latter part of June, 1935.

Previous contacts, of course, had been made at various times in the past by the division personnel who were acquainted with Mr. Ira Kennedy, branch manager at Dallas and Mr. Chadburn, branch manager at New Orleans. Repeat contacts with Messrs. Chadburn and King, service manager for the New Orleans branch, by Messrs. Munding, Hamilton and Errol Gay resulted in a very fine set-up for high compressioning at New Orleans. In addition to the technical information supplied by our representatives, Mr. Munding did a considerable amount of sales promotional work with our customer companies and various fleets which resulted in an appreciable amount of initial business.

At the present time a reasonably satisfactory number of cars are coming into the branch for high compression tune-up. It is believed that this number will increase as the satisfied customers assist United Motors and ourselves in this new activity.

The initial contact at Dallas was made by Mr. Hamilton when he saw Messrs. Kennedy and Cook, branch
(Please turn to next page)

That Gasoline Tax Question

• SHOULD HIGH TAXES be levied on food and other necessities of life? The answer will of course be "no". Why then should taxes be imposed which will raise the price of such commodities?

In a survey recently conducted by the American Petroleum Industries Committee, it was shown that during 1935 the average gasoline tax in 50 representative cities amounted to 5.29¢ per gallon. This represents an average sales tax of approximately 40% based on the average retail price.

In the past it has never been the practice to place a heavy tax burden on human needs, high taxes being reserved for—and quite properly so—the obvious luxuries. But is gasoline purely a luxury? In this day and age we would say decidedly *not*, although many gallons are consumed for recreational purposes.

Without the use of motor equipment we can imagine the difficulty and consequent increased cost of moving food such as dairy products and the like, to market, for the price of these reflect transportation charges. From this angle alone, gasoline has become one of the principal necessities of our daily life. Probably because the automobile has for so many years been looked upon as solely a pleasure vehicle, we have failed to realize that in reality it has grown to be a necessity. Without it, it would be impossible to transact business as it is carried on today. Seventy-five years ago the bathtub, as we know it, was a luxury, to be found in a small percentage of the homes in the country. Today health department regulations require a properly equipped bath in every residence. Thus we progress.

It is high time the public awoke to the facts. The suggestion has been made that one method of education along this line be conducted at the filling station by pointing out to a customer who is having the tank filled, that of the \$1.50 paid for 10 gallons of gasoline, \$1 only is for the fuel and the additional 50¢ is tax. When, and not until, the motorist becomes sufficiently tax conscious, may we expect an equitable adjustment to follow.

• THE NATIONAL PETROLEUM ASSOCIATION notes in a recent Bulletin how the automotive industry has again revealed itself an outstanding contributor to the business recovery. With the 1935 output of motor vehicles estimated at 4,150,000, the industry once more is shown to be the largest individual consumer of the country's raw materials. Included in the list of the various commodities taken by the car manufacturer was 23% of all the iron and steel, 77% of the plate glass production, 39% of the lead, 33% of nickel, copper 22%, 15% of all the aluminum, and of zinc and tin 15 and 20% respectively. In order to turn out the 50,000,000 tires which the market demanded, it required 885,000,000 pounds of crude rubber and 210,000,000 pounds of cotton fabric.

PAGE FOURTEEN

Cooperating With Oliver Farm

• MR. H. L. NIXON (K. C. Div.) recently completed a series of 14 meetings with the Oliver Farm Equipment Sales Company. The Sales Manager for Oliver, writes us that this talk on fuels was not only convincing but extremely interesting to all their salesmen. He stated that it brought out facts concerning fuels that the salesmen heretofore had not realized and that he would like to have Mr. Nixon give other talks at sales meetings of his company. The following letter was also received at the Kansas City office:

*Ethyl Gasoline Corporation,
North Kansas City, Mo.*

Gentlemen:

Recently we held a dealer meeting at Denver, Colorado, and a dealer opening day at Boulder, Colorado. Your Mr. Paul F. Johnson of Denver assisted us in these meetings by demonstrating the little high compression Delco unit, burning various grades of fuel.

I am quite sure the farmers and dealers in these two communities learned a lot from Mr. Johnson's talk and demonstration and I feel sure that it will not be but a few months until farmers and dealers everywhere will be sold on high compression and Ethyl Gasoline.

We wish to take this opportunity to thank you for Mr. Johnson's services at these two meetings. Mr. Johnson knows his stuff, is a likeable chap and has a wonderful personality and I just know that he is going to put Ethyl Gasoline over the top in the Colorado territory.

*Yours very truly,
OLIVER FARM EQUIPMENT SALES COMPANY.
R. C. Hunt,
Sales Manager.*

UNITED MOTORS SERVICE

(Continued from page 13)

service managers. Messrs. Hamilton and Cottrell appeared on the program of a large general meeting on July 25th which was held as an automotive service clinic before approximately 900 automotive and repair men. Mr. Nagle, General Service Manager of United Motors, was the principal speaker.

As the success of the program in Atlanta, Dallas and New Orleans became more apparent, the Kansas City branch of United Motors organized to extend the work in their territory. Mr. Gay came on from Detroit in November to supervise the initial meeting. So much enthusiasm was evinced that the activity soon became well established. On January 30th a combined meeting was held which was attended by representatives of all the oil companies and important automobile agencies in Kansas City. At this first general meeting, conducted by our Mr. Berry (K. C. Div.) and Mr. Gay, there were 312 in attendance.

The expansion within the last few months has been so rapid that many United Motor Service garages who have not as yet put in a high compression service intend to have such service available in the near future.

ACTIVITIES AT THE SAN BERNARDINO PROVING GROUNDS



• THE ACTIVITIES at San Bernardino have, since the beginning, been shrouded in mystery. We were very glad, therefore, to have our roving reporter make a trip to the Coast recently, armed with his camera, and secure this first-hand information. The above pictures give us a glimpse of the intensive research which is being carried on. At the top left we find General Carl George von Krieger in an Iowan barnyard, en route to the Coast. To his right may be seen Earl Bartholomew and Chuck Hawley engaged in tractor research as they settle an argument about torsion effect of draw-bar pull with a 1936 model Woolworth tractor. At the upper corner to right, our reporter caught Earl Bartholomew in a moment of relaxation. In the bottom row at left are shown patrons of the Recess Club having a sandwich luncheon at Muroc Dry Lake. They are, from left, Chuck, Jake, Earl, George and Juan Hidalgo. In center, George Krieger inspects a high compression farm job, and at right Ralph Champlin of our agency, is endeavoring to put a real farm touch to his advertising as he types an ad.

Newsbriefs



• SAM WAGNER gives living proof to the saying "the child is father to the man." Personal characteristics still prevail as may be observed in this youthful picture of Sam with an unidentified Miss back in the gay nineties. He still has a smile for the ladies. Furthermore, Harry Mack gives proof to Sam's continued penchant for odd headgear. When the west coast Manager greeted "General" Harry recently at the first tee of a Los Angeles golf course, he was sporting a small beret. Seemingly he retains his weakness for French bonnets but unquestionably a beret is easier to balance than the old lid of his youth.

• Joe St. Germain doesn't take any chances on his attendance at meetings. He recently held a meeting at Fort Bragg, N. C., and instead of inviting every one to attend, HE GOT THE COMMANDANT TO ISSUE AN ORDER REQUIRING THEM TO BE PRESENT.

• Division Manager, Harry Mack, recently attended the Kentucky Petroleum Marketers Association Convention held at the Brown Hotel at Louisville. He was pleased to discover from several of our customer company executives that our new Kentucky representative, Louis Slack, has been so successful in establishing himself in his new territory.

• While motoring to Dayton to attend the recent division meeting, Bill Newman was obliged to do some fancy driving. It so happened he was following a beer truck down a hill when several of the empty kegs became unfastened and dropped off at frequent intervals on to the highway. Bill believes that playing tiddle-de-winks with empty beer barrels is a new experience in the life of a field representative.

• The fire extinguishers issued to all representatives in the Tulsa Division last summer have at last proven of value. J. E. Hendrick, while making a call at Mack Tire & Battery Supply Company in Shawnee recently, rose to the occasion when a gasoline fill pipe caught fire. The blaze was extinguished in short order, thereby winning for Ed the hand embroidered hook and ladder. Your correspondent notes that this is reminiscent of the fire fighting feat of Jack Steelman, some years ago in Illinois, which was witnessed by Clair Dees.



• THIS is a picture of the way Dan Guy (Tulsa Div.) felt when at the conclusion of a recent demonstration someone in the audience asked, "What made the motor knock?"

PAGE SIXTEEN

NOTABLE NATIVITIES

• Last month we gave credit for the first 1936 model to Dick Murphy of the New York Division who reported the birth of a daughter on January 28th. A delayed report from Detroit makes it appear that Dick wasn't even in the running and Detroit claims the all-time Ethyl record of four births in thirty days. Just look this over and see if they're good or are they good: Mr. and Mrs. John R. Howard III announce the birth of John R. Howard IV on December 30, 1935 (the last 1935 baby), weight 7 lbs. Apparently the honors for the first 1936 model go to Mr. and Mrs. Howard Pearsall who received congratulations New Year's day on the arrival of their first child. Miss Patricia, it is reported, weighed 7 lbs. On January 25th Dr. and Mrs. Harold Beaty—Doc is attached to the Chemical Lab—greeted their second son, who will be called David Stewart and to round out the quartet Harold Chalk's wife presented him with a 7 lb. 3 oz. daughter on January 27th. Our correspondent also sends the additional information that little Miss Silvia is blessed with red hair. Certainly this is a most auspicious start for 1936.

• Mr. and Mrs. Vernon Cushman of Kansas City, Mo., have announced the marriage of their daughter, Virginia, to Paul Johnson of our Kansas City Division. The wedding took place in Denver, Colorado, on February 1st and the young couple will make their home at 1665 Sherman Avenue, in that city. We wish Paul and Virginia all the luck in the world.

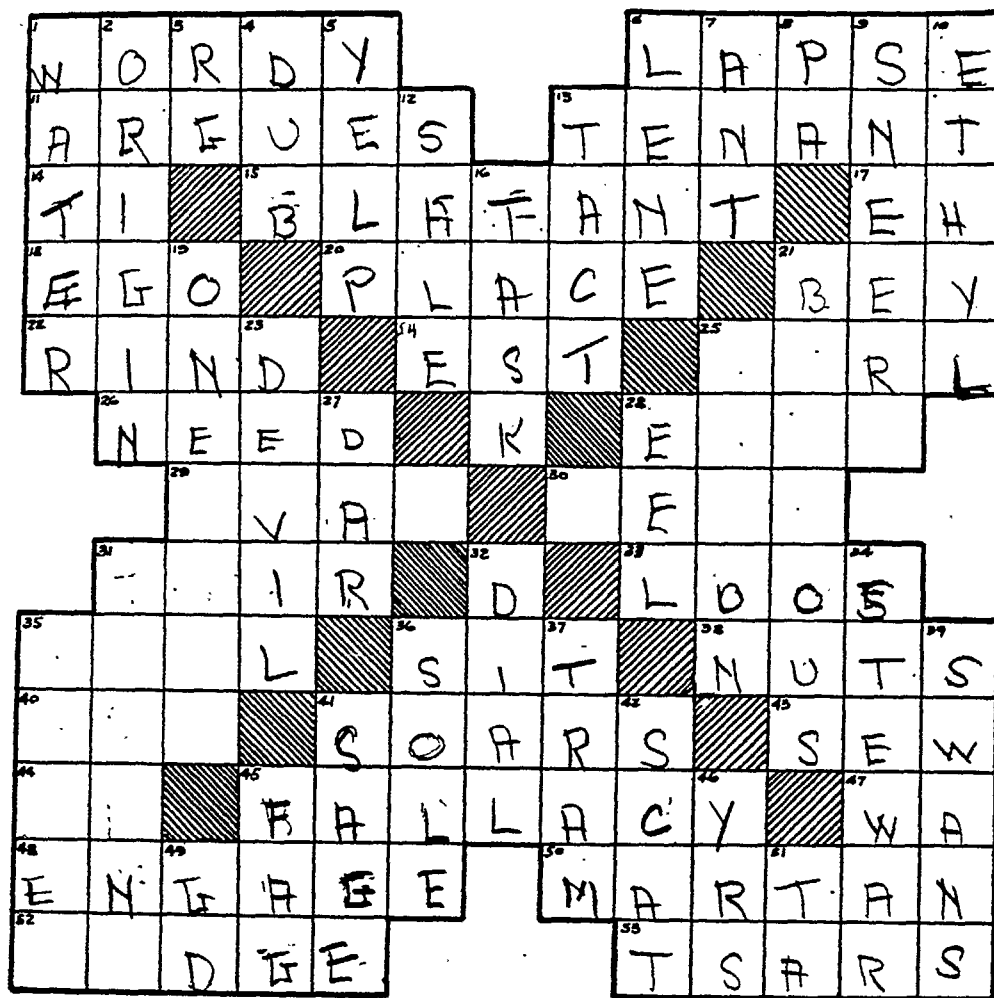
• Mr. and Mrs. Jack Martin (California), were recently introduced to the delights of drinking semi-unadulterated Florida orange juice. They finally admitted that the fruit of their "enemy" state had its good points. The occasion was a party on the return of the Art Wiltz from a vacation to that southern "playground" when they brought back several crates of the delectable fruit, and was staged in the apartment of George Krieger and Jack Taylor in Detroit. Witnesses to the admission that good oranges grow outside of California were George Krieger, Jack Taylor, Art and Mrs. Wilt, C. J. MacFarlane and Eddie Paige.

• The whole Ethyl family and the Tulsa Division in particular, take pleasure in welcoming to our midst Mrs. Carl Meurer who was the former Miss Frances Elizabeth Martin of Tulsa. The wedding took place on February 14th in the First Lutheran Church of that city before the many friends of the young couple. After a wedding trip to New Orleans, Mr. and Mrs. Meurer will make their home at the Arlington Arms Apts., 12th and St. Louis Streets, Tulsa.

• The Kansas City Office received quite a surprise when Mildred Williams, Secretary to Mr. Merritt Collins, in charge of the Laboratory, was married February 8th to Mr. Paul Jones of Kansas City. Mr. and Mrs. Jones will reside in North Kansas City and Mrs. Jones will continue her splendid work with the Laboratory Department.

• The Tulsa Division wishes to enter John Rollins in the free lunch derby. His claim to recognition is a schedule of seventeen luncheon clubs on twenty-two working days between February 17th and March 14th.

• While Bob Hogan (Baltimore Div.) was at a Standard Oil station in Salem, Va., recently the following incident took place. A negro drove up in a dilapidated old Ford and called out to the attendant: "Boss, can you give me two gallons of dat Esso right away, my buddie jest got away from me and I want to catch him."



HORIZONTAL

1. Verbose.
6. To pass slowly.
11. Dispute.
13. A lessee.
14. Note of scale.
15. Blustering.
17. Syllable of inquiry.
18. Self.
20. Set.
21. Turkish Governor.
22. Outer coast.
24. Superlative degree ending.
25. Project.
26. Want.
28. Weird.
29. Imagination (abbr.).
30. Name of song writer.
31. Small.
33. Author of "Gentlemen Prefer Blondes."
35. Scrutinize.
36. To seat.
38. Hard shelled fruits.
40. Possessive pronoun.
41. Aspires.
43. Darn.
44. Continent (abbr.).
45. Delusion.
47. West Africa (abbr.).
48. Attract.
50. Fur bearing animal.
52. A right triangular prism having one very acute angle.
53. Former Russian Rulers.

VERTICAL

1. Melts at 0° C.
2. Primary source.
3. Royal Guard (abbr.).
4. Entitle.
5. A crying bark.
6. Smooth.
7. Insect.
8. Keystone State (abbr.).
9. As a sneer.
10. A great boon to gasoline.
12. Barter.
13. Diplomacy.
16. Drudgery.
19. Tribe of North American Indians.
21. Cloak worn by Arabs.
23. An evil spirit.
25. Wading bird.
27. Daughters of Amer. Revolution (abbr.).
28. Long fish.
31. A gasoline test.
32. A compass.
34. A stewing pot.
35. Tendon.
36. Individual.
37. Street-car.
39. Graceful water birds.
41. Wise.
42. Begone.
45. Cigarette (slang).
46. Periods of time (abbr.).
49. Grand Duke (abbr.).
51. Three Arts (abbr.).

Contributed by Mrs. R. C. Murphy.

It costs *from*
\$ 7 to \$ 15
to make a demonstration



4^c makes performance

THE average sales department overhead, per demonstration, is reported by various dealers as from \$7 to \$15—made up of the following items: Rent, Insurance, Maintenance, Salaries, Taxes, Advertising, Investment, Gasoline, Miscellaneous.

The average amount of gasoline consumed per demonstration is not over two gallons. Two gallons of Ethyl cost exactly 4c more than two gallons of regular gasoline—and the difference in performance may swing a sale. Ethyl brings out the peak performance of every car—old or new.

P. S. If your car has an adjustable spark for the octane quality of fuel used, be sure you set it to take full advantage of Ethyl.

SMART SALESMEN DEMONSTRATE WITH



ETC 21147

ETHYL NEWS PHOTO FILE 436 No. 1

ETHYL
NEWS
APRIL, 1936



ETC 21148

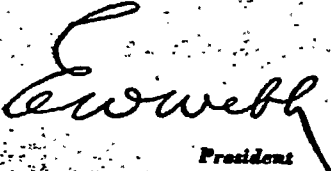
To The Members of Our Organization

Business as a Fine Art

• THE other day while talking with Mr. Bruce Barton about several phases of our business, I expressed the view that one of the things about which we had to be most careful was that of being satisfied with the business we have today and the contribution that any of us may have made toward its accomplishment. During the conversation he told me the story about a letter Ralph Waldo Emerson received from a friend in Europe who had an opportunity to climb a ladder to view Michael Angelo's "Last Judgment" at close range. That masterpiece was doubtless designed to be seen quite some feet away. The artist perhaps had no idea that anyone would study it in its small details. Yet Emerson's friend was astonished at the minute finish of muscles and nerves, like a miniature.

• As Mr. Barton expressed it, Michael Angelo was painting not merely for the verdict of the ordinary observer but to satisfy the far higher and more exacting standards inside himself.

• SINCE that conversation I have been even more impressed with the fact that every man in business is painting the picture of his own career and every business organization is painting the picture of its achievement. Some men and some businesses are satisfied with crude results. Applied specifically to ourselves, there are probably some of us who assume that because our products are now used to such a large extent in the gasoline of the country they can feel complacent. This, of course, may prove to be a grave error. It is the untiring devotion to the holding of the business we have and the filling in of infinite details of service with the ever present idea that there is still further work to be done and greater progress to be made, that makes the real achievement.


President

To The Members of Our Organization

Unless otherwise indicated, all artwork and photographs destroyed
May 1957.

Business as a Fine Art

- THE other day while talking with Mr. Bruce Barton on business, I expressed the view that one of the things about business that is so careful was that of being satisfied with the business we have. That any of us may have made toward its accomplishment. I told me the story about a letter Ralph Waldo Emerson received from a man who had an opportunity to climb a ladder to view Michaelangelo's "The Creation of Adam" at close range. That masterpiece was doubtless designed to show the human figure. The artist perhaps had no idea that anyone would study it. Emerson's friend was astonished at the minute finish of the miniature.

- As Mr. Barton expressed it, Michael Angelo was painting the picture of the ordinary observer but to satisfy the far higher artist inside himself.

- SINCE that conversation I have been even more impressed with the fact that every man in business is painting the picture of his own career and every business organization is painting the picture of its achievement. Some men and some businesses are satisfied with crude results. Applied specifically to ourselves, there are probably some of us who assume that because our products are now used to such a large extent in the gasoline of the country they can feel complacent. This, of course, may prove to be a grave error. It is the untiring devotion to the holding of the business we have and the filling in of infinite details of service with the ever present idea that there is still further work to be done and greater progress to be made, that makes the real achievement.

E. W. Webb
President



Vol. 3, No. 4

ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

APRIL, 1936

Published monthly by the Ethyl Gasoline Corporation for the entertainment and benefit of the members of its organization. Address all news items, correspondence or other material to the Editor, W. Cary Harris, 35th floor, Chrysler Building, New York City.

W. CARY HARRIS - - - - - Editor

Associate Editors

EDWIN DOWNS

RUSSELL B. WESTON

CORRESPONDENTS

Atlanta Division	GEORGE W. WARREN
Baltimore "	L. W. SHANK
Boston "	DONALD S. FLYNN
Chicago "	A. B. WYRICK
Dayton "	VINCENT KEENAN
Kansas City "	C. M. BERRY
Los Angeles "	R. G. LOSER
New York "	R. C. MURPHY
Toronto "	J. N. FITZGERALD
Tulsa "	HARRY KUHE
Engineering Dept.	JULIAN J. FREY
Manufacturing Dept.	ARTHUR P. STOVER
Gasoline Testing Dept.	LESTER B. ROBERTS
Export Dept.	HUBERT FOSSETT

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH

What Price Motoring?

By BIRD REES

• AUTOMOBILE accidents in the United States have caused 380,000 deaths in the past fourteen years. This is fifty per cent. more than the total number of Americans killed, including those who died of wounds, in all wars in which this country has participated. Last year thirty-six thousand persons were killed in automobile accidents in this country compared to a total of fifty thousand Americans killed during the World War!

Small wonder that the country is thoroughly aroused over this annual increase in wanton killings, permanent disabilities, painful injuries and the useless destruction of property. Individual carelessness of motorists and pedestrians is mainly responsible. With a realization of the astounding facts of the causes of automobile accidents, the public is being aroused from its apathy to the most wide-spread campaign ever undertaken for greater safety on our highways and streets. Since mass education is one of the four ways to attack the problem, it is essential to broadcast as widely as possible the causes, results and other facts pertaining to this needless mortality. The following data are quoted from publications of the Travelers' Insurance Co., National Bureau of Casualty and Surety Underwriters, and other authorities.

In 1935 the record of automobile accidents resulting in persons killed and injured increased at about the same rate as car registration. The total registration of all motor vehicles was 26 million, of which nearly twenty-two and a half million were passenger cars. That is 71% of the world's motor cars. There were 826,000 automobile accidents resulting in 36,100 persons killed and 895,280 injured. This makes the past two years' daily average, 100 killed and 2,265 injured. The annual economic loss is estimated at one and a half billion dollars, which is nearly equal to the total annual wholesale value of motor car production. The greatest number of accidents and the greatest number of injuries from

(Please turn to page 12)

PAGE ONE

ETC 21151

65 copies 4/8
to Rotary International

mailed 4/8
copies delivered
4/6/36

MEET MR. HAWLEY

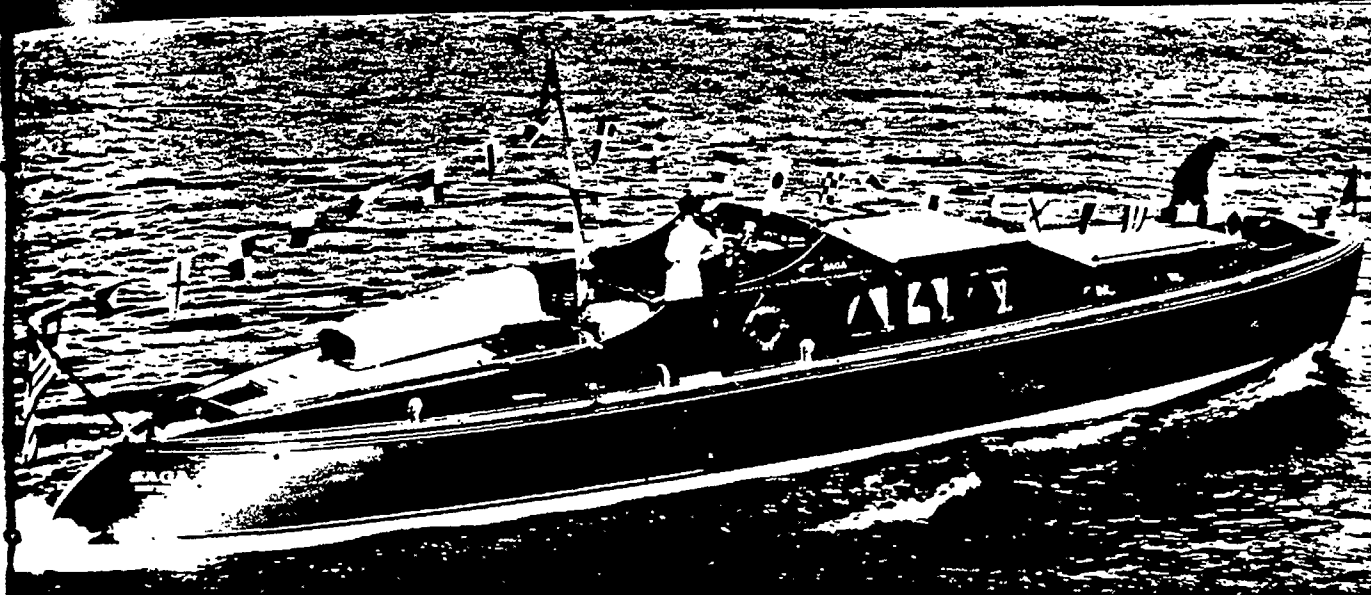


• CHARLES D HAWLEY was born in East Tawas, Michigan, on September 17, 1901. He moved to Oregon as a small boy, attending the local schools in Multnomah and Portland and later Oregon State University at Corvallis, from which institution he graduated with the degree of Bachelor of Science in 1924. During his college career he was elected to the honorary society of Tau Beta Pi.

In 1925 Mr. Hawley enrolled in the graduate school of engineering at Harvard University where, for two years, he continued his studies, finally becoming a member of the staff of instructors. In 1927 he joined the Ethyl Gasoline Corporation as a Mechanical Engineer in the Engineering Department located in Yonkers, N. Y. When the Engineering Laboratory was transferred to Detroit during the latter part of 1927 he was appointed Assistant Director, which position he still occupies.

A member of the Society of Automotive Engineers, he has contributed in recent years much technical literature on the subject of fuels and engines.

In 1933 Mr. Hawley married Miss Barbara Kirtland of Exeter, New Hampshire, and makes his home with his wife and two sons in Birmingham, Michigan.



ETHYL NEWS PHOTO FILE 4/36 No. 2
Army Tests at

Fort Ethan Allen

✓ THE Army has completely mechanized the Seventh Field Artillery and the Third Cavalry at Fort Ethan Allen and in order to keep the fleet in perfect operating condition at all times, a motor training school has been set up. This naturally involved an extensive educational program, as many of the men had very limited mechanical training. Mr. Phil Perry, northern representative of our Boston Division, arranged with Captain Kennett, motor officer, for an Ethyl demonstration and talk. After the demonstration the Captain and Lieutenant Dalton requested that tests be run on the new armored scout cars, used by the cavalry, as well as the motor equipment used by the artillery.

The testing ground consisted of ploughed fields, pits filled with loose sand, swamps and steep inclines in wooded areas. In fact the scout cars are expected to be able to travel anywhere that a horse can go. These cars which are specially built by the Army Ordnance Department, weigh approximately 9,000 pounds. They are powered with special high compressioned Hercules engines and made the run over the course several times, first using third grade gasoline and then Ethyl. With Ethyl Gasoline the car covered the course in one gear higher and with no apparent overheating in two thirds of the time. They had previously experienced excessive detonation and overheating when running the same test with third grade (G-101). After this run, acceleration tests were made on the highway, again using third grade and Ethyl Gasolines but due to the weight of the armament, the car was naturally a sluggish performer. It required forty-five seconds to accelerate from fifteen miles per hour to thirty, with the third grade product, whereas the same acceleration was obtained with Ethyl Gasoline in thirty-seconds.

Similar tests were run on the Chevrolet and Dodge trucks used by the Seventh Field Artillery. As a result of these, specifications were changed so that only Ethyl Gasoline is to be used in scout cars and leaded regular gasoline in all transportation equipment.

The "Saga"

• THE yacht, "Saga," shown above, was designed by the Wheeler Shipyard, Inc., of Brooklyn, N. Y., for Mr. Charles S. Payson, and was one of the most unusual craft to be launched in 1935. She is powered by 12 cylinder twin Packard engines, developing from 800 to 900 H.P. which operates through angle drives. They are located in the extreme stern of the boat and this is believed to be the only installation where such high powered engines are installed in such a manner. The "Saga" is 69 feet long and has a beam of 12 feet. An elaborate set of telegraphs connect the engine room with the flying bridge from which the boat is handled. Quarters for the crew of four are aft and adjacent to the engine compartment. Just forward of the bridge is the saloon with a dining alcove which may be turned into a double bed. A guest room and owners' stateroom with bath and lavatory occupy the remainder of the forward quarters.

✓ She burns approximately 120 gallons of Ethyl, which is used exclusively, at 40 miles an hour and her storage tanks have a capacity of 1,600 gallons. There is no difficulty of attaining 40 m.p.h. and her top speed is 48 miles. The boat has frequently made the run from Port Washington, L. I., to Portland, Me., a distance of 300 miles, mostly through open waters, in approximately ten hours. She cost over \$70,000 and the engines alone were \$26,000. A side view of the "Saga" underway at high speed, resembles a wall of water with the head of the skipper just visible above the wave.

APRIL COVER

• A view of the reconstructed north facade of the colonial Capitol of Virginia at Williamsburg. This drawing was made especially for the "News" by the well known artist, Jack Manley Rose, from a photograph taken by F. S. Lincoln and is reproduced by permission of Colonial Williamsburg, Inc.

PAGE THREE

ETC 21153

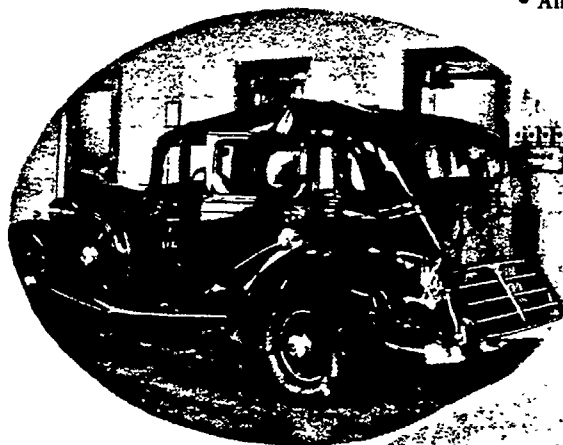
Engine
Wheeler
Copy to
Army to
file
4/3/36

Copy sent
4/6
P.L. to file

Re. 4/6/36



• AIRVIEW showing proximity of Servicenter to Capitol.



• REPAIR shop job, Before and after.



*Richard L.
J. S. Cole
4/6/36*

• WASH TRACK

ETC 21154



• THIS S. S. man has just told his astonished customer that the cost of the ten gallons of Ethyl he has just bought includes a 54 cent tax—a sales tax of over 28 per cent!

Capitol Servicenter

• ONE of the finest service stations in the country, if not in the world, is the "Capitol Servicenter" which is operated by the Standard Oil Company of New Jersey on Constitution Avenue in the city of Washington, D. C. It is literally in the shadow of the Capitol building and the only privately owned structure on this new thoroughfare which extends for two miles from the Capitol to the Potomac. It is a six story Indiana limestone building of classic design to harmonize with the Government buildings which surround it. Three of the floors are for the exclusive servicing and repair of automobiles and the equipment includes the most modern and up-to-date machinery available.

On the main floor, to which access is had through eight wide doorways, are located four island pumps each of which, except for greasing, is a complete service station in itself. On the same floor is a washing track equipped with belt conveyor system which can handle approximately 450 cars a day. There is also on this floor a lubrication department with a track working on the same principle. The Brake Department and Wheel Alignment Department, are located in the basement and contain all the most advanced equipment for servicing brakes, wheels and tires. On the upper floors are located shops for all kinds of repair work from damaged fenders to major wreck jobs. A unique feature of the Servicenter is the laundry where clothes and chamois are cleaned, as well as uniforms used by the salesmen. Last year the Servicenter's Ethyl sales showed an average ratio of 31% and for January and February this year, it has been holding better than 39%. Illustrations on opposite page show various views of the Servicenter.

ETC 21155

THE ETHYL NEWS

"Little Bertha"

• THEY called her "Little Bertha" and while she was going she established something of a record, for she ran 100,645 miles most of the time on Ethyl Gasoline before head was taken off or pan dropped. When she wasn't using Ethyl she was using leaded regular.

"Little Bertha" was an International B3 model tractor put into service July 24, 1933, by the Standard Oil Company of Kentucky. Back of Bertha was a semi-trailer with a 1,559 gallon tank. The combined gross weight of tractor, trailer and load was 17,593 pounds. From the very start she worked hard. Starting from the river terminal at Louisville she averaged two 250 mile trips a day, with three drivers alternating at her wheel. And incidentally those were pretty hilly miles—Kentucky has plenty of "ups and downs".

For eleven months Bertha plugged along serenely. It had not been intended at first to make an endurance test, but as the miles piled up her owners got interested and Mr. Jack O'Connor, who has charge of maintenance of company motor equipment at Louisville, got permission to see how long Bertha could take it without a major overhaul. All along her routes south, east and west, she became well known and people watched for her: By-standers asked the up-to-date mileage and made bets on how much longer she could hold up. People said they could almost set their watches by her.

Spark plugs, of course, were replaced; once a pin sheared in the differential; generators were replaced; water pumps were re-packed; but the head stayed on and so did the oil pan. Throughout the run Bertha used S.A.E. No. 30, oil which was changed every 750 miles, and every 500 miles Bertha was greased and generally serviced. Just once was a change made in the oil. One morning without saying anything, Mr. O'Connor put in S.A.E. No. 40 oil. The driver brought Bertha back and reported that she was losing her performance. "It won't be long now", he said. Again saying nothing, O'Connor changed back to S.A.E. No. 30 oil. The driver who complained, came back and wanted to know what O'Connor had done to restore her pep.

"What did you do, grind her valves?" the driver wanted to know.

"Yeah", said O'Connor, who hadn't touched the valves at all.

It was not until June, 1934, when 100,645 miles had been rolled up, that "Little Bertha" went into the shops for overhaul.

Such sustained runs without even inner engine inspection are probably not to be recommended as standard practice, but certainly "Little Bertha's" run speaks well for her. It speaks pretty well for Ethyl Gasoline too, since the major part of the run was made on Standard of Kentucky's Crown Ethyl, the balance of the time Crown Leaded Regular being used.



America's First College for Women Still a Leader in Modern Education

✓ CELEBRATING its one hundredth anniversary, Wesleyan College, on the outskirts of Macon, Georgia, marks another milestone in education in America. In December, 1836, it was granted a charter and thus became the first college in the United States exclusively for women and probably the first in the world. The idea was not a new one, as for a number of years far sighted individuals had advocated the plan against those conservatives who maintained that a woman's place was in the home and that education would make her "unwomanly". However, it remained for Alexander Stephens, later to become Vice President of the Confederacy, to overcome the popular prejudice and champion the cause of the new enterprise. In later years commenting on the event, Stephens said: "Whatever honor Georgia is entitled to let this still be the crowning point of her glory, that she took and holds the lead in the world of female education."

How well the founders built is evidenced by the fact that it is today celebrating its centennial and may be justly proud of its beautiful campus and modern buildings. The first president of the college was George Foster Pierce, a young man not yet in his thirties, who later became one of the most brilliant ministers in the Methodist Conference. Many famous women of the South, as well as other parts of the country, have attended Wesleyan and eminent scholars have served on its faculty. It is one of the finest colleges for women in the country and quite naturally occupies a warm spot in the hearts of Georgians. One of the interesting features about the buildings is that a student never has to go up more than one flight of stairs from the ground floor.

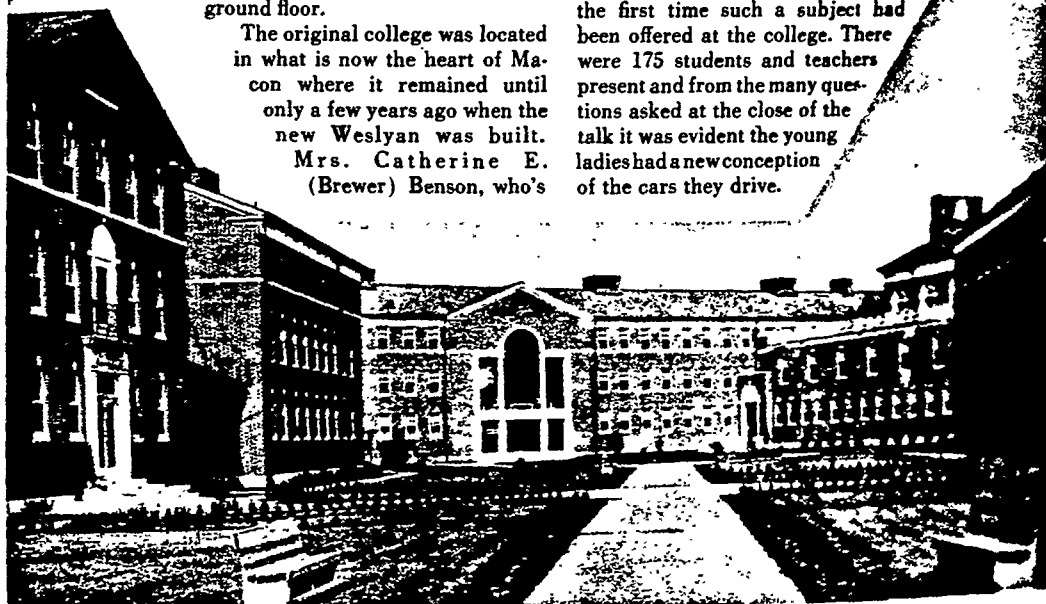
The original college was located in what is now the heart of Macon where it remained until only a few years ago when the new Wesleyan was built. Mrs. Catherine E. (Brewer) Benson, who's



MR. SMITH ADDRESSING STUDENTS

son was Admiral Sheppard Benson, ranking Admiral during the World War, was the first graduate, receiving her degree in 1840. In 1851 the Alpha Delta Pi sorority was founded here and the following year Phi Mu came into being. These were the first sororities in the United States and today both maintain scholarships at Wesleyan. Also this was the birthplace, in 1859, of the first Alumnae Association.

Wesleyan College has truly been a leader among educational institutions for women and it is not surprising therefore, that this same spirit of pioneering should continue to the end that the Ethyl story was promoted. Through the ready cooperation of Dr. Dice R. Anderson, the president, Dean Smith of the Science Department and Dr. Almand, professor of Chemistry and Physics, our Mr. M. M. Smith, of the Atlanta office, asked to Mr. Carter of the Standard Oil of Kentucky, was able to arrange an educational meeting for the Science students. This was held in February and it was the first time such a subject had been offered at the college. There were 175 students and teachers present and from the many questions asked at the close of the talk it was evident the young ladies had a new conception of the cars they drive.



QUADRANGLE & DORMITORY GROUP

Here and There

Word has reached us from Division Manager Harold Berg that the Kansas City office of the Skelly Oil Company arranged to have one of our representatives appear at their "1936 Merchandising Forums" which are held throughout their marketing territory during March. Out of a total of 44 of these meetings, 25 are in our Kansas City Division, 16 in the Chicago Division and 3 in Tulsa. It becomes necessary then for all three of these divisions of ours to co-operate with the program. We are allotted 30 minutes at each meeting, 10 of which is devoted to our sound film and the balance to a talk with the aid of slides and if advisable a demonstration. The audiences range from 100 to 500 and include jobbers, dealers and Skelly service station men. Meetings of this type have been held by the Skelly Oil Company for years and have always proven highly successful.

The "Petroleum Times" (British), in an article entitled "Growth of Ethyl Fuels", which appeared in its issue of January 25th, says: "An interesting gasoline marketing development of the year was the introduction of 'Power Ethyl', thus becoming the fifth of this type of fuel to be marketed in the United Kingdom, the others, in order of their appearance, being 'Esso', 'Clico', 'B.P.' and 'Redline'. In the Irish Free State 'Texaco Ethyl' is marketed. A survey on their development (June 28th) estimated that the sales of Ethyl gasolines on the British market had risen from 7,000,000 gallons in 1928 to around 100,000,000 gallon mark in 1934. This figure should have risen very considerably during the year under review." The article then goes on to describe how the octane rating of gasoline has been raised year after year until today a rating as high as 80 is available to the motorist. "This represents", says the "Times", "an enormous advance in anti-knock value in a relatively few years and one which has enabled the British motor manufacturers to improve very considerably the high performance of his product."

Mr. Newman of our Dayton Division recently made a call on the Adjutant General in charge of all the C.C.C. camps in West Virginia. During the interview he learned that approximately half of the gasoline used in these camps is Ethyl and the remainder leaded regular. There are 40 camps operating in the state and the gallonage therefore is considerable.

A typical example of one of the advantages we may expect to gain through school meetings was brought to the attention of our Mr. Sievert while calling on the automotive instructor of the Ogden (Utah) High School. This gentleman told him that he had been using Ethyl in his own car ever since Mr. Sievert held a meeting in the school last year and that he knew that a number of the students had had their parents use it. Without doubt an enthusiastic school boy roofer for Ethyl is a valuable asset.

The Harley-Davidson Co. got off to a flying start in their 1936 sales campaign. Undaunted by the cold and adverse weather conditions, a fleet of their motorcycles toured the state of Maine during the last week of February. All of the models had high compression heads and used Ethyl exclusively. Furthermore the salesman in charge of the caravan told our representative, Mr. Phil M. Perry, that the instruction book specified that Ethyl Gasoline was to be used in all 1936 models.

Late in February, Mr. J. E. Hendrick (Tulsa Division) held a meeting with Wheeler's Service Garages in Oklahoma City. Notwithstanding that very inclement weather prevailed about twenty appeared, and resulted in a good meeting. Messrs. Harry and Al Wheeler, the owners were enthusiastic and appreciative of the work and they heartily favor demonstrations at Ethyl stations when the weather gets warmer. Much of their clientele are premium goods buyers.

Mr. Ray Faller, our Cincinnati representative, called at the Gusweiler Buick & Pontiac agency in that city last month. Mr. Poland, the manager, is a most enthusiastic Ethyl booster. He is continually urging its use by his customers and has adopted a very clever scheme for promoting his belief in our product. A tag, like the one below, is stuck on the windshield of every new Buick and Pontiac which goes out of his agency.

The motor in this automobile
has been **DESIGNED** and
ADJUSTED to give **PEAK**
Performance on
ETHYL GASOLINE

A very nice letter was received the other day from Mr. Joseph A. Muldoon, Director of Chemistry at Georgetown University which once more illustrates the fine acceptance accorded our educational program. It reads as follows:

"As Director of Chemistry of Georgetown University, it has been extremely gratifying to me and I feel sure you will experience a sincere pleasure in realizing that the recent lecture of Mr. John S. Cole delivered before the Chemistry Academy was so highly appreciated. It is my pleasant duty, as Director, to take this opportunity of expressing the many thanks of the Academy as a whole and to congratulate Mr. Cole on his splendid lecture. It is our sincere wish that the Academy will be again honored some time in the future by another of his interesting lectures."

Our Tennessee representative is responsible for the Kroeger Stores in Memphis adopting a leaded gasoline instead of the unleaded fuel which they have used until quite recently. They secure their supply both by tank car and through service stations. The tankcar gallonage runs about 200,000 per year with service station sales closely approaching that figure.

Recently the tank school class at Fort Benning, Ga. spent two days in Atlanta, Ga. visiting the Ford and Chevrolet branches and put in quite a little time at the local branch of United Motors Service. The class was under the command of Colonel Andrew D. Chafin and the fifty officers included Captain T. E. Smythe, convoy commander; Captain R. G. Howie, convoy instructor; Major L. A. Besette, Captain G. M. Nelson and Lt. F. A. Hornisher, tank school instructors. The officers expressed their pleasure at the opportunity of visiting these great assembly plants and the trip through United Motors where they saw the latest developments in repair service. The invitation to visit United Motors Service was given by Mr. Ray B. Wilson, manager, who had been to Fort Benning with our Mr. M. M. Smith, for the purpose of holding a joint educational meeting.

The Ohio Petroleum Marketers Association Convention recently held at Columbus, Ohio, was attended by approximately three hundred jobbers during the three-day session. It proved to be an excellent opportunity to distribute copies of the recent "Facts & Flashes" entitled, "Shake Hands with the Ethyl Field Organization". Practically the entire initial supply of the bulletin which was received at the Division Office, was distributed to the individual jobbers attending the convention. A great many who read it expressed amazement as to the scope of the activity of our Field Organization. All the Dayton representatives feel that this bulletin was most timely and suitable.



- TOP: Colonial Capitol Building. Reproduction of original finished in 1705.
- ABOVE: Exact duplicate of Governor's palace.
- BELOW: Bruton Parish Church, court church of colonial Virginia, erected 1710-1715.



• THE WREN BUILDING at the College of William and Mary, the oldest academic building in America.

*Charles Andrew
L.B.W. Norton
4/6/36*

TURNING BACK THE PAGES WILLIAMSBURG, VA.

• COULD George Washington, Thomas Jefferson, Patrick Henry and other hallowed figures of America's past, return to the one-time familiar scenes of Williamsburg, Va., they might readily conclude that time had stood still with their passing. For today, as if by magic, Williamsburg has risen from ashes and ruin to stand again, a perfect replica of the lovely and cultured town of over two hundred years ago. But let us first turn back the pages to the beginning of this shrine of the old Southland.

Some twenty-five years after the founding of Jamestown or in 1633, the colony moved inland and established a palisaded outpost on the Virginia Peninsula between the James and York Rivers which they called Middle Plantation. For more than sixty years the settlement continued through varying vicissitudes until 1699 when it became the recognized capital of Virginia and was given the name of Williamsburg in honor of King William III of England. As capital of the State which then comprised what is now Virginia, West Virginia, Kentucky, Ohio, Wisconsin and part of Minnesota, it was one of the cultural and political centers of the Colonial Colonies. The new seat of government was officially planned, the first city in the new world to be so laid out. The main thoroughfare was about a mile in length with the beautiful Christopher Wren building of William and Mary College at one end and the impressive Capitol at the other. It was called Duke of Gloucester Street in honor of Queen Anne's eldest son. On this "Avenue" stood the magnificent Governor's Palace which was said to have cost a sum equivalent to \$382,000 today. Here also were such historic landmarks as the famous Raleigh Tavern, Bruton Parish Church, said to be the oldest Episcopal Church in continuous



• College of William and Mary, Williamsburg, Virginia, oldest academic building in America



• RALEIGH TAVERN rebuilt and completely furnished as in colonial days

THE PAGES OF HISTORY WILLIAMSBURG LIVES AGAIN

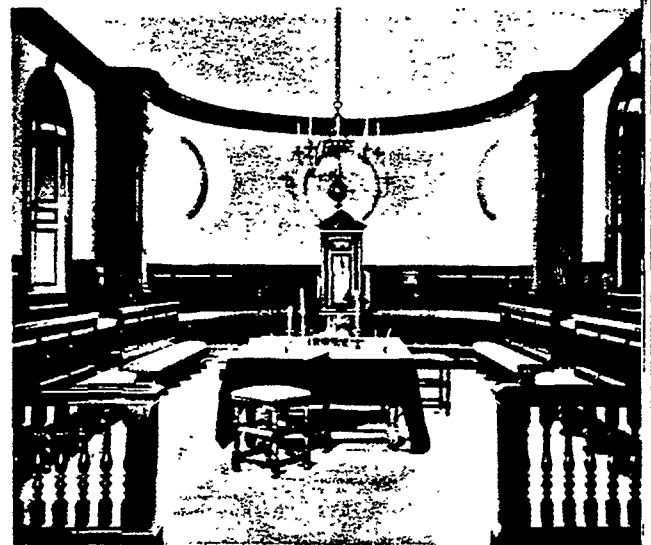
use in America, and the stately George Wythe Mansion.

Although the population never exceeded 2,000, Williamsburg, for eighty years, remained the mecca of wealth and culture of the South. The college, which grew around the original structure designed by Sir Christopher, and today the oldest academic building in America, drew many as students who were later to write history for their country. Such men as Washington, Jefferson, James Munroe and John Tyler received their education within its walls.

This was Colonial Williamsburg but with the War of Independence, the Capitol was hurriedly moved to Richmond and after the surrender of Yorktown its glory began to fade. Fire devastated the stately Palace of the Governors; the Capitol was partly burned and finally torn down and even the Wren Building at the College was damaged. The old Raleigh Tavern, gathering place of statesmen and aristocrats, where Thomas Jefferson danced with the starry-eyed Belinda and birthplace of Phi Beta Kappa also fell a prey to the ravages of time. And then the inevitable march of progress completed the destruction by the erection of small stores, movie houses and filling stations. The once renowned thoroughfare became just another "Main Street".

So reads the history of Williamsburg until the year 1925 when a champion appeared in the person of the Reverend W. R. A. Goodwin, rector of old Bruton Parish. Dr. Goodwin conceived the idea of making the old town America's shrine of the past, and while addressing a meeting of Phi Beta Kappa in New York pleaded for his dream of reconstruction. By chance John D. Rockefeller, Jr., himself a member of the Society, attended meeting and became interested in the Doctor's story.

Please turn to next page



• HOUSE OF BURGESSES in Capitol Building. Here Washington was cited for gallantry and Virginia signed the Declaration of Independence.

• ALL PICTURES reproduced by courtesy of Colonial Williamsburg, Inc.





• THE Electric Railway Association of Equipment Men's semi-annual meeting in Memphis, composed of men from the south, mid-west and east, was addressed by Mr. Edward Jolly of Standard Oil Company of Louisiana. His talk was supplemented by our portfolio furnished by our Mr. Pruitt who gave a 20 minute demonstration. Photo shows Mr. Jolly and part of his audience.

Wagner
4/6

WILLIAMSBURG LIVES AGAIN

(Continued from page 9)

With the result that in 1927 Colonial Williamsburg, Inc., came into existence and the task of restoration began. During the next eight years, with an expenditure of \$15,000,000, the Williamsburg of 1700 has been re-born and stands today in much of its old glory.

It was a giant task which required the services of a corps of research workers who delved into records in this country, England, France and Spain. Then search brought to light at the College of William and Mary, a document, known as the "Frenchman's Map" which showed the location of every building in 1782. Had it not been for the discovery of this invaluable record, accomplishment of the project would have been well nigh impossible. Having located the sites of the original buildings and with the acquisition of the property, the work of uncovering and excavating the foundation began. Nearly four hundred and fifty modern buildings have been torn down, eighty-four colonial buildings re-built and over sixty restored. Two entire business blocks have been constructed in Colonial style and yet during all this, business went on as usual. The greatest care was taken that everything should be reproduced in exact replica of its original form. As each excavation was made the earth was carefully sifted so that any relics might be preserved. Thus twenty-five tons of ceramics, china, silverware, glass, kitchen utensils, wearing apparel and hardware, were recovered. Exact paint colors were determined by scraping through the many coats of finish and by a study of pigment used in early paints. In short, no stone was left unturned which would aid in the exact reproduction of the old buildings, even to the smallest detail.

Mere words do not adequately describe the results of this unique undertaking. It must be seen to be appreciated and every American who has a spark of tradition in his make-up, owes to himself a visit to Williamsburg of yesterday and today. One may live completely in our modern world, scoffing at the conditions of the past, but after a few hours spent in the soft charm and quiet beauty of Williamsburg, absorbing a bit of its atmosphere and memories, he may well ask the question—"How much has the world lost through progress?"

PAGE TEN



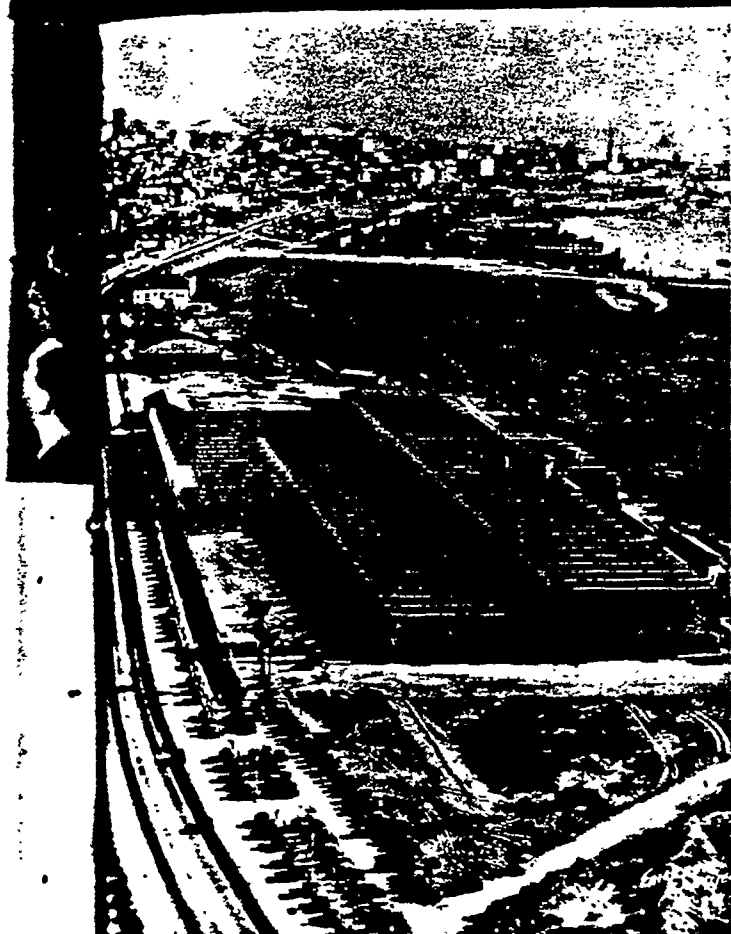
• ONE of our most recent customers, The St. Helen's Petroleum Co., Ltd., of Los Angeles, California, have just issued a most excellent pamphlet, "Peak's of Profits" describing the advantages of their new product, St. Helen's Ethyl.

Particular emphasis is laid on the additional profits available to the dealer in pushing his premium product not only by assuring him of satisfied customers but drawing attention to the possibility of interesting Ethyl users in the better grade oils and accessories. Some of the copy reads as follows:

"33 1/3% MORE PROFIT WITH NO MORE EFFORT.

You make more profit on a gallon of St. Helen's Ethyl Gasoline than on a gallon of third structure gasoline, but it takes no more time or effort to deliver it. Your Ethyl customers are in the new car class with more money to spend. They are more particular about what they buy and buy more freely. When they drive up to your pumps they lend prestige to your station. Others in the same class follow and your patronage steps up in both character and profits. As the quality of your patronage improves, your opportunities for profits on other items than gasoline also increase. You sell more oil of a better grade; you get more lubricating, washing and polishing jobs if you are equipped to handle them; your volume of all necessary sales goes up together with your increased profits on gasoline. Here are actual figures obtained from a recent survey covering purchases OTHER THAN GASOLINE by the three types of customers:

Ethyl Users Spent	\$4.00
Leaded Regular Users Spent	2.50
Third Grade Users Spent	1.25"



ETHYL NEWS PHOTO FILE 4/36 No. 3

• TOP RIGHT: Douglas factory before recent enlargement.

• RIGHT: Birthplace of Boeing planes.



ETHYL NEWS PHOTO FILE 4/36 No. 4



ETHYL NEWS PHOTO FILE 4/36 No. 5

PACIFIC COAST AIRCRAFT PLANTS ENJOY BOOM

• AN article which appeared a short time ago in the New York Herald-Tribune, written by C. B. Allen, states that, "California's unemployment problem is solved as far as the aircraft industry is concerned." It seems that the present airplane construction program far surpasses anything that the State has witnessed, due to millions being spent on equipment for air lines supplemented by huge government contracts. The demand for skilled labor in these great plants is such that it is necessary to bring trained mechanics and engineers from the east and middle west. The Consolidated Aircraft Corporation, who's plant is shown above, is one of the most recent arrivals having moved to San Diego from Buffalo, N. Y. The first plane turned out from their new quarters was a U. S. Navy job which was tested in December, 1935. The company is already employing over 1,200 men and are increasing their personnel continually to keep up with the government business they have booked. We also show a general view of the great Douglas plant which has operated at Santa Monica for some years and is the largest aircraft manufacturer on the west coast. The factory has been enlarged considerably, however, since this picture was taken. It is re-

ported that they have orders for more than \$14,000,000 worth of business. They now employ some 2,000 men and their program calls for an additional 3,000 by mid-summer. They have been awarded contracts for 20 of the new sleeper-transport ships, 90 observation planes and a like number of bombers for the U. S. Government, together with 135 of the new type torpedo planes.

Next to Douglas, the Northrop Corporation at Los Angeles, are doing the largest business as far as present orders are concerned, they having secured one contract of over \$3,000,000 for 114 low wing all metal attack planes for the army. Another company who are pioneers in the field is Boeing Aircraft of Seattle. In their almost twenty years of existence they have produced approximately 1,900 planes of 58 different types. Among other manufacturers participating in this great building program are Lockheed Aircraft Corporation of Burbank and the Ryan Aircraft of San Diego. Although at the moment the business is approaching top speed, it must be borne in mind that when the peak is finally reached in the summer there is a likelihood that activity will taper off considerably until a new crop of contracts makes its appearance.

WHAT PRICE MOTORING?

(Continued from page 1)

any one cause were due to collisions between automobiles. The greatest number of deaths (16,030) from any one classification were the results of motorists striking pedestrians.

"Did not have the right of way" caused the largest number of accidents and the greatest number of persons injured. "Exceeding the speed limit" caused the greatest number of deaths and was second in both the number of accidents and persons injured. "On the wrong side of the road" resulted in the second largest number of deaths. "Pedestrians crossing between intersections" leads in the number of accidents, of persons killed and of persons injured. "Children playing in the street" was second in the number of accidents and of those injured, and fourth in the number of those killed. The answer is obviously: more intelligence on the part of the pedestrian and more watchfulness by the motorist.

Last year "Sudden Death" came to more pedestrians in automobile accidents than to any other classification. Of these pedestrians, about 23% were under fifteen years of age and 22% were over sixty-five years of age. The 20,000 deaths to others than pedestrians were due to collisions of many kinds. A shameful record indeed, but hardly comparable to the rampant running down of innocent pedestrians, of whom 23% were children.

That the mechanical condition of motor cars has little influence on accidents is evidenced by the analysis of over a million cars and trucks that were in accidents, since 95% were shown to be "apparently in good condition." Of the motor vehicles in accidents, 80.4% were passenger cars, 13% commercial trucks, 3.7% taxis and 1.2% buses. In fatal accidents, 77% were passenger cars and 18% commercial cars.

As to the location of accidents, we find the greatest number of these as well as persons injured occurred at street intersections. But fatal accidents occur in the greatest numbers on open highways, and "between intersections" ranks second.

During the normal hours of darkness—6 P.M. to 6 A.M.—about 60% of the fatalities occur. Each hour from 6 P.M. to 10 P.M. averages 7.5% of these deaths and about 14% are between 1 A.M. and 6 A.M. What greater indictment is needed for the careless and reckless driver who practices excessive speed when visibility is restricted and his control is beyond the range of his headlights. Exceeding the speed limit is the greatest cause of fatal accidents and it requires fifty yards of travel to stop from a speed of fifty miles per hour. Most of the fatal accidents occur on Sundays and Saturdays while the driver is "going straight ahead."

In conclusion let us picture the consolidation of all 1935 facts about fatal accidents into one description; we will be amazed to see how normal and commonplace the story sounds. And there's the great danger that points to the necessity for mass education of the individual driver and of the pedestrian. Here's the picture in which many drivers may suddenly find themselves a central figure.

Around two or three o'clock Sunday morning a man



Replica of the official state seal pledge that will appear in the lower left hand corner of the windshields of Maryland cars.

is driving a passenger car, apparently in good condition on a straight highway. It's late—there is little traffic and the night is clear. So the driver "speeds up" to around fifty miles per hour. Suddenly about forty yards ahead a pedestrian crosses the highway where there is no intersection. At that speed it takes the driver fifty yards of travel to stop. He can't stop in time. The pedestrian, probably a man around thirty, is struck; and sudden death claims another of its sixteen thousand victims of automobile accidents every year. Who was responsible? Was it the driver, the pedestrian, the legislation, the engineers who built the highway, or the police, who certainly cannot watch twenty-six million motor vehicles at all times? Wasn't it mainly the personal responsibilities of both the driver and the pedestrian? Assuredly mass education of the public is one of the most effective solutions of this problem.

America is aroused. Something is going to be done about it—more wide-spread and more effective than ever. Legislatures, city councils, public officials, police and automobile clubs are becoming more aggressive in their safety campaigns. Other campaigns are being built up through cooperation in individual education about safety, by churches, chambers of commerce, safety councils, parent-teacher associations, the American Legion with its 900,000 ex-service men, Rotary, Kiwanis, Lions and similar civic clubs, Scouts, insurance companies, motor vehicle administrators and other groups. These campaigns have the complete cooperation of newspapers, radio, magazines, bill boards and various forms of publicity.

The objective is to have the essential factors for safety on our highways and streets constantly before the public. Effective legislation, better engineering of highways and strict law enforcement are highly essential to increased safety, but the most effective progress will be through individual education about safety among as many people and from as many sources as possible. It is largely an individual problem and therefore of little interest to politicians. Let us be on the alert constantly to do our full share to aid in these campaigns for curbing the vast number of motor car accidents that so overshadow the joys of safe motoring.



407 111 111 ✓

• IN common with many other communities throughout the country, Billings, Montana, has become alive to the need of reducing the frightful toll of injuries and deaths which have appalled the whole country. Accordingly, largely through the efforts of Mayor Williams, Safety Clinics have been set up, in accordance with a city ordinance requiring the inspection of all cars three times a year. The burden of making these inspections is placed with the Fire Department whose men have been trained by Bendix and the work is carried on at local fire houses which have been especially equipped. One of the accompanying pictures shows a fire house with equipment for testing brakes, horns, wheel alignment, headlights, etc. When a car meets the requirements a safety sticker is placed on the windshield showing date of inspection. Another view is of Mayor Williams, pointing out the Buick Safety Emblem to Chief of Police Lickner, while Fire Chief Steele (kneeling) looks on. Still another shows the same three city officials having their pictures taken by our Billings representative, Mr. Jack Steelman.



On the World's Highways

✓ • THE Department of Commerce of the United States has just released their Annual Statistical Survey of World Highways. This is the sixth of these to be published and although we have no comparative figures available, some of the current ones are interesting. The report mentions, that although during the last few years world highway construction has lagged, "there seems to be a general increase in 1935." The survey is separated into five major divisions:

- (1) America—comprising the western hemisphere and adjoining islands;
- (2) Europe—including the United Kingdom and Asiatic Russia;
- (3) Africa;
- (4) Asia;
- (5) Australia, New Zealand and Oceania.

The total area of the five divisions is close to fifty million square miles and the road mileage is a little over nine and a quarter million miles. Throughout the world is shown an average of one mile of road to every 5.3 miles of area. There are 35,352,004 automobiles and the average number of automobiles to one mile of road is 3.8. In the tabulation, the American division is of course far in the lead. It comprises nearly fifteen and three quarter million square miles and road mileage of a little under four million with 26,953,187 automobiles. Europe comes next with somewhat less than 3½ million miles of road and 6,655,453 cars. There is one mile of road for every three square miles in Europe as against one to four in America but only 1.9 automobiles to each mile of road whereas in America there are 6.9. Africa shows the lowest road mileage with less than half a million, and the fewest number of cars, there being slightly less than one for every mile of road. But Asia, with road miles of more than twice that of Africa, can claim only one car to every two miles of roadway.

In breaking down the division statistics, we get some interesting comparisons. The United States has just over three million miles of highway which is about twice as much as Russia where the area is more than two and a half times as great. Nevertheless, Russia is second in road miles with 1,682,109. However, the Soviet can only claim 0.2 automobiles to each road mile. Next to our own country, France leads in number of cars—just under two million with the United Kingdom a very close second and then Canada with 1,114,655. In France, with its 393,761 miles of road there are almost five cars to every mile but in the United Kingdom there are more than twice the number and Belgium is slightly higher with Netherlands just under the British figure. In far off Hong Kong the car-per-mile-of-road figure is about the same as Belgium but with only 377 road miles,

Quick on the Draw or Driving Havana's Narrow Streets

✓ • THE last time that George Warren visited Bill Munding in Havana he writes us that Bill had become so expert in piloting his car in accordance with the approved local system that it gave him (George) the "jitters". He inquired how this system worked and here is Bill's explanation in his own words:

"In the early days of the great wild west, the guy who could draw the quickest was the king pin of the local gentry. There would seem to be little parallel between being quick on the draw and piloting a car through Havana's narrow streets, but its a fact so help me.

"In Havana, where many of the streets are of only one-car width, with eighteen inch sidewalks (everyone walks in the street, however, the sidewalks being there to keep you from nudging the buildings with your car) my first few days of driving were rather a nightmare. I was sure my accident record was going to be shot full of holes but before anything serious happened I learned that drivers in Havana had worked out a great system of right-of-way. It works like this: You drive through the narrow streets, missing by a fraction of an inch those pedestrians who somehow hop out of the way just in the nick of time, and when about two-car lengths from the blind corner (all are blind corners) you blow two loud blasts on your horn, the louder the better, as they say in Cuba "TOCA EL FOTUTO". If you blow first its your right of way, but if the fellow crossing, beats you to the blow, its his right of way and you lose the decision. The first to "TOCA EL FOTUTO" wins. In case of ties, the Police arbitrate. So far I've had no ties, either winning or losing all decisions by a clear majority.

"The remarkable part of this "TOCA EL FOTUTO" system is that while I've witnessed many close shaves, I have never seen an accident. You soon learn that to miss by an inch is just as good as a yard. When you have a foot clearance, you don't even slow down."

whereas the former has about 19,000 miles. The most congested area in the world is Gibraltar with its sixteen miles of road and sixty-two and one-half cars for every mile. The only country where there are no automobiles is Spanish Guiana with an area of 10,000 square miles and 180 miles of road. Next in line are American Samoa with 60 and Bermuda where 64 are recorded but in both, the road mileage is low, being 30 and 101 respectively.

ACKSON
COMICK DEE
MACHINER

press
impro
getting
were l
dicted
Mr. W.



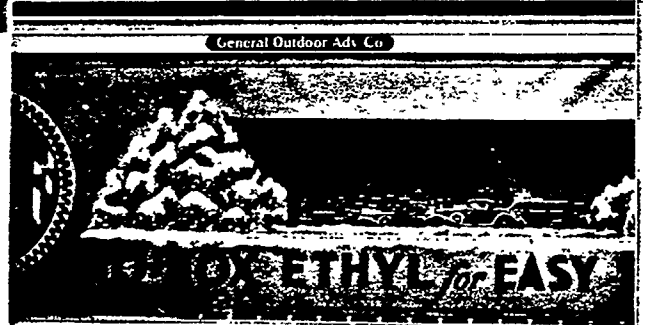
• TENNESSEE'S STATE HIGHWAY PATROL. Our representative, Mr. S. T. Pruitt, informs us that they use Ethyl exclusively in their high-compressed Harley-Davidson motorcycles and are enthusiastic over the performance obtained. This photo is reproduced through the courtesy of Chief Benton McMillan.

These two Jackson, Miss., fleets are comparatively recent converts to leaded fuel which replaced the straight gasoline formerly used. The R. H. Green Co., one of the largest wholesale grocers in the state, not only operates in the City of Jackson but covers cities and towns within a radius of one hundred miles. Their yearly gallonage is something over fifty thousand. The Jackson Steam Laundry is the leading steam laundry in Mississippi maintaining a large fleet of new Dodge trucks which consume approximately twelve thousand gallons a year. Both President Green and Mr. Lehman, owner of Jackson Steam Laundry, ex-



• A MOST striking advertising display is this animated board which Gulf Refining Company operates near the heart of Louisville, Kentucky. The moving panel in the center is changed to conform to different seasons of the year. For example, during the period preceding the Kentucky Derby, it shows a number of horses with the jockeys moving along the track. Again at the Christmas season St. Nick may be seen driving his reindeer over snow-covered hills. In the view shown, Kentucky motorists are plowing through snow in Louisville's streets. Another interesting feature is the changing of the No-Nox Ethyl message to tie in with the various times of the year. As in the winter scene illustrated "Easy Starting" is featured. The board is of course illuminated at night.

press themselves as well pleased with the improved results their respective fleets are getting with the new fuel. These conversions were the outcome of demonstrations conducted by our Mississippi representative, Mr. William C. Petty.



Newsbriefs

✓ For some time we have wondered at Jim Boudreau's (Div. Mgr., N. Y.) preoccupied air and also his great interest in Ethyl sales in Western Pennsylvania. The recent announcement by Mr. and Mrs. H. Drew Stroup of Holidaysburg, Pa., of the engagement of their daughter Madolyn to Jim, is the answer. The wedding will take place in the late spring.

✓ Mr. and Mrs. J. W. Meyer of Freeport, L. I., have announced the engagement of their daughter, Alice Camille, to Mr. James Hiram Boyden of Baldwin, L. I. As yet no date has been set for the wedding. Alice has been with our organization for six years.

✓ Miss Mary Linegar, who was the Secretary at the Toronto Division office for a great many years, resigned her position with the Corporation on February 15th. Mary was recently married to Mr. John Hoare and sailed for England with her husband on the 21st of February. They expect to make their new home in London.

✓ The Editors of the "News" wish to apologize to Mr. and Mrs. J. G. Martin for a statement appearing in the March issue to the effect that Jack and his charming wife were "recently introduced to the delights of Florida orange juice" while being entertained in Detroit. Jack was born and reared within the shadow of Florida orange trees. The guests at the party given by George Kreiger and Jack Taylor in Detroit, to which we referred, were Mr. and Mrs. "Dude" Martin who are both native Californians. Be it said that the Editors gladly make this correction notwithstanding the fact that they have been threatened with a suit for libel. Above all we aim to print the facts.

✓ Our correspondent slipped-up on his job last month and neglected to report an event of great moment to Mr. and Mrs. Herbert Gerland of Kansas City. Their household was blessed with the arrival of an 8-pound girl on February 24th. The young lady is to be called Barbara Lois. Herbert is attached to the Kansas City Laboratory. To the Gerlands go our best wishes.

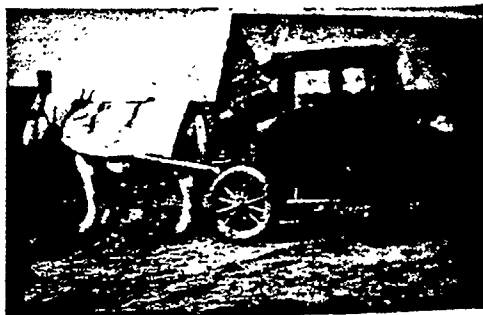
• Charles Gambrell of the Chemical Laboratory has moved, with his wife and son, to Cleveland, Ohio, where he will enter Western Reserve to make a special study of "micro-chemistry". After sixth months he will return, and expert "mike", to carry on at Detroit.

✓ The date MARCH 8, 1936, marks a milestone in the career of one Ethyl representative—"That mighty-mite from Maine" who now headquarters in Raleigh, N. C. The occasion was "Li'l Joe's" first solo flight in a heavier-than-air. The place; the Municipal Airport in his headquarters town and the craft; a Waco F-2. Joe says that the ship did a wonderful job in getting him safely back to earth notwithstanding it did not respond as he expected to his movement of the stick. (The darn thing was almost human, for which his buddies give thanks.) Several things gave evidence that Joe was sincere when he says his nervous system was at the breaking point more than once while he was negotiating a landing.



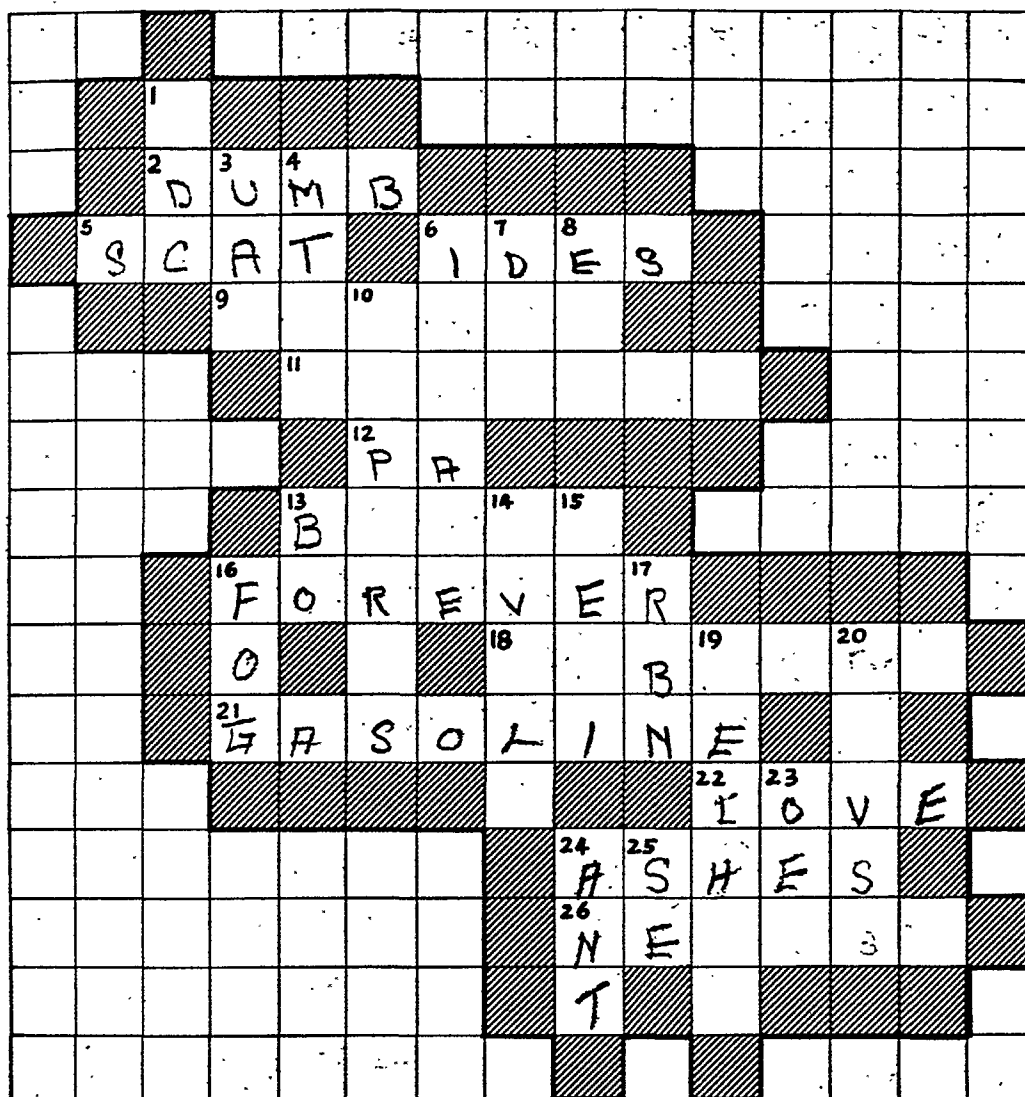
• KANSAS CITY Division's Harold Berg and Mrs. Berg vacationing at "The Nob" situated in the mountains southwest of Denver. Incidentally this cabin is owned by Les Roberts, Manager of our Yonkers Laboratory and Ethyl News correspondent.

• That famous California sunshine is surely God's gift to mankind. The whole world realizes that under its influence everything grows better and bigger. We were, therefore, not unduly surprised when we learned that the boy which arrived at the Chenault residence on March 8th, was an eight-pounder. He is to be named Lawrence Hume. We assure the happy parents that all share their pride in the birth of a new champion in the Ethyl family.



• This is a picture of our Mr. C. J. McFarlane taken somewhere in Saskatchewan. It shows a good "milk-carrying job" and the old mare is named ETHYL. It may be noted by the milk cans that this equipment is actually in use and not just a publicity stunt.

✓ On February 27th, a son was born to Mr. and Mrs. Robert F. Cleveland. This is Bob's first child but on the surface he was as unconcerned as Pope Urban. The young crown prince is to be named Robert Clifford and his official weight as given out to the press was 10 pounds net. We send our hearty congratulations to the Clevelands and may all their troubles be truly over. Bob is attached to the Statistical Department in the New York office.



DOWN

ACROSS

1. What you can't get of this cross word puzzle.
3. The other famous division besides Tulsa.
4. Tools to work with when you don't have tools.
6. The hardest thing that exists to describe.
7. What everyone tries to have when he closes his fiscal year. (I said tries.)
8. What most of us would like to do with money, but usually have to do with our imagination.
10. Roses to the executive office, the blues to the Division Manager, and the scourge of a field man existence. (I'm proud of this one.)
13. Wrestlers have this, I think. (If some one has had a ringside seat please verify.)
14. Neighbor to a tonsil.
15. How near to through is a field man ever? (The ultimate.)
16. For a crooner to get lost in.
17. Right Bright Night. (Abbreviation.)
19. What we need from relief.
20. Easy on the fist.
23. Spats on a cowboy. (Or on anybody for that matter.)
24. Insect often accused of inhabiting certain articles of clothing.
25. Sell Ethyl. (Abbreviation.)
2. What many of us are but hate to admit it.
5. What a Division Manager and his good man Friday should do when an irate jobber tells them he is busy and is also tired of looking at them.
6. The fifteenth of March.
9. Anti-knock compounds other than lead.
11. Epistles, often numbered, and often three cents due.
12. Chenault was recently one.
13. Ethyl Kringle (Kriss' Wife.)
16. How long will it take Russ Schell to work this crossword puzzle?
18. What this puzzle will probably create with most of us.
21. What Mae West asks for when buying gasoline.
22. It's decreasing the number of single field men.
24. It would be a swell place to put your work but if you did your bonus might be put there.
26. Sticky things—Some will stick you but in a carburetor they get stuck.

Contributed by J. O. BALZER, Tulsa Division

Excellent base gasoline, plus
Tetra-ethyl lead, in
High compression engines, gives
You
Lasting satisfaction.

Generous mileage
Anti-knock performance
Smooth action
Octane of 76 or above
Lower driving costs
Intant starting
Nation-wide distribution
Ethyl Gasoline is best

EQ
3-1636

THIS COPY IS CANT BARRIS

*Convention
Issue*
**DETROIT
MAY 18-21**



ETC 21169

The "NEWS" extends its congratulations to the following members of our organization on completing ten or more years of service with the Ethyl Gasoline Corporation.

ADMINISTRATION DEPARTMENT

E. Carr	C. P. Hill
E. R. Chellborg	J. C. Mehring
Dr. Graham Edgar	Thomas Midgley, Jr.
J. Goux	D. Patterson
Earle W. Webb	

SALES DEPARTMENT

Frank R. Elliott	Thomas E. Ronan
James T. Grady	N. D. Siebenthaler
R. L. Jordan	J. C. Taylor
H. A. Mack	S. M. Wagner

MANUFACTURING DEPARTMENT

L. W. Armstrong	J. H. Schaefer
-----------------	----------------

CHEMICAL RESEARCH

Fred J. Dykstra	John C. Pope
-----------------	--------------

ENGINEERING DEPARTMENT

C. P. Harding	J. E. Mescher
A. Sortman	

GASOLINE TESTING DEPARTMENT

John C. Murphy

MEDICAL DEPARTMENT

Dr. Robert A. Kehoe	Dr. Willard F. Machle
Dr. Karl V. Kitzmiller	Dr. Lester W. Sanders



Vol. 3, No. 5

ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

MAY, 1936

Published monthly by the Ethyl Gasoline Corporation for the entertainment and benefit of the members of its organization. Address all news items, correspondence or other material to the Editor, W. Cary Harris, 35th floor, Chrysler Building, New York City.

W. CARY HARRIS - - - - - Editor

Associate Editors

EDWIN DOWNS

RUSSELL B. WESTON

CORRESPONDENTS

Atlanta Division	GEORGE W. WARREN
Baltimore "	L. W. SHANK
Boston "	DONALD S. FLYNN
Chicago "	A. B. WYRICK
Dayton "	VINCENT KEENAN
Kansas City "	C. M. BERRY
Los Angeles "	R. G. LOSER
New York "	R. C. MURPHY
Toronto "	J. N. FITZGERALD
Tulsa "	HARRY KUHE
Engineering Dept.	JULIAN J. FREY
Manufacturing Dept.	ARTHUR P. STOVER
Gasoline Testing Dept.	LESTER B. ROBERTS
Export Dept.	HUBERT FOSSETT

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH

"News" Staff to Meet at Detroit Convention

• THE coming convention in Detroit will give an opportunity for members of our organization to make the acquaintance of many whom they have heretofore known only by name or through correspondence. Not alone will it be a pleasure to personally meet co-workers, but it will offer an occasion for the inter-change of ideas.

At some time, to be determined later, during the four days it is proposed to have an informal meeting of the Editors and the various Division Correspondents of the "News". Possibly this may best be accomplished at a luncheon or at a gathering late in the afternoon following one of the regular sessions. In any event an effort will be made to arrange it at a time most convenient for those concerned.

The purpose is to discuss what progress has been made and how the "News" may better serve the needs of our organization as a whole. Without doubt the correspondents have suggestions to make and this will be an excellent opportunity to voice them and secure the opinions of others. It will, of course, be impractical to hold a discussion of this kind at a general meeting, due to the large number present, but if there are any in the organization who have ideas to express for the improvement of our publication, they are urged to inform their Division Correspondent, who can then present it at this proposed meeting. We earnestly hope you will give some thought to the subject so that real benefit will result.

The Editors are looking forward with pleasure to greeting you in Detroit on the 18th.

PAGE ONE

ETC 21171

In Memoriam



• ARTHUR E. MITTNACHT, Secretary and Treasurer of the Ethyl Gasoline Corporation, died at his home in Old Greenwich, Connecticut, on the morning of April 17th. Though not in robust health, he had returned to duty after a respite which, it was hoped, would restore his native buoyancy. The end came suddenly and at a time when his friends and associates believed his recovery well assured.

ARTHUR MITTNACHT's career does not lend itself to conventional eulogy nor would a mere narrative of his official relationships and personal qualities do him justice. He lived apart from the spotlight and his real worth was known only to those with whom he worked in closest intimacy.

Fortunately, however, it is possible to tell the story of our late colleague in brief and simple phrase: Of him it may be said, as a distinguished Polish diplomat has said of others like him, that he belonged to that select group of men who do not merely inhabit the world but who help to build it. This summation implies human distinctions which court reflection.

The world which ARTHUR MITTNACHT helped to create was the world of Ethyl. Identified with this enterprise since the day it came into existence as the offspring of scientific research, he, in association with a few others, nurtured it through vicissitudes and reared it to the position which it now occupies. Mr. MITTNACHT's activities embraced a large range of corporate affairs. Latterly they were concerned chiefly with manufacturing and administration. His contributions to the development of the Ethyl Gasoline Corporation, while unostentatious, were induring. To him, they were what we have come to know as "the durable satisfactions of life." To others of the Ethyl family they are a freshening influence.

The memory of ARTHUR MITTNACHT will engender a fuller understanding of how broadened opportunity for the many may arise from the few. It will encourage a more reverential regard for those attributes which embody personality, intense application and loyalty to his work. In the Ethyl organization the significance of his achievements will persist in conscious tradition.

Cut off at forty three, Mr. MITTNACHT's life experience was not unromantic. He was born in Baltimore, Maryland, on August 2nd, 1893. After studying at the Johns Hopkins University, he entered the steamship business in that city. In 1914, at the age of twenty-one, Mr. MITTNACHT became manager of Parr-McCormick Steamship Company of San Francisco. During the World War, he served overseas for fifteen months with the Fourth Division of the A.E.F., as a Lieutenant in the Signal Corps. His Army service over, he joined the United States Shipping Board at Washington. Subsequently he was a partner in Elder and Mittnacht, Inc., steamship owners and operators. For a time he was an operator for vessels of the Shipping Board. He has been secretary and treasurer of the Ethyl Gasoline Corporation since its establishment in 1924 and was also secretary and treasurer of the Ethyl-Dow Company.

Mr. MITTNACHT is survived by his widow, Mrs. Katherine Wood Mittnacht and three sons, Arthur E. Jr., Stewart and Richard. The funeral services were held in Christ Church, Greenwich, on April 20th, and the burial was in Ferncliff Cemetery, Hartsdale, N. Y. He was a most devoted family man and had a large circle of friends.

BENDIX SAFETY SERVICE SCHOOL

CERTIFICATE

South Bend, Ind.

This is to certify that B. G. CRAIG
has satisfactorily completed the STROMBERG

SAFETY SERVICE SCHOOL

SUCCESSFUL ACTIVITY

• THE Bendix Products Corporation of South Bend, Indiana, has for about four years, been operating a Service School for the purpose of training service men who come in contact with Bendix products. Continual improvement has been made from time to time, both with respect to the instructional personnel as well as equipment. The School is housed in a separate building adjacent to the main plant and has capacity for accommodating fifty men each month.

Bendix, in sponsoring the Service School, has had in mind as a basic motive, improving the technical knowledge of service men with regard to servicing automobiles, and particularly, the Bendix products which are today found on practically every motor vehicle the world over.

The present day automobile, one of the most highly developed machines in popular use though extremely simple in design, often appears puzzling to the uninformed. Therefore the Bendix Corporation, through their School, offers a place where men may meet and discuss the automobile technically to the end that they may acquire a thorough knowledge of how the various parts function mechanically and what is necessary for accurate adjustment. Although the School does not assume the responsibility of extending service information on parts not manufactured by Bendix, it will, however, direct persons interested, in securing such information.

Bendix, not only encourages enrollment in the school for those who are desirous of taking up automobile servicing as an occupation but others who may already be engaged in that work.

THE SCHOOL IS FREE and it offers twelve courses of training per year, beginning on the first Monday of the month and lasting for four consecutive weeks. The courses are divided into four sections, lasting for a period of five and one-half days commencing each Monday morning. An applicant cannot enroll unless he agrees to spend at least one quarter course period, except by special permission obtained at the time of enrollment. The work covered in the full four weeks course is divided as follows:

First Week—Theory of Operation and Service Maintenance of all Designs of Bendix Brakes.

Second Week—Theory of Operation and Service Maintenance of Bendix B-K Vacuum Power Brakes, Bendix Vacuum Automotive Clutch Control and the Bendix Vacuum Gear Shifting Equipment (Electric Hand).

Third Week—Theory and use of Bendix-Ferguson Wheel Alignment Equipment and Practice Wheel Aligning and Frame Straightening.

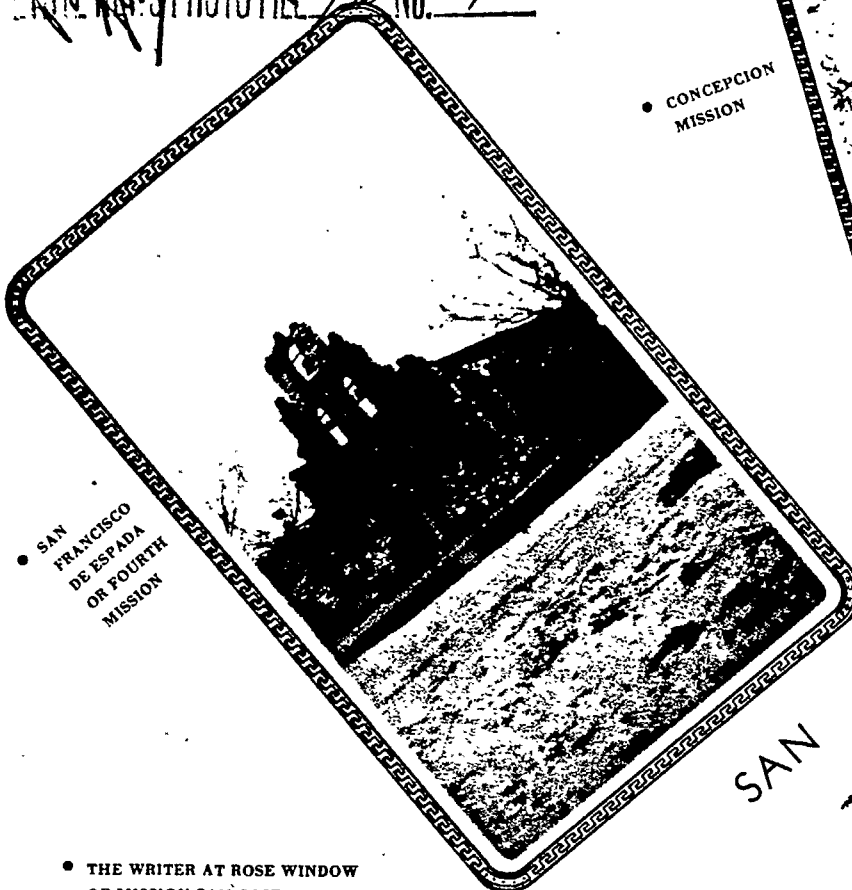
Fourth Week—The Stromberg Carburetor—Its theory of operation, Modern Engine Tune-up Practice including the use of Bendix-Ferguson Power Absorption Dynamometer, Ignition Tune-up Practice and Carburetor Adjustment.

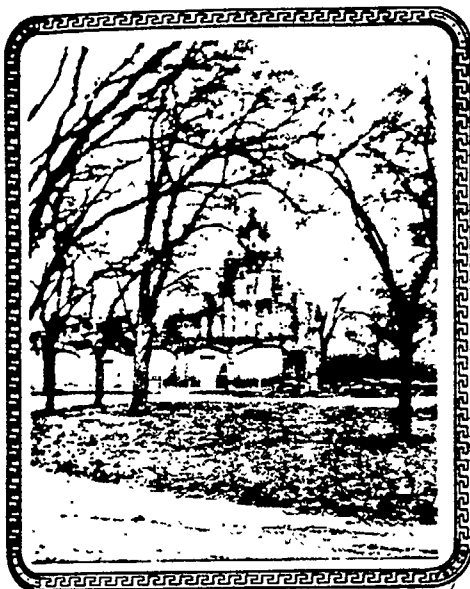
(Please turn to page 10)

PAGE THREE

ETC 21173

NEW'S PHOTO FILE 5/36 No.





• SAN JUAN DE CAPISTRANO

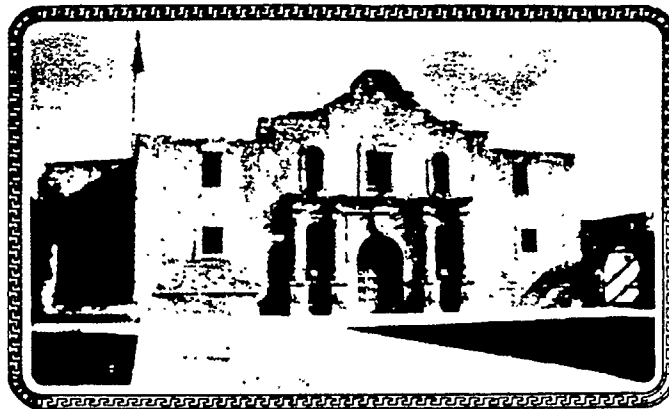
ETHYL NEWS PHOTO FILE 536 No. 4

MISSIONS

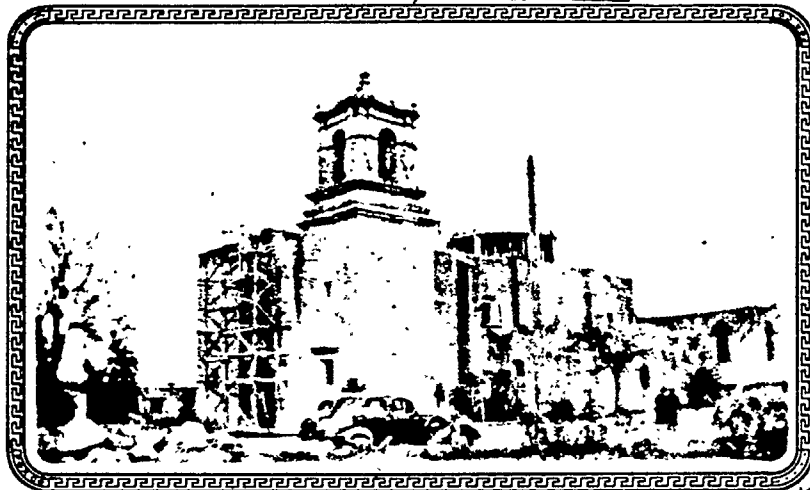
*"Majestic, silent, crumbling slow with time,
The gray old walls stand out against the sky
In sharp relief, a lesson wrought in stone
That speaks sublimely to the souls of men."*

*"Yet strange sweet memories haunt the gray old pile
And breathe a message from the voiceless past,
Of men who wrought for higher things than gold,
And dying, have bequeathed to future years
A heritage of noble thoughts and deeds."*

Jane Field Baskin



ETHYL NEWS PHOTO FILE 536 No. 5



• Top; THE ALAMO

• Above; MISSION SAN JOSE

ETHYL NEWS PHOTO FILE 536 No. 6

by rail.
he Lone
ll as the
t seems
ory and
Mr. Dan

ve eight-
ards on
places
, but in
remain.
an Juan
n miles
of the
ed. The
d doors
e chapel
illies for
n of the

Sword", which is on the opposite side from San Juan, and three miles further downstream, was originally established in East Texas near Nacogdoches but later moved to the present location, the cornerstone being laid in 1731. Here, too, the chapel is still in use and the old priest's quarters have been turned into a parochial school for Mexican children, the barracks being occupied by the nuns who teach in the school. In one corner of these barracks is a curious round room, with no outside opening except peepholes, where defenders evidently picked off the marauding Indians. The lands near the mission are still watered by part of the original irrigation system which has been in continuous operation for over two hundred years. It is remarkable how these men, with no modern equipment or surveying instruments, were able to construct dams in the San Antonio River, and the necessary canals, or "acequias", to supply water to the irrigable land around all of the five missions, as well as the old village of San Fernando, which was the real heart of San Antonio's early development. At this spot General Stephen Austin camped

with his army in 1835 after the first battle of the Texas War of Independence.

About five miles up the river on the west side is Mission San Jose y de Miguel Aguayo, justly known as the "Queen of the Missions" with its beautiful Rose Window still intact. Recent investigation by the Mission Road Association has revealed the original plans of the establishment and excavation has unearthed the foundations of the rectangular arrangement of barracks where soldiers and Indians were quartered. Restoration of all this is in progress, including the dome of the chapel, which fell about 1868. A secret tunnel was discovered which evidently led to the nearby river or to the acequia, presumably so that inhabitants could slip out to obtain water without danger from hostile Comanches, and the ruins of the old water mill were found with the dam which impounded water for the "Acequia de San Jose". It is hoped complete restoration of this, the second Mission, will be accomplished in time for the Centennial this summer.

The First Mission, about a mile or so above San Jose,

(Please turn to page 13)

ETHYL NEWS PHOTO FILE 536 No. 7



ECONOMY

100% more power, 400% more torque

100% more power, 400% more torque

100% more power, 400% more torque

HIGH COMPRESSION

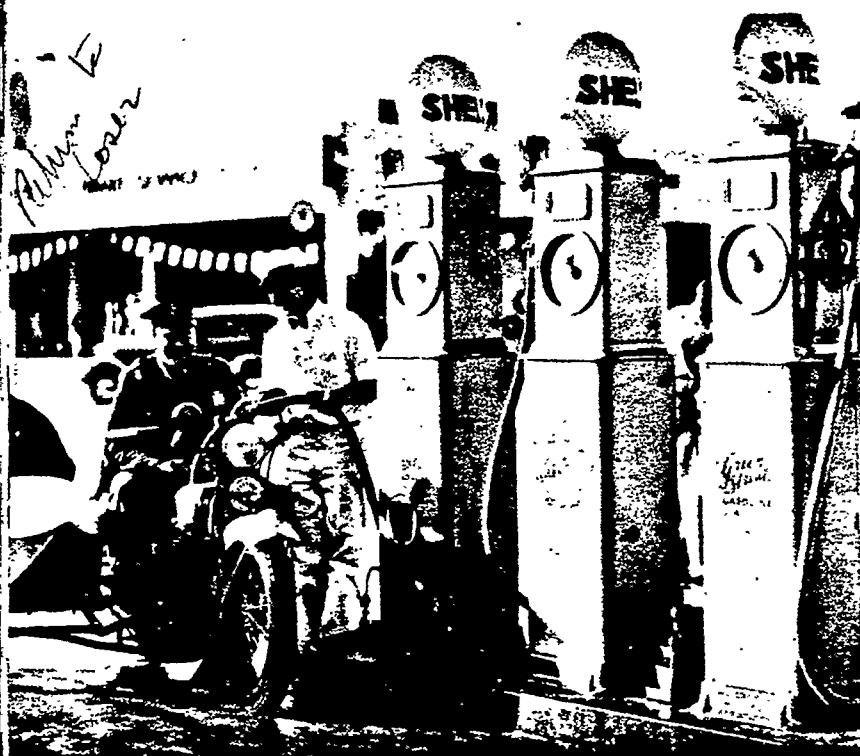
GET 1936 PERFORMANCE
with
OUR

NEW METHOD

• UNITED MOTORS SERVICE high compression set-up as arranged at the Dallas, Texas branch. They have given a rather interesting treatment to the specimen cylinder head. The red painted portion was high compressioned and the aluminum portion remained as in original equipment. This gives the salesman an opportunity to show the customer how much additional squeeze is given to the gasoline. The head is mounted in such a way that it can be turned 360 degrees.

Filed

• THE Louisiana Oil Refining Company has completed a five-day school for its retail salesmen from 16 states. The sessions were held at the Washington-Youree Hotel in Shreveport, La. One of the features on the program was a lecture and demonstration by our Mr. Dan Guy. Above is some of the group who attended, including department heads of the company. Mr. Guy is standing second to the left of demonstrator.



• BELOW: Window panel displayed by a Socony service station manager in South Norwalk, Conn.

Filed



• TRAFFIC VIOLATORS BEWARE IN ARIZONA—the State Police use Ethyl. The picture shows one of the highway policemen having his motorcycle fueled at a Shell Station in Phoenix.

ETC 21176

Here and There

• The United Motor Service branches in Cincinnati and Cleveland are carrying on an active high compression program which is producing gratifying results. Mr. Errol Gay of the Detroit Laboratory held a general meeting at both these branches early in March and this was followed closely by Mr. Raymond Faller in Cincinnati and Mr. Albert Bingham in Cleveland. Mr. Kessel, United Motors Manager in Cincinnati, and Mr. Bradley of Cleveland, attribute their success not only to the improved performance of cars but to the fact that their entire organization is sold on the idea and are actively pushing it.

• A leading Chevrolet dealer in one of the large cities on the Pacific Coast recently had a problem—what to do about demonstrator fuel as he had no gasoline pump in the agency. So he announced at a morning sales meeting that he would give each salesman a gasoline allowance of \$10 per month to finance the purchase of fuel for demonstrating. One of the boys suggested as a compromise that the agency put in an Ethyl pump and give each salesman an allowance of \$7 worth of Ethyl per month. Later the dealer told us about the incident and expressed the conviction that the arrangement had resulted in increased car sales. Acting on the suggestion of our representative that Ethyl fuel would help the sale of used cars by showing better performance, a trial resulted in this agency going 100% Ethyl.

• Word has reached us of a very successful meeting held by our Mr. C. J. McFarlane for the Imperial Oil Company in the Bessborough Hotel at Saskatoon, B. C., on April 6th. Although the event was put on primarily for Imperial dealers, an audience of over 200 included many prominent business men, among whom were Mr. Agar, a Member of Parliament, the Mayor and Councillors, Mr. Johns, head of the Exhibition Board and the City Commissioner. Particularly noticeable was the presence of Professor Hardy of the University and other members of the faculty who had earlier in the day attended a meeting of Mr. McFarlane's held at the University. Much of the credit for bringing so many prominent people together was due to the cooperation of Mr. Roblin of Imperial Oil, Ltd., who issued the invitations. A gratifying outcome was the suggestion of the head of the Exhibition Board that a similar demonstration be given at the Class A Fairs at Brandon, Calgary, Edmonton, Saskatoon and Regina.

• An innovation introduced in Baltimore recently deserves special mention. The Southern High School wished all of their students to see the Ethyl demonstration and hear the talk but found it impossible to get the entire student body together at one time. Consequently Messrs. Keyes and Cole arranged to take six classes a day for two full days alternating the presentation. At the end of the second day the faculty asked for a special meeting for themselves. Reception of the program was so enthusiastic that it resulted in a request from the Patterson Park High School for a similar series of talks and accordingly these were arranged for April 17th, 20th, 21st, 22nd and 23rd. Additional requests have been received from other schools in the city.

• On March 27th Mr. Mundinger (Tulsa Division) read a paper entitled "Combustion Characteristics of Gasoline-Air Mixtures in Internal Combustion Engines" before the Louisiana Academy of Science in Lafayette, La. Much of Mr. Mundinger's material was obtained from an address delivered by Dr. Edgar on Theory of Knock in Internal Combustion Engines, given some time ago. The audience numbered approximately 200. Reading of the paper required about 25 minutes and was supplemented by a motor demonstration put on by Mr. Dan Guy. At the close of the meeting Mr. McKnight, Chairman of the Physical Science Division of the

Academy and an official of the Arkansas Natural Gas Corporation, expressed his appreciation on behalf of the Society. In closing his remarks he very graciously commented: "Everyone should feel indebted to the Ethyl Gasoline Corporation for its research and development of modern fuels, and the part it has played in making possible our present excellent performing automobiles."

• Mr. Louie Wilson of the Kansas City Division gave a demonstration at Jefferson Barracks, an Army Post located at St. Louis, Missouri. The meeting, which was exclusively devoted to Mr. Wilson's talk on automobile and truck engines and Ethyl Gasoline, was held in the Post motion picture building. It was attended by all officers and privates who were not engaged in drilling at the time. Major Brown informs us that the demonstration and talk were of great value to his men and furthermore said that he never realized there was such a difference in the quality of motor fuel. The Major was so pleased with the presentation that he has arranged with the local CCC headquarters for a series of 37 Ethyl meetings to be given next month.

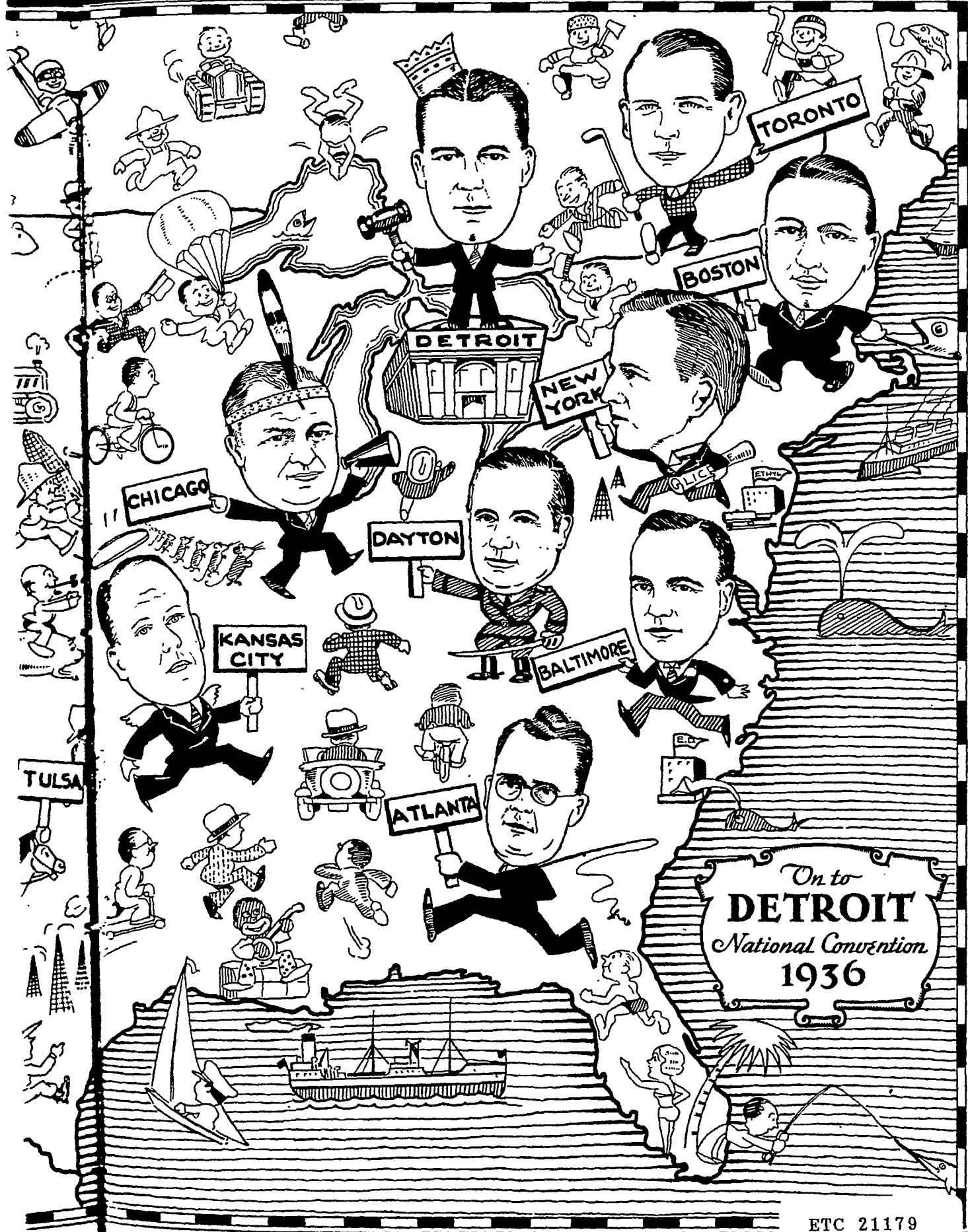
• Carl Abell, Southern California and Arizona representative seems to be getting hard boiled. The last four school lecture dates that he has taken, he has asked for general assemblies of the entire school—and got away with it. At Brawley, Cal., he arranged a sort of "double header" in the form of a combined general assembly of the Brawley Union High School and the Junior College. This meeting was followed by a special lecture and demonstration of how to high compression an engine, which was attended by all students in the automotive shop classes. Attendance at the two sessions was 660 students.

• That our educational meetings for schools are becoming more and more popular each season in all sections of the country is evidenced by the increasing number of requests we receive from the school officials. A typical example is contained in a recent report from Mr. Fred Naylor of our Chicago Division. He writes that at the invitation of the instructor of automobile classes in the Eveleth (Minn.) High School he gave six lectures at the school in one day to a total of 550 students. The classes represented were: Physics, Chemistry, Aviation, Automobile Mechanics, Machine Shop and Junior College. Mr. Naylor says this school is exceptional as to equipment, having 1935 Ford, Chevrolet and Chrysler engines with the result that unusual enthusiasm is shown in the work by the students. Many of the instructors also attended and displayed a great deal of interest, one even arranging to have a high compression head put on his new 1936 car.

• We venture to say that on numerous occasions all fieldmen, while waiting for traffic signals to change or at other times when cars draw up alongside, have heard motors knocking. In this connection Mr. Distler of our Dayton Division makes an observation which seems to have merit. He suggests that in such an instance it might be possible for our Ethyl man to make a note of the license number of the car in question and contact the owner by mail. A printed card could be sent reading something like this: "Does your motor knock? Why not try your favorite brand of the new Ethyl Gasoline?" And with this enclose an Ethyl circular. At least it's worth a trial.

• The old adage, "It pays to advertise" was put to the test the other day by Mr. C. E. Colvin (Chicago Division) with gratifying results. He writes, "Our recent advertisement (which appeared on the back cover of the March 'News') saying that it costs \$7 to \$15 to make a car demonstration—and only 4c to make it 100%—served me well today." It

(Please turn to page 10)



THE ETHYL NEWS

HERE and THERE

(Continued from page 7)

seems that a Pontiac dealer in his territory, on whom he was calling, noticed this ad and wanted to know "what it was all about." Whereupon our Ethylman got to work. A demonstrating car was taken out and the gas-electro advanced. "It knocked badly on regular," writes our correspondent, "but none at all on Ethyl." The dealer pronounced the operation of the car "the best he had seen." Then the question was raised as to customer reaction to the need of using premium fuel. Messrs. Colvin and Dealer accordingly got together and worked out a short story for both sales and service departments. This was based on the gas-electro providing a super compression engine without the expense and trouble of changing heads. Opportunely enough a rather price-minded customer appeared on the scene and was at once made use of as a "proving ground." Upon hearing the story he reacted with the comment, "fair enough—I'll certainly give it a trial." In the end it was settled that if the dealer found similar reactions from other customers during the following two weeks the agency's regular pump would be changed to Ethyl. In any event Ethyl is to be used for demonstrating.

• Oakland District of the Richfield Oil Company reports that at least twenty 100% dealers in their territory have removed third grade gas entirely. In two-pump stations, third grade was replaced with Richfield Ethyl. In three-pump stations, Ethyl is dispensed from one pump and Richfield Hi-Octane out of the other two. This is just another indication of the turning tide. The Service Department of the Oldsmobile Motor Works in Oakland arranged for our Mr. E. L. Cline of the Los Angeles Division, to hold key meetings throughout Central and Northern California. Dealers were invited to attend one of the five meetings held at strategic points and out of a total of 54 dealers, only 16 failed to send at least one representative. Factory sponsorship of dealer meetings helps the acceptance of our presentation materially.

• The following letter was recently received in our Kansas City Division office from the Bordewick Motor Company, Larned, Kansas:

"We, the members of the Western Kansas Ford Service Club wish to thank you and Mr. Mason for making it possible for your representative, Mr. J. C. Stump, to be present at our Club meeting in Dodge City on Friday, March 20th. Mr. Stump gave us a very interesting and instructive talk on the internal combustion conditions that exist in the later types of motors. We are making plans so that we will be able to have as many owners of late model cars to be present at a meeting in the near future and we are looking forward to being able to have another of your representatives present as our speaker and demonstrator for the evening.

"Again thanking you for this past favor and with best wishes for the future, we remain,

*Sincerely yours,
Western Kansas Ford Service Club,
(signed) Loren McMannama, President."*

• Bearing out a prediction made us a short time ago, which was quoted in the "News", we learn that a leading marketer in the Province of Nova Scotia shows a 47% increase in Ethyl during February over the same month last year. Mr. Harold Murch, our representative there, says that he has not completed figures for the other Maritime Provinces yet but believes that they also have a corresponding increase in Ethyl.

• Our Texas representative, Mr. John Rollins, has just completed a month's demonstration schedule in the extreme southern and western part of his territory. In all, 48 meetings were held for a total audience of almost 1,600, which is doing pretty well in the "wide open spaces". During the course of

the program he had the distinction of addressing, believe it or not, the richest and the largest districts in the world. The former, where he spoke at Iraan High School, is in a district assessed at \$49,500,000 where the famous Yates oil pool is located. Edinburg High School is the largest, located in a district covering 1,600 square miles, embracing the entire northwestern part of Hidalgo County. Eighteen trucks are used to bring the children to school and one of these must travel 94 miles each day.

• As the school year draws to a close, our representatives speed up their programs of lectures and demonstrations at high schools and other educational institutions. Following is a list of such meetings with attendance figures, held by Mr. W. A. Newman (Dayton Div.) during one week, for students in Chemistry, General Science and Physics:

West Hamlin H. S., W. Hamlin, W. Va.	350	present
Hamlin H. S., W. Hamlin, W. Va.	403	"
Griffithville H. S., Griffithville, W. Va.	359	"
Milton H. S., Milton, W. Va.	469	"
Barboursville H. S., Barboursville, W. Va.	425	"
Douglas H. S., Huntington, W. Va.	932	"
Huntington Jr. H. S., Huntington, W. Va.	647	"
Wayne H. S., Wayne, W. Va.	607	"
Gallipolis H. S., Gallipolis, Ohio	468	"
Pt. Pleasant H. S., Pt. Pleasant, W. Va.	516	"
Chesapeake H. S., Chesapeake, Ohio	482	"
Ceredo Kenova H. S., Kenova, W. Va.	618	"
Proctorsville H. S., Proctorsville, Ohio	375	"

BENDIX SAFETY SERVICE

(Continued from page 3)

In addition there are lecturers representing manufacturers of service station equipment and others associated with the automotive industry such as ignition manufacturers, carburetor companies and gasoline companies. These representatives are invited to give detailed information about their respective products so that the student may be fully informed on the particular service operation under discussion.

Among the lecturers who visit Bendix each month is Mr. B. G. Crane of the Chicago Division of our own organization. Mr. Crane presents in detail the characteristics of gasoline treated with Ethyl Fluid, discusses the subject of carburetion and engine tune-up and supplements his talk with a special showing of the demonstrating motor.

Parties interested in enrolling in the Bendix Safety Service School may communicate with Mr. M. M. Cunningham, Service Sales Promotion Manager, Bendix Products Corporation, 401 Bendix Drive, South Bend, Indiana.

• DUE to the vacancy caused by the sudden death of our Secretary-Treasurer, Mr. Mittenacht, it became necessary to make certain changes in the Administration Department. Accordingly the following have been elected to the positions indicated:

Treasurer	Mr. John C. Mehrling
Secretary	Mr. Julian C. Gonzalez
Assistant Treasurer	Mr. Louis J. Volz

Mr. Mehrling will also act as Bonus Custodian and Mr. Volz continues as Comptroller.

Driver Reaction Meter Announced

• A DRIVER reaction meter, a new product which measures the speeds with which motorists make emergency stops, is announced by The Bendix Products Corporation, South Bend, Ind. The new device is in production and available at once according to Frank B. Willis, Vice President in charge of sales.

The driver reaction meter consists of a seat, brake, clutch and accelerator pedal arrangement similar to that in every automobile. In addition an electric traffic signal is arranged before the device so that it is in plain view of the "driver". With the subject seated at the steering wheel, the stoplight is flashed and the "driver" moves his foot from the accelerator pedal and applies it to the brake pedal as quickly as possible.

The duration of time between the instant when the stoplight reacts on the brain of the driver and the brake application is made, is automatically recorded in tenths of seconds on a graduated scale, as well as permanently recorded on a card which is inserted in the instrument. The instrument, which will undoubtedly become popular with safety schools, license application bureaus and other organizations interested in motoring safety, was explained in detail by Mr. Willis.

"The driver reaction meter is a very accurate timing device, its accuracy being maintained through the primary drive which is a synchronous motor", said Mr. Willis. "The speed of this motor is reduced through a gear drive to a relatively slow speed so that the arm will pass the record card at a speed which corresponds to the graduations on the card. The stop sign is operated by a cam and flashes just as this hand or pointer passes the zero line on the record card.

"The flashing of this sign is a signal for the operator to release his foot from the accelerator and as his foot leaves the accelerator, a switch is operated which closes the primary circuit of a transformer which in turn is connected to this hand which is now passing the record card. and, as a result of the primary of the transformer being closed, the energy being developed in the secondary of this transformer burns a hole in the record card. The distance from the zero line to this hole is the mental reaction of the time required from the time the operator sees the stop sign until his foot has left the accelerator.

"The second hole which is burned in the card is made in a similar manner to the one described except that the switch is connected to the brake pedal instead of the accelerator. The glass tube that passes beneath the scale in the front of the case flashes at the time the hole is burned in the card. This flash in no way affects the operation of the reaction meter but it is an indication that a hole has been burned and also gives other observers an opportunity to visualize the speed of the person being tested."

Behind the Scenes with G. M.'s Caravan

• OUR representative, Mr. Frank Cronin of Richmond, Va. who was assigned to our exhibit with the General Motors Caravan when it set out from Detroit in January, sends a letter from Daytona Beach, Florida, which gives some interesting details of his activities with the "Parade of Progress". He says: "Operations of the Caravan were pretty much routine last week. As you know, we showed at Orlando from Sunday until Wednesday. On Friday the Caravan proceeded to Daytona where we are opening on Sunday and will show, up to and including Tuesday. From there we go to Jacksonville to remain for about ten days, including the check-up and over-haul period.

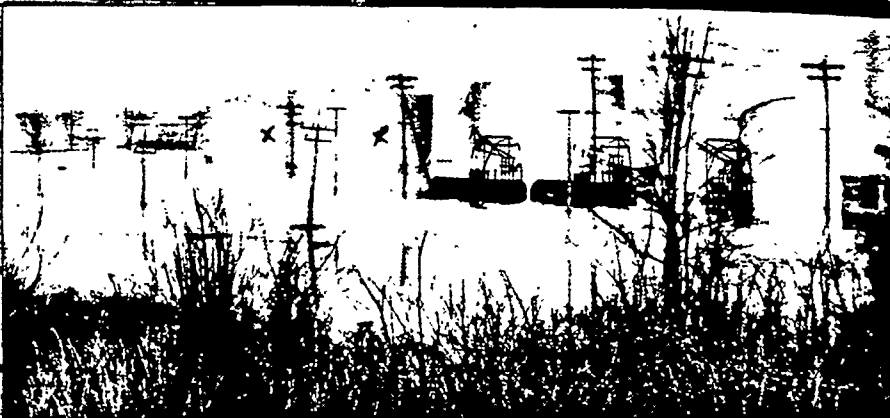
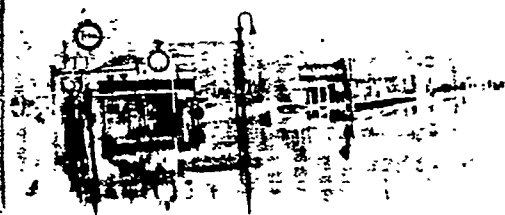
"The attendance at Orlando was extremely gratifying, taking into consideration the population of the city. We played to 16,573 people and this figure represents about 55% of the normal population. This population is, of course, higher in the winter because of the tourists but they are leaving the state in droves just now.

"I know that you are interested in the movie that we prepared for the Caravan and the use it is being put to. Gratifyingly enough, our film has been shown a great deal along with other divisional films but at the same time I would like to see it shown more frequently... Something else for the records is that many like our picture better because of the action in it. I have watched the audiences thrill to its speed and nearly laugh the tent down at its comic portions."

Commenting on the reactions to it from the Caravan management. Mr. Cronin says that the length of the film is one point that appeals to them. With an eleven minute showing it has been worked into full programs whereas were it longer there might at times be some difficulty in fitting it in.

In closing Mr. Cronin writes: "The General Motors dealer organization at Daytona Beach is quite alive and has made arrangements to broadcast one full hour each day of the show over station WMFJ. The first day the stage show will be broadcast, the second the exhibit men in the right wing will go through a question and answer period and the third day the left wing will do the same. We are included in this and I will have about fifteen minutes on the air."

• A FEW weeks ago Ben Bernie the "Old Maestro", during his weekly broadcast sponsored by the American Can Company, had Ethel Merman on as guest star. In introducing her to the radio audience, Bernie said, "I've been trying to get you for months—I've noticed all the publicity you've had at the gas stations throughout the country." "Gas stations?" said Ethel Merman. "Sure," said Bernie, "there are signs at all of them—for good performance get Ethyl."



New England Floods Ravage Oil Companies

• NEWSPAPERS, newsreels and the radio have portrayed very graphically, the disasters caused by the recent floods. Along with other industries, the oil companies suffered tremendous losses in view of the fact that most of their bulk plants are located on water terminals. Socony-Vacuum, Colonial Beacon and Shell Eastern suffered the greatest. In each of the six New England states, bulk plants were lost as well as millions of gallons of gasoline and other products. The fire hazard in large cities such as Springfield, Mass. and Hartford, Conn. was acute as a film of gasoline formed on top of the water over large areas.

In New Hampshire there was such a scarcity of motor fuel that it was rationed off under the supervision of the National Guard. The demand for kerosene for lighting purposes, gasoline for emergency electric light plants, pumps, etc. together with the diminished supply of these products and the flooded roads, presented a grave problem to all our customers. This was met only by tremendous effort on the part of oil company employees.

Particularly fine work was done at some of the bulk plants where huge gasoline tanks bobbed around in the flooded areas like corks. It required almost super-human effort to lash these tanks, open the king valves and sink them so the gasoline could be pumped out into waiting barges in order to minimize the fire hazard. Several tanks which got away started to float down the Connecticut River but were pursued in boats and forced towards the shore. Coast guard cutters stood ready to destroy by gun fire, any which might threaten demolition of bridges further down stream.

The temporary damage, and in a great many instances utter destruction, of thousands of motor cars and the closing of practically all through highways with warnings to motorists to keep off the road, resulted in curtailed sales along with the actual physical loss suffered. In many localities available sources of power, light and drinking water were shut off. Oil companies gave invaluable assistance in solving the problem of water shortage by transporting it in gasoline trucks. Before this could be done, each truck was thoroughly cleaned with live steam, scrubbed by hand and rinsed with hot water. This procedure was approved by the local Red Cross. The downtown section of Hartford, Conn. had no electric power from March 20th till March 31st, and all gasoline sold in this section had to be delivered through hand pumps.

Remarkable progress is being made in reconstruction, however, and in another three months it will be hard to believe that such a disastrous flood ever occurred.

The accompanying photographs, sent by our Boston Representative, Mr. Donald Flynn, give a vivid picture of the flood as it affected the New England oil industry in particular.



"ETHYL"

I am Ethyl,
 The one in red.
 My octane is high
 And I've plenty of lead.
 My acceleration
 You'll find is good,
 With proper control
 I do what I should.
 You'll always find
 Me on the road
 In pumps and cars
 And trucks with loads.
 I'm good on trips
 Either short or far,
 On business or pleasure,
 In plane or car.
 Now Mother Earth was
 The maker of me
 I'm taken from depths
 Of land and sea.
 I am the choice
 She offers you
 To pep up your car
 And keep it like new.

Contributed by MRS. R. W. HOGAN.

N. E. FLOOD VIEWS ON OPPOSITE PAGE

- TOP RIGHT: *Colonial Beacon tanks at Hartford, Ct.
Starting trip down stream.*
- UPPER LEFT READING DOWN: *Coast Guard boat standing by to destroy Shell Oil tank. Texas Oil plant at Windsor, Me.
Two feet of silt in Main St., W. Springfield, Mass.
Shell Oil tank cars at Gardiner, Me.
"Gasoline Row" under water at Hartford, Ct.*
- BOTTOM RIGHT: *4,000,000 gallons of Socony floating a mile and a half down stream. One million of this was Ethyl.*

San Antonio's Historic Missions

(Continued from page 5)

is Mission Nuestra Senora de la Purissima Concepcion de Acuna, generally called Concepcion Mission. Here, also the chapel is in use. On the south side of the main church, on the second floor, is a room which in the days of the padres, was an infirmary. In it, opening into the upper part of the church, was a window in the two foot

thick wall, so that the sick could hear the services. There is evidence that this and San Jose Mission had the largest population and greatest sphere of influence among the Indians. Old records show that in 1768 the population was 350, of which 110 could bear arms, 45 being able to use guns and the rest bows and arrows.

Near Concepcion Mission, on October 28th, 1835, was fought the second battle of the Texas Revolution, and probably one of the most important. Austin had sent a messenger to General Cos, commanding the Mexican Army in the Presidio of San Fernando, then the headquarters in San Antonio, demanding surrender. Cos had refused, so Austin sent Colonel James Bowie and Captain James W. Fannin, to find a suitable camp site nearer the city. They reached this mission on the night of the 27th of October and on the morning of the 28th, saw a Mexican detachment advancing toward them. They took up a position in the bed of the river and being good shots, were soon in possession of the field. Only one man was killed on the Texas side, Captain Richard Andrews, for whom one of the oil-producing counties in West Texas was named. The importance of this victory was that it gave confidence to the newly organized forces of Texas, thus paving the way for later occupation of San Antonio.

Other maneuvers of Austin's force brought them to the north of the city, and they spent some time encamped at the head of the San Antonio River. Here dissension broke out, and the army nearly deserted General Edward Burleson, who had succeeded Austin, when the latter returned to East Texas. Finally, on December 7th, 1835, Colonel Ben Milam emerged from the council tent and uttered the words now engraved on his tomb, "Who will go with Old Ben Milam into San Antonio?" Under this leader, and Colonel Johnson, the Texans moved southward and engaged in four days hand-to-hand fighting during which Milam fell with a bullet through his head, but in the end Cos surrendered. He was allowed to return to Mexico with his troops and the Texans were in possession of the city for two short months.

Sometimes called the Fifth Mission, Mission del San Antonio de Valero, which was originally established as Mission San Jose, somewhere on the Rio Grande, was moved to a location east of the San Antonio River, and about half a mile from the San Fernando Church and Presidio. The erection of a stockade enclosing its chapel was begun on May 1, 1718. This chapel is better known as the Alamo, from the Spanish name of the cottonwood trees shading it. On February 22nd, 1836, after the Texans had established some semblance of order in the city, they were surprised by the forces of Santa Anna, the Mexican dictator, and the available Texan soldiers took up a stand inside the Alamo stockade. The story of this gallant but futile defense against overwhelming odds, resulting in the annihilation of the little garrison, is too well known to bear repeating, but the Alamo still stands as the shrine of Texas liberty. Situated in the heart of the old city it contains an immensely valuable collection of relics of this struggle and the battle-cry of Sam Houston's followers—"Remember the Alamo"—has become immortal in Texas history.



• SKELLY'S SALES PROMOTION MGR. R. M. WARD OPENS 1936 FORUM AT DODGE CITY, KANSAS.

• V. PRES. W. T. ATKINS ADDRESSING FORUM AT MANHATTAN, KANSAS.

SKELLY'S 1936 MERCHANDISING FORUM

• THE Skelly Oil Company, with their home offices at Kansas City, Mo., recently conducted a series of all-day sales meetings which were held in important cities in their marketing area. The theme of the 1936 Merchandising Forum was "Down Profit Road—with Skelly". Sound moving pictures which occupied the major part of these meetings carried forceful merchandising ideas.

The picture "Profit Road" was built around a service station manager who ran an unsightly place and was ready to concede defeat in regard to profitable operation. Important subjects such as advertising and merchandising, salesmanship and station management were discussed with him in an effort to place him on the road to success. Finally it was shown that by adoption of the new methods suggested by the Advertising and Sales Promotion Departments of the Skelly Oil Company he was able to operate a progressive and profitable station.

The Kansas City Division arranged the Aromax Ethyl presentation for the meetings. Thirty minutes of the Skelly Merchandising Forum was devoted to Aerotype Aromax Ethyl Gasoline and the sound film, "Where Performance Counts", acted as an excellent introduction to the discussion of today's market on Ethyl. This film was followed by a brief discussion which was illustrated by stereopticon slides outlining the necessity for the new fuel. Detonation was illustrated by the flame travel in glass tubes and the Ethyl program was concluded with a motor demonstration of the high qualities of the new gasoline.

• CARL BERRY DEMONSTRATING AROMAX ETHYL IN WICHITA.

Merchandising Forums were conducted by two Units simultaneously and were held in forty-three cities throughout the states of Oklahoma, Kansas, Colorado, Nebraska, Iowa, North and South Dakota, Missouri, Illinois, Wisconsin and Minnesota.

Unit No. 1 was conducted by Mr. R. M. Ward, Sales Promotion Manager from Skelly Oil Company, and assisted by Messrs. Carl Berry, Paul Johnson, Howard Lappe and "Mac" McCulloch of our Kansas City Division.

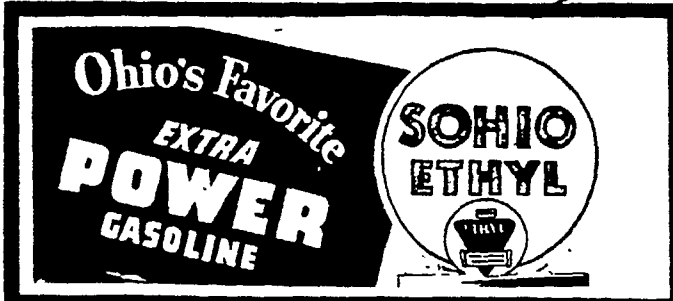
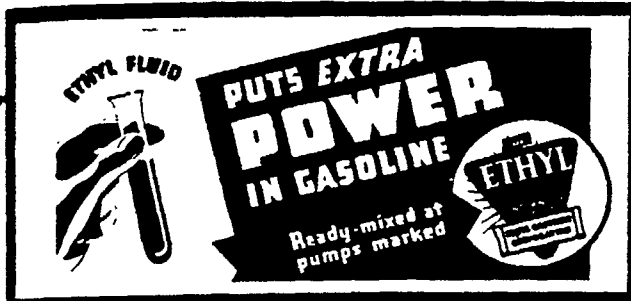
Unit No. 2 was headed-up by Mr. Art Taylor, Assistant Division Manager of the Skelly Oil Company, and Mr. Louie Wilson of our Kansas City Division assisted him in the six meetings that were held in Missouri.

Mr. W. T. Atkins, Vice President in charge of Merchandising for Skelly Oil Company, addressed a number of the meetings. Mr. Harry Clifford, Advertising Manager, and Mr. Bob Chamberlain, Retail Sales Manager, together with Mr. Tex Underwood, Wholesale Sales Manager, played a very important part in the success of the program. The meeting at Tulsa was closed by Mr. W. G. Skelly who seemed to be well pleased with the merchandising ideas that were presented.

The average attendance numbered 103 with a total of over 4,000 affiliated Skelly men present. At the close of each Forum a sales contest was announced which stimulated the interest. Favorable reports have been received from Mr. Atkins and Mr. Chamberlain regarding the increased sales obtained directly following each of the meetings.

• ETHYL'S MCCULLOCH IN ACTION AT DES MOINES.





• ARRANGEMENTS have been completed with the Standard Oil Company of Ohio for tying up our billboards with their Ethyl posters. This means that in May, July and September, double boards will be used each month with our own ad on one and Standard's Ethyl ad on the adjoining one. We appreciate having this major oil company cooperate with us in their advertising. Above is the May poster.

Associated Oil Conducts A Novel Survey

• UNDER the heading "Oil Firm Holds Impartial Poll" the Seattle Times describes the recent activities of the Associated Oil Company in connection with their current advertising campaign. Says the "Times":

"With its theme based on an impartial survey made by the Western Union among 300 motorists who were not advised of the purpose, Associated Oil Company will shortly launch the largest newspaper advertising campaign for several years. The campaign will tell motorists the story of Associated gasolines, motor oils, lubrication service, specialty products and Smiling Associated service.

"According to H. A. Jackson, district manager in Seattle, the results of the survey forcibly back up Associated claims that Aviation Ethyl Gasoline improves the performance of motor cars. 'Three hundred motorists of the Pacific Coast acted as a jury and confirmed what Associated engineers have been telling the public for the past year—that Associated Aviation Ethyl Gasoline is a superior motor fuel,' says Mr. Jackson.

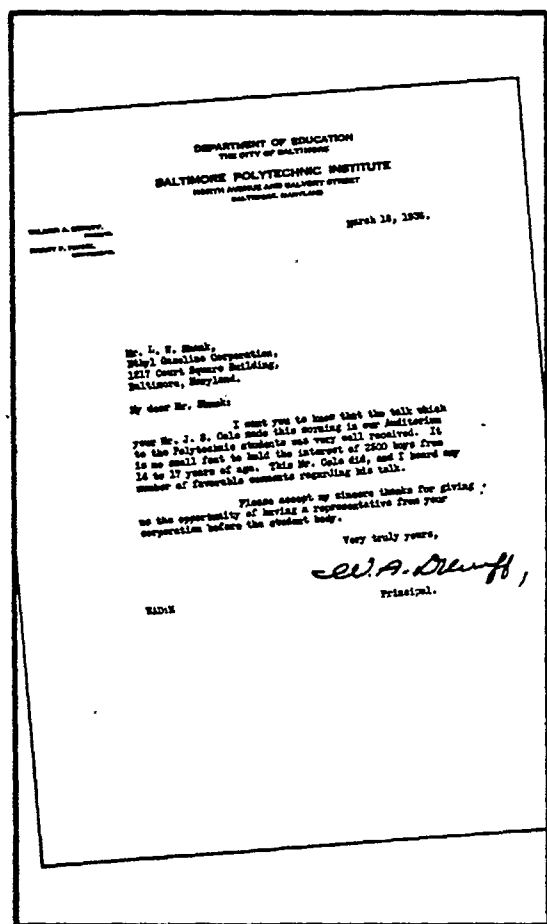
"The Western Union report, dated March 3, 1935, follows: 'We hereby certify that we have delivered in unbranded cans, ten gallons of gasoline certified by licensed chemists to be Associated Aviation Ethyl of regular grade, to 300 motorists selected at random by Ross Federal Research Corporation. These motorists did not know the full name of product or manufacturer. Those voting that the gasoline improved the performance of their car are as follows:

- "Washington—out of 68 returns— 61 yes.
- "Oregon —out of 66 returns— 58 yes.
- "California —out of 166 returns— 154 yes.
- "Total —out of 300 returns— 273 yes."

• ON April 13th we received word from the Art Directors Club that the illustration on our advertisement "Mike and Mame" (see back cover this issue) which was done for us by Paul Wolf through our agency, received the award of Distinguished Merit for the best photographic illustration in class magazines. The award was made at the 15th Anniversary Exhibition of Advertising Art.

CORRECT READING OF BULLETIN ON THIRD COVER

• "To produce a good crop of Sohio Ethyl sales for reaping in the summer and fall of 1936, start now to break the ground and sow the seed by suggesting to your winter Sohio Ethyl customers that it is also the finest summer gasoline sold in Ohio. This seed will grow to a healthy proportion of your total crop if it is planted early and carefully. With a small amount of cultivation and attention throughout the entire year, the high compression field will produce a large volume of sales."



Newsbriefs

Returned to Mrs J. A. Watson 118 Berkeley St. May 206



• They're off—for "Down under" to join the Kangaroo Division. The Doug Jeppes sailed aboard the Mariposa from San Francisco on April 2nd and will make their new home in far off Melbourne. Doug has represented us in South Carolina and has been attached to the Baltimore Division for the last four years. Now he is to aid in removing knocks from Australian and New Zealand motors, the while the Jeppe heirs disport themselves with Koalas and Alice keeps the whole family thoroughly organized. We all join in wishing them much happiness in their new surroundings. The accompanying snapshot of Jeppe, Inc., was taken just before they left Batesburg, S. C., the end of March.

• We learn that the Chicago Division has acquired two additions to its personnel. Mr. William Trelease has become an Office Mouse with the understanding that within a reasonable time he may expect to become a member of that fine upstanding and intelligent body known as the Ethyl Field Mice. It always takes a few weeks of intensive training to convert the meek house-mouse to the aggressive roaming variety so necessary to field work, but Bill has made a good beginning. The Great White Father has turned him over to the Detroit Demons for the hardening process. The other newcomer, Miss Marie Brand, has already lightened the work of the office through her honest endeavors and brightened the countenance of the Great White Father by her pleasing personality and ready smile. It is reported that anything which brightens that countenance is not only good but welcome.

• A new member of the Ethyl family arrived in Little Rock, Ark., on April 4, 1936, in the person of Miss Gayle Ruth Huxtable. She is the daughter of our Arkansas representative Leonard Huxtable. Both mother and daughter are doing nicely and the young lady tipped the scales at 6 pounds 6 ozs.



PAGE SIXTEEN

• At the conclusion of the series of Pan American Sales Meetings "Tarzan" Smith (below left) and "Happy Boy" Pruitt (right) took a day off with Mr. C. B. Gale of Pan American at Pensacola Beach.

• Johanna Noonan, of the Chicago office, departed this month from the rose strewn pathway of an Ethylite to venture forth upon the road to martyrdom and human service, via the Cook County Hospital. Johanna, who has been Bob Jordan's secretary since the opening of the Chicago office, is well known to many people in the oil industry generally as well as our own organization. A nurse's watch was presented to her as a token of the good wishes of the members of the division. All the personnel who have worked with "Jo" regret her departure, but her fine intelligence and enthusiasm for the work will, without doubt, bring her a generous amount of success in this new venture.



We are glad to welcome Dwight to the Ethyl family.

• Announcement has just been made of the engagement of Miss Martha Evans, daughter of Mr. and Mrs. W. O. Evans, of Chama and Albuquerque, N. M., to Herbert N. Peters. Herbert is a member of the Tulsa Division field staff and covers the state of New Mexico, making headquarters in Albuquerque. The wedding will take place this summer.

• It was reported that our esteemed Advertising Manager, Paul McElroy, considered himself quite a bowler, so when some time ago while in Louisville, Ky., he challenged Brigadier General Harry Mack, considerable excitement prevailed. The General, however, maintained his standing by trimming Paul rather easily. A Kentucky general could not allow himself to be beaten in anything—especially by an outsider. The result was that Paul bought the dinner. Later Paul and Harry met in Pittsburgh. Paul, after revenge, had been practicing duck pins, so again challenged, but the General came through once more. We understand Paul is thinking up a new game.

• Two or three of our representatives have shown some ingenuity in arranging meetings and demonstrations around the luncheon hour, thereby satisfying human needs and likewise keeping expenses down. This last is always commendable. Howard Reinhart of Seattle, has gone them one better, however, due to a lucky break (for him) in the weather. Boarding a plane at Seattle for Portland, he arrived over that city at 9 a.m. to find landing impossible due to fog. The ship finally set him down in Medford, Oregon, some 300 miles further south. Having contemplated a trip to that city the following week he seized the opportunity to transact his business and caught the afternoon plane back to Portland. His trip from Portland to Medford and return (28 bucks) was "on" the air line as was his lunch at Medford. Howard is ready to enter any contest for free meals, etc., which may be organized.

SOHIO ETHYL Sales Bulletin



IT WILL SOON BE TIME
FOR SPRING PLANTING...



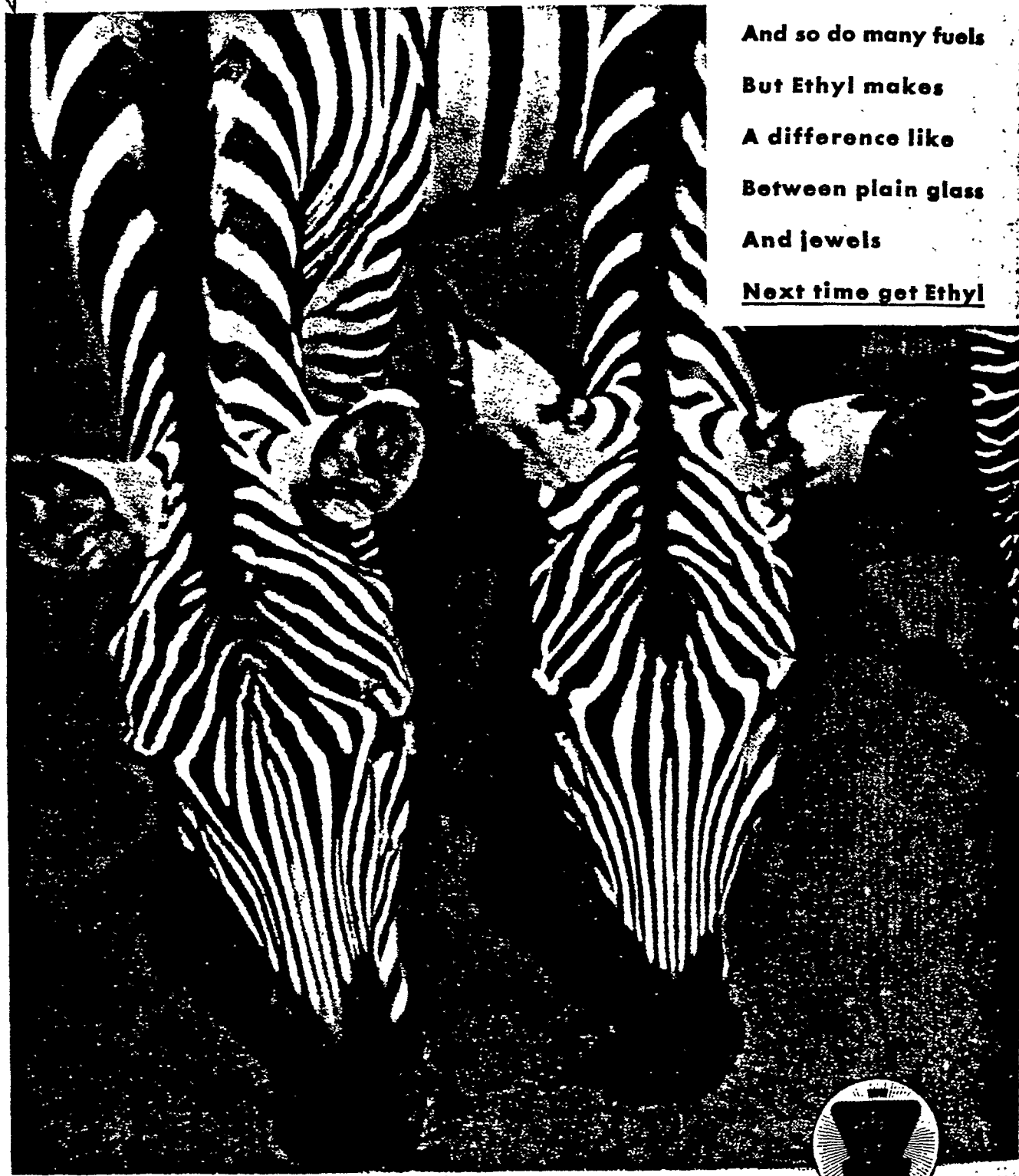
2 pro² a  od cro² of 
 for² in the ²/₃mer &  of 1936
 ☆t now 2  the ground and  the
 b² suggesting II y/winter 
 tomers t² it is so the fi² ²/₃mer
 gaso  s² in .

This ~~and~~ will  (1+1) a  thy
 7/ortion of y² tal  p if  it is
 ted  Cly &  y. With a sm²
 amount of Cultivation & at(5+5)tion thru 
 the en  y? the h² com  tion  w 
 pro² a large  of .

ASK THEM TO TRY SOHIO ETHYL NEXT TIME

MIKE AND MAME

Look much the same
And so do many fuels
But Ethyl makes
A difference like
Between plain glass
And jewels
Next time get Ethyl



ETC 21188



ETC 21189

Mr. Webb Announces Ethyl Service Clubs Makes Awards

At the National Convention of the Corporation held in Detroit the week of May 12th, President Mark Webb announced the award of service pins to all those who have been with the organization for five and ten year periods as of June 1, 1936. Mr. Webb said that hereafter a similar award would be made for every successive five year period. The conditions governing the award of service insignia are as follows: For the purpose of computing length of employment, anyone employed from the first to the fifteenth of a month will rate as of the first of that month. Those joining the organization after the fifteenth of any month will rate as of the first of the following month. A group of seven who were associated with the General Motors Chemical Corp. before the incorporation of the Ethyl Gasoline Corporation have been given credit for the additional service. They are: Thomas Minkley, Jr., Abraham Edgar, Robert A. Kahn, Harry A. Mack, Robert L. Jordan, M. D. Siebenhafer and L. P. Harding.

The names of those who received ten year pins were published in the May News. The names of those receiving five year service insignia as of June 1st, 1936, will be found on third cover. Subsequent issues will record additional awards as they are made.

Unless otherwise in-
dicated, all artwork and
photographs destroyed
May 1957.

Army Ser

A full-time
the back
of service
has let five and
last section of
five-year period
his area follows

anyone employed from the first to the fifteenth of a month will rate
as of the first of that month. Those joining the organization after the
fifteenth of any month will rate as of the first of the following month.

A group of seven who were associated with the General Motors
and Corp. before the incorporation of the Army-Lansing Corporation
have been given credit for the additional service. They are Thomas
Mudley, Jr., Abraham Edgar, Robert A. Kelms, Harry A. Mack, Robert
L. Jordan, W. H. Sembach, and L. P. Harding.

The names of those who received ten years' service were published in the
May issue. The names of those receiving five years' service were
published in the June issue. The names of those receiving three years' service
will be published in the next issue. The names of those receiving one year's
service will be published in the next issue.



Vol. 3, No. 6

ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

JUNE, 1936

Published monthly by the Ethyl Gasoline Corporation for the entertainment and benefit of the members of its organization. Address all news items, correspondence or other material to the Editor, W. Cary Harris, 35th floor, Chrysler Building, New York City.

W. CARY HARRIS - - - - - Editor

Associate Editors

EDWIN DOWNS
RUSSELL B. WESTON

CORRESPONDENTS

Atlanta Division	GEORGE W. WARREN
Baltimore "	L. W. SHANK
Boston "	DONALD S. FLYNN
Chicago "	H. C. DEES
Dayton "	R. R. FALLER
Kansas City "	C. M. BERRY
Los Angeles "	CARL ABELL
New York "	R. C. MURPHY
Toronto "	J. N. FITZGERALD
Tulsa "	HARRY KUHE
Engineering Dept.	JULIAN J. FREY
Manufacturing Dept.	ARTHUR P. STOVER
Gasoline Testing Dept.	E. R. ANDERSON
Export Dept.	HUBERT FOSSETT

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH

How Foreign Trade Concerns YOU

By BIRD REES

• MORE than two million of those normally employed in the United States derive their livelihood from some form of work connected with our foreign trade. Another million are employed, at least part time, to supply the needs of these workers.

Our foreign trade is building better understandings and more amicable relations with some seventy-five countries in all parts of the world. This international exchange of commodities has always been profitable to the United States and last year our foreign trade totalled 4.3 billion dollars—a gain for the year of 15% and 1.7% above the average of the past five years. The favorable balance was nearly a quarter billion dollars and net custom receipts over a third of a billion dollars.

What does all this mean to you and me, personally? It affects our taxes, the federal budget, farm relief, employment, prices, our surplus production and more or less directly, nearly every major form of business. There is scarcely a day when we do not find use for some products that it is best, if not wholly necessary, for us to import. On the other hand, although less than 10% of our goods, raw materials and agricultural products is normally sold abroad, a substantial proportion

(Please turn to page 13)

PAGE ONE

ETC 21192

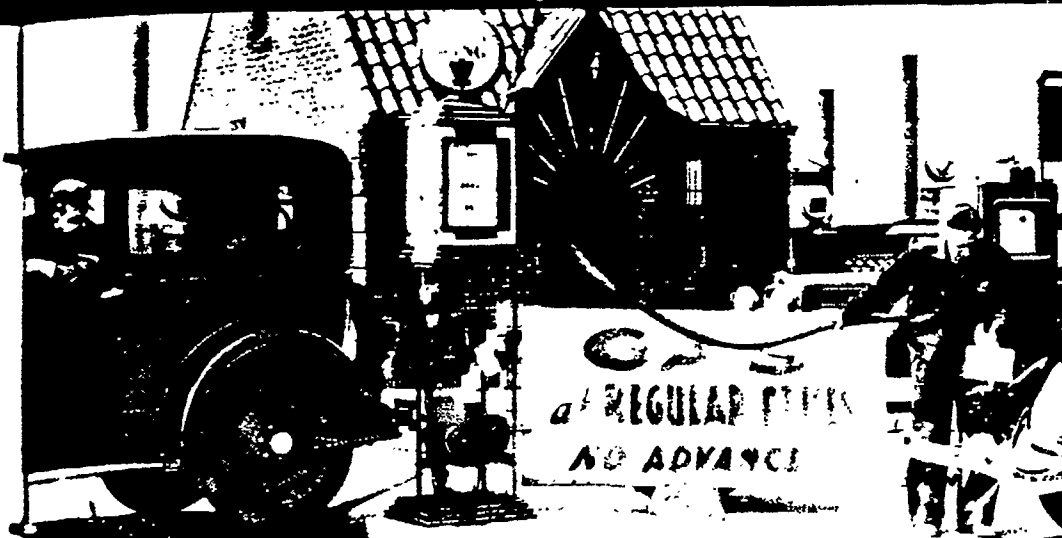
MEET MR. WAGNER



• SANFORD M. WAGNER was born in Williamsport, Pa., on February 17th, 1888. He received his early education in the public schools of Auburndale and Newton, Mass. Upon completion of his high school course, he entered the Rensselaer Polytechnic Institute at Troy, N. Y., graduating from there in 1912.

The first four years of his business career, Mr. Wagner engaged in farming in Florida, but in 1916 he became associated with the Standard Oil Company of New Jersey, where he continued in various capacities for about ten years. Joining the Ethyl Gasoline Corporation in 1926 he becomes, in point of service, one of the oldest members of our organization. A short time after joining the company he went to the west coast to take charge of the Los Angeles office and has held the position of Division Manager ever since. In the matter of appointment he is the second in seniority among the Division Managers.

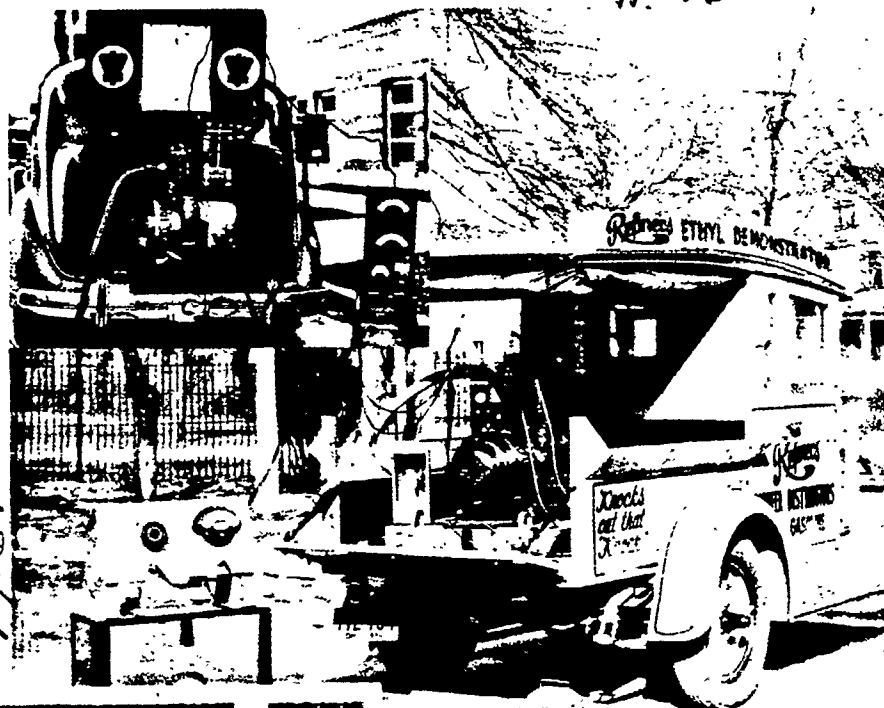
Mr. Wagner makes his home in Glendale, California, where he resides with his wife and two daughters.



• **DURING** the March floods the Vandergrift (Pa.) Station of the Penn-Glenn Oil Works was for three days the only station in the district able to take care of its customers, although it was without electric power, and wire communication was cut off. But the enterprising manager rose to the emergency, rigged up this Chevrolet with the belt from the air compressor and carried on. He dispensed close to 2,000 gallons and did not raise his price, whereas many other stations were charging a premium. By this outstanding service, he won many friends.

44-46

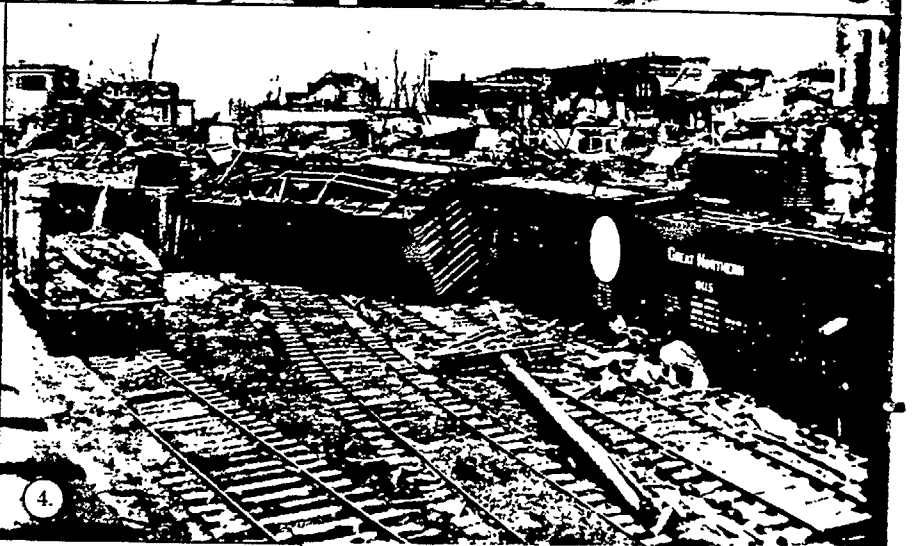
● **REFINERS, INC.**, were the first major oil company to distribute Ethyl Gasoline commercially and likewise led in giving public demonstrations. Here is their original demonstrating equipment mounted on an especially arranged four-cylinder Chevrolet truck. The demonstrator and panel equipment is the first of several succeeding models developed by our Engineering Laboratory. This is the grand-daddy of the present Series 600. Unfortunately, no record was kept in those early days of number of demonstrations given, but we have vivid proof today that a convincing job was done. The total cost of this unit was about \$1,500. Inset shows modern demonstration equipment used by Ethyl fieldmen.



See Historical File

• **BOOTH** of the Standard Oil Company of New Jersey and Wallace Bros. in the first annual Business and Automobile Show of Lakewood, N. J. The Ethyl Gasoline Demonstrating Engine may be seen at the right center. Approximately 4,500 people attended. Inset shows Ethylman Ellis Jones explaining the engine to Standard Oil local Manager, Mr. Walter Clayton.





Tornados Take Their Toll

(story on next page)

1. In the heart of Tupelo's best residential district. Note bathtub on top of building.
2. C.C.C. recruits raking depths of Gum Pond, Tupelo, for bodies. More than a score were recovered.
3. First Baptist Church of Tupelo. Note how walls are pushed in.
4. Freight yards at Gainesville, Ga., a complete wreck.
5. Where the tornado swept over Gainesville's public square.

*Charles
H. H. H.
E. H. H.
7/1/36.*

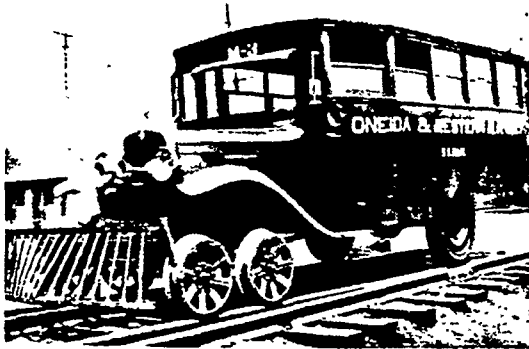
Tornados Wreck Three Southern Towns

• DURING the early part of April, two devastating tornados struck the southern towns of Cordelea, Ga., Tupelo, Miss., and Gainesville, Ga. The total loss of life was estimated at 466 with 3,400 injured, 2,169 homes destroyed and a property damage of about 20 million dollars.

Cordelea was the first to suffer, and just as rehabilitation was getting well under way a week later, Tupelo was visited by a similar catastrophe, killing hundreds and leaving thousands homeless. This occurred on a Sunday evening at 8:30 and early Monday morning, without warning, Gainesville was stricken. In the space of a few minutes, buildings were demolished, taking a heavy toll of life, and a swath two blocks wide was cut through the heart of the city. Shortly, flames burst out in many places while fire departments were helpless due to broken water mains. The havoc was frightful and in one building alone, sixty bodies were recovered.

It is typical that in times of emergency the populace rise to the occasion, and this instance was no exception. Help came from all quarters and the untiring rescue and relief work was splendid. In this connection special mention should be made of the help rendered by the boys of Riverside Military Academy and the girls at Brenau College, who volunteered their services unstintingly. The Red Cross and Government agencies collected thousands of dollars for food, clothing and medicine and all available doctors and nurses from nearby towns gave their skill and energy in efforts to alleviate suffering and prevent the possible outbreak of disease.

Plans for rebuilding are well under way and the courageous southern towns are looking ahead to the future when newer and finer edifices will rise from the ashes of their former homes. The accompanying photographs give some idea of the devastation which nature visited on this section.



• OUR TENNESSEE representative, S. T. Pruitt, sends us this picture of the "Toonerville Trolley," which makes the 30-mile run on a railroad operating between Oneida and Jamestown, Tenn. It is constructed on a Chevrolet truck and uses Ethyl exclusively.



New Amphibian Tested

• ON TUESDAY, April 14th, 1936, Sikorsky's new amphibian, S-43, established an altitude record for Class C-3 amphibians. The flight was made at Sikorsky's field in Stratford, Conn., and the altitude reached was about 25,600 feet. A pay load of 1102.11 lbs. was carried.

The amphibian is a fifteen passenger high-wing cabin monoplane, powered by two Pratt & Whitney S1EG geared Hornet engines, which deliver 750 horse-power each at 7,000 feet altitude, to two Hamilton Standard constant speed propellers. The motors are super-charged with 12 to 1 blowers. The fuel used for this flight and recommended for similar equipment was 87 octane Aviation Ethyl Gasoline. A photo of the record-breaking ship is shown.

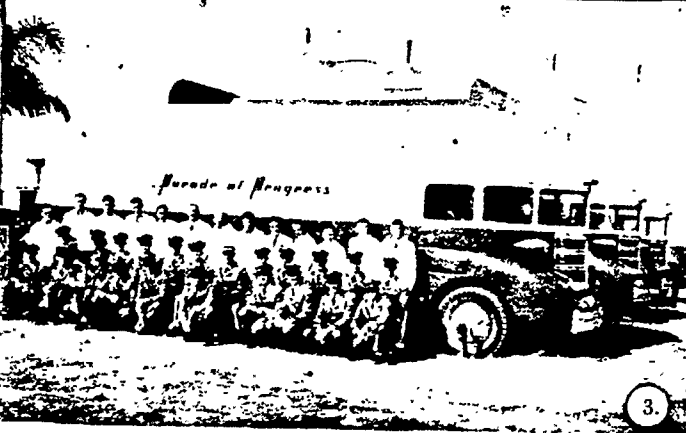
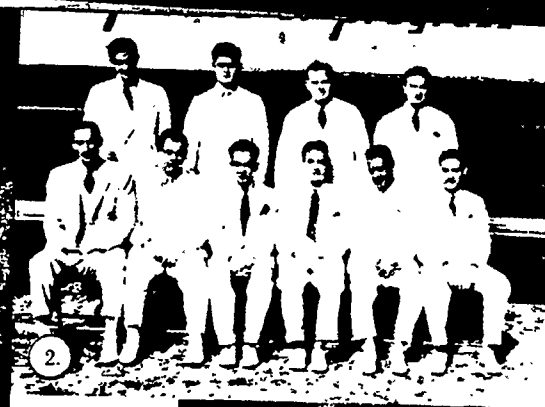
PERFORMANCE RECORD

Gross Weight	19,000 lbs.
Weight Empty	12,570 lbs.
Weight Useful Load	6,430 lbs.
Power Loading (per BHP)	12.7 lbs.
Wing Loading	24.3 lbs. sq. ft.
Cruising Speed, Sea Level	
75% BHP.	163 M.P.H.
Cruising Speed, 1,000 ft. 70% BHP.	160 M.P.H.
Cruising Speed, 8,000 ft. 75% BHP.	176 M.P.H.
High Speed, Sea Level	182 M.P.H.
High Speed, 7,000 ft.	194 M.P.H.
Stalling Speed, Sea Level	65 M.P.H.
High Speed, One Engine, 2,500 ft.	115 M.P.H.
Initial Rate of Climb, ft./min.	1,100 ft.

Mr. Richardson, our Connecticut representative, has arranged for a meeting and demonstration for the Sikorsky Club, which is made up of some 200 Sikorsky employees. This meeting was made possible through Mr. Mundy I. Peale, who had attended one of our meetings for Pratt & Whitney's airplane motor manufacturers of East Hartford, Conn.

• DIESEL oil tax rates already have reached levels comparable to gasoline taxes in many states, according to a survey made by Joseph Geschelin, who recently discussed the Diesel engine and Diesel fuel situations before the semi-annual meeting of the National Petroleum Association.

Thirty states already have taxes on Diesel oil compared with 48 states with gasoline taxes. In virtually all of the thirty, the rate is identical.



✓ PARADE OF PROGRESS—

- Photo Laid*
1. COMMANDER SCHAEFFER explaining safety car to Chief Sherman of Florida State Police and his Lieutenant.
 2. DIVISIONAL representatives of the Caravan. ETHYLMEN Cronin and Urquhart are at extreme left, standing, and third from left, seated.
 3. PART of the personnel of the Caravan.
 4. SOME G-M division executives visit the Caravan in Atlanta. Mr. Geo. Warren, our Atlanta Division Manager, is in front row at left. Others include Messrs. Pearson, United Motors Service; Carr, Chevrolet zone manager; Commander Schaeffer; Conn, G.M.A.C. manager, Atlanta; Kemp, manager, G-M Truck, Atlanta; Echenlaub, manager, Frigidaire, Atlanta.
 5. NIGHT set-up in Atlanta.
 6. ETHYL's Cronin broadcasting at Daytona.
 7. MR. and MRS. GEO. WARREN with Mr. C. S. Olsen, G.M.A.C., and Commander Schaeffer, at Macon, Ga.
 8. CROWDS entering the west wing at Daytona Beach, Fla.

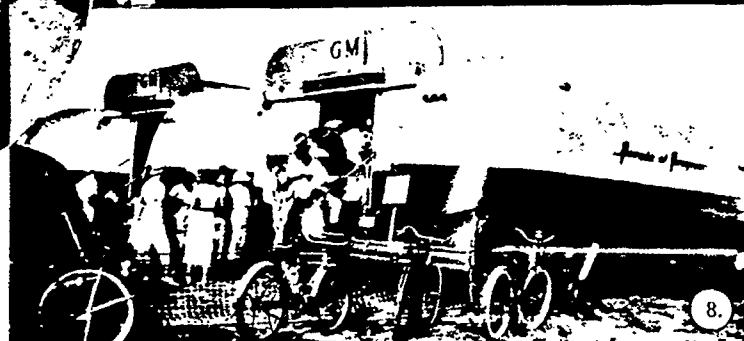
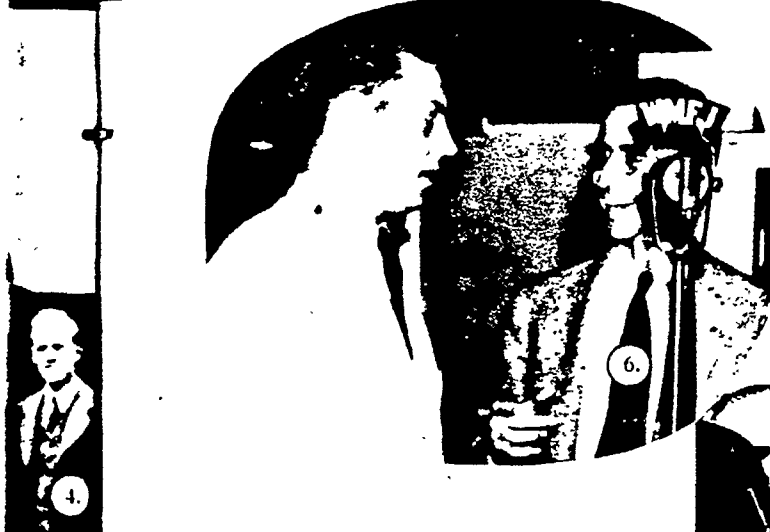
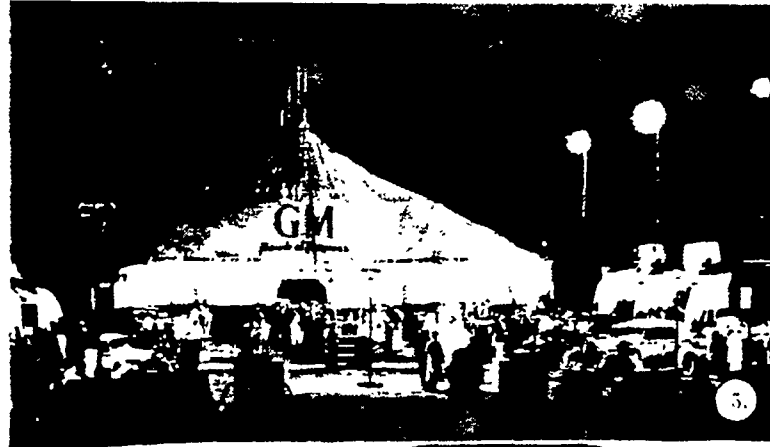
• HERALDED by all who have seen it as the greatest show of its kind ever presented, the General Motors "Parade of Progress" finished its triumphal stay in the Atlanta Division with a final show at Augusta, Ga.

After twelve weeks of constant programs, that have covered thirteen principal cities in Georgia and Florida, the Caravan has folded its tents, packed its exhibits and has moved into the Baltimore Division, via South Carolina.

Governors of both states, mayors of cities where the Caravan rested, and of the towns on the line of march, as well as many other notables, came to the Caravan to witness its wonders. Mr. Sloan and Mr. Kettering were present at Miami to welcome their "brain-child". Altogether, more than 215,000 persons viewed the "show" and went away convinced that the age of miracles has not passed.

Those who saw the Parade of Progress sweep into Atlanta, headed by Commander Schaeffer in his golden Cadillac, followed by eight big streamlined transports, fifteen cars of various General Motors makes with eight other trucks to carry the equipment, were impressed with this gigantic educational undertaking. When on location three streamliners are joined together on either side to make a good sized building, affording an impressive entrance and egress to the exhibits housed in a large tent, which has a capacity for five hundred persons.

Many are the wonders to be seen under the "big top". An egg is scrambled on a newspaper through the use of an induction furnace.



SENSATION IN ATLANTA DIVISION TERRITORY

Sound is transferred on a Neon light beam and can be eliminated by stepping in the path of the beam. The miracles of the telephone and electric light are shown and one can see the vibrations of the human voice by means of a dancing ball of light. The talking pictures that follow show what happens when Man, Methods and Materials are thrown into harmonious balance. With men like Edwin C. Hill, Lowell Thomas, John S. Young and John B. Kennedy to give the explanations, there is not one moment that is not filled to the brim with entertainment of a most unusual kind. In the streamliners one can see the progress that has been made in the home, through the comparison of old and new type living rooms and kitchens. The blacksmith shop is supplanted by the modern motor repair shop. The interior of an airplane cockpit may be examined and there is a comparison in miniature of the old-time village with the city of the future. A piece of railroad iron may be bent by the lightest touch and a crankshaft turning over at 1750 R.P.M. can be made to look as if it were standing still. There is also one of our own demonstrators, ably operated by Mr. Frank Cronin, of the Baltimore Division, assisted by Mr. Neil

Urquhart of the Chicago Division. This is one of the most interesting exhibits if the crowds that gather around the motor are any indication.

The handling of the Caravan has been a notable achievement. The crew works with marvelous efficiency in setting up and taking down the show. Every man has been assigned a certain job and each fulfills his particular mission to the best of his ability. Many divisions of General Motors are represented, and it takes fifty-two men, including executives, photographers, doctors, service men and various engineers to keep the wheels turning.

Our Atlanta correspondent writes that it is a pleasure to observe the high place our exhibit holds, and Mr. Cronin and Mr. Urquhart enjoy the respect and confidence of the various caravan divisions. They have had an excellent chance to help with fuel problems and have been on the alert to render such service whenever possible.

For the Divisions that have not yet had the opportunity of seeing the Caravan, the Atlanta Division gives assurance that there is a real treat in store for them.

PAGE SEVEN

ETC 21198



p. G-m-3
THE LASTS



FIRST ROW, SEATED

Left to Right

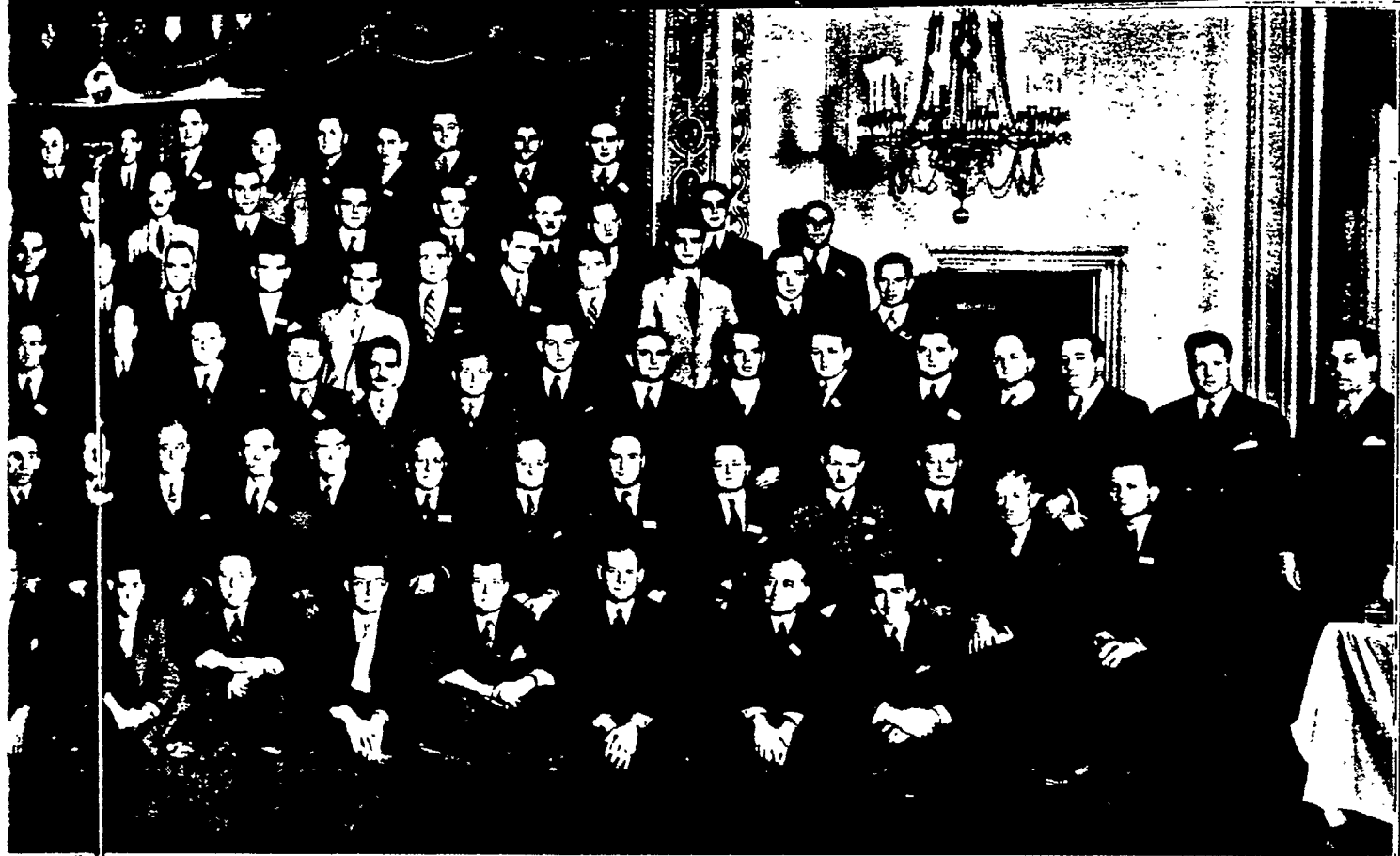
J. H. Schaefer, Manufacturing
R. Champlin, Agency
B. Hayward, Agency
A. F. Wilt, Detroit
A. P. Stover, Manufacturing
C. G. Krieger, Detroit
R. Weston, General Office
H. A. Lappe, Kansas City
L. L. Wilson, Kansas City
H. L. Nixon, Kansas City
W. K. McCulloch, Kansas City
W. C. Harris, General Office
W. H. Resler, General Office
P. F. Johnson, Kansas City
C. G. Lindsay, Agency
R. A. Kehoe, Medical
A. D. Chiquoine, Agency
J. N. FitzGerald, Toronto Mgr.
W. M. Turnley, Toronto
E. N. Downs, General Office

SECOND ROW.

E. R. Anderson, Y.
L. B. Roberts, Liby
H. Kuhe, Towa
J. J. Frey, Detroit
W. G. Mundinger,
J. C. Stump, Kans.
C. F. Kautz, Kans.
C. M. Berry, Kansas
O. B. Lewis, Gen. (C
H. W. Kaley, Gen.
G. Edgar, Vice-Pres
J. C. Taylor, Gen. M
E. M. Clark, Presi
E. W. Webb, Presi
T. Midgley, Gen. P.
J. T. Grady, New Y
Bruce Barton, Ager
C. E. Boyle, Toront
H. Murch, Toronto
C. J. McFarlane, T
A. S. Oliver, Toront
G. M. Connor, Tor.
W. J. Distler, Day
N. D. Siebenaler,
H. F. Dedo, Dayton

FROM TOP, CLOCKWISE: Thomas Midgley, Jr.,
Dr. Graham Edgar, H. A. Mack, N. D. Sieben-
thaler, C. P. Harding, R. L. Jordan, Dr. R. A. Kehoe.

*Charles
F. Ladd*



LAST SESSION OF THE DETROIT CONVENTION, MAY 21, 1936

SECOND ROW, SEATED

R. Anderson, Yonkers Lab.
B. Roberts, Ethyl Export
Kuhe, Tulsa
J. Frey, Detroit
G. Mundt, Tulsa
C. Stump, Kansas City
F. Kautz, Kansas City
M. Berry, Kansas City
B. Lewis, Gen. Office
W. Kaley, Gen. Office
Edgar, Vice President
C. Taylor, Gen. Manager
M. Clark, Director
W. Webb, President
Midgley, Vice President
T. Grady, New York City
Bruce Barton, Jersey
E. Boyle, Toledo
Murch, Toledo
J. McFarlane, Toronto
S. Oliver, Detroit
M. Connors, Toronto
J. Distler, Dayton
D. Siebert, Dayton
F. Dedo, Dayton

FIRST ROW, STANDING

H. W. Kellogg, Detroit
~~D. M. Guy, Tulsa~~ *and Gayle*
H. E. Cottrell, Tulsa
J. O. Balzer, Tulsa
R. Schell, Tulsa
J. N. Rollins, Tulsa
G. W. Warren, Atlanta Mgr.
J. E. Murphey, Atlanta
E. T. Smith, Atlanta
T. E. Zadra, Los Angeles
F. Elliott, Los Angeles
W. G. Petty, Atlanta
S. T. Pruitt, Atlanta
G. Rosser, Atlanta
H. R. Berg, Kansas City Mgr.
M. A. Taylor, Boston Mgr.
P. M. Perry, Boston
R. W. Richardson, Boston
H. K. Ball, Boston
L. H. Blatchford, Boston
R. J. Coveney, Boston
A. C. Hutson, Boston
D. S. Flynn, Boston
A. H. Bingham, Dayton
R. R. Faller, Dayton
H. A. Mack, Dayton Manager
J. Gonzalez, Secretary
W. A. Newman, Dayton

SECOND ROW, STANDING

J. B. Taylor, Detroit
D. E. Hamilton, Tulsa
H. N. Peters, Tulsa
C. H. Meurer, Tulsa
D. M. Guy, Tulsa
L. L. Huxtable, Tulsa
G. Stiehl, Los Angeles
C. O. White, Los Angeles
H. A. Reinhart, Los Angeles
C. E. DeWitt, Los Angeles
W. H. Sievert, Los Angeles
A. H. Chenault, Los Angeles
R. W. Hogan, Baltimore
J. S. Cole, Baltimore
M. I. McCooley, Baltimore
L. W. Shank, Baltimore Mgr.
E. L. Mason, Baltimore
J. R. St. Germain, Baltimore
D. Andrews, Baltimore
B. Crane, Gen. Office
G. E. Townsend, Gen. Office
J. E. Keyes, Baltimore
J. A. Costello, Baltimore
C. D. Boehme, Dayton

THIRD ROW, STANDING

J. E. Hendrick, Tulsa
C. Abell, Los Angeles
A. D. Martin, Los Angeles
E. L. Cline, Los Angeles
J. G. Martin, Los Angeles
S. M. Wagner, L. A. Mgr.
E. O. Jones, New York
F. J. Stablien, New York
J. E. Boudreau, New York Mgr.
R. C. Murphy, New York
R. L. Goltz, New York
M. P. Murdock, New York
M. Littlefield, New York
E. C. Paige, New York
J. S. Krick, New York
J. G. Rick, New York
F. S. Cronin, Baltimore
L. M. Slack, Dayton

LAST ROW

R. G. Loser, Los Angeles
B. R. Jones, Chicago
W. Trelease, Chicago
N. B. Hedden, Chicago
A. J. Steelman, Chicago
H. C. Dees, Chicago
R. L. Jordan, Chicago Mgr.
C. E. Colvin, Chicago
G. B. Donohue, Chicago
L. A. Dollahan, Chicago
B. G. Crane, Chicago
W. B. Heck, Chicago
C. F. Naylor, Chicago
L. R. Burroughs, Chicago
C. E. Smith, Chicago



P-G-M-16

• ASSISTANT DIVISION MANAGERS. Seated L. to R.: Costello, Balto. J. G. Martin, L. A., R. C. Murphy, N. Y., Kuhe, Tulsa. Standing: Flynn, Boston. Turnley, Toronto. Dees, Chicago. Rosser, Atla. Nixon, K. C.



• DIVISION MANAGERS. Seated L. to R.: Shank, Balto. Jordan, Chic. Fitzgerald, Toronto. Boudreau, N. Y. Standing: Mack, Dayton. Warren, Atla. Berg, K. C. Wagner, L. A. M. A. Taylor, Boston. Inset, Ronan, Tulsa.



• LEFT: Two Texas representatives, Balzer & Peters, talk over the convention.



P-G-M-19

• "News" staff and correspondents. Seated L. to R., Weston, Asso. Editor. Loser, L. A. Siebenthaler, Dayton. Harris, Editor. Murphy, N. Y. Shank, Balto. Kuhe, Tulsa. Standing: Flynn, Boston. Downs, Asso. Editor. Roberts, G. Test. Dees, Chic. Fitzgerald, Toronto. Warren, Atla. Frey, Det. Lab. Stover, Mfg. Berry, Kan. City.



• A GROUP of Ethyl engineers visit the Rouge plant of Ford Motor Co. at Dearborn. They are shown in front of the company's new Rotunda Bldg.



• THE first farm tractor ever on exhibit in a hotel. Ethyl's Krieger "tells 'em" at the Hotel Fort Shelby, Detroit.

WITH THE CAMERAMAN AT DETROIT



Balto.
V. Y.
K. C.
Tulsa.



ditor.
Balto.
Test.
M/g.



hibit in
at the



Tom Gluck

Jack Ogden

WE INTERVIEW A SERVICE SUPERINTENDENT

• The other day your correspondent dropped in at Paulsen & Gibson, Inc., Buick agency in Glendale, California and was met by the Service Superintendent, Mr. Tom Gluck. After the usual banalities on the subject of California weather, car sales, the Townsend plan and Epic, we tactfully brought the conversation to the subject nearest to our heart—motor fuels. At once Mr. Gluck exploded: "I've quit being the goat for the customer's wrong choice of fuel." and before we knew it he was well launched on the topic stating his views in no uncertain terms. "We've stopped apologizing for the way cars run on 'slightly leaded' gasoline. We've stopped apologizing because our tune-up men cannot perform miracles. We've stopped sending our customers out with compromise tune-up jobs that will be back on our necks in two or three weeks. We are proud of our cars and proud of our skill as service technicians, but neither our cars nor our men can show up to advantage without a fair chance." After thus proclaiming his creed he continued: "We ask our customers to operate their cars for thirty days as we say they should and then if they're not satisfied with our way we'll try and satisfy them their way." Pretty sound philosophy, it sounded to us and we were about to so remark when he clinched his argument with the following: "Our way, as far as fuel is concerned, is ETHYL GASOLINE." This was his story in brief and he sat down to await our comments. "That's a swell sales talk, Mr. Gluck," we said, "and of course we believe you're dead right but we would like to hear how you have come to this very definite conclusion. If it won't take too much of your time, please tell us." Glancing up at the clock he answered, "Yes, I have about fifteen minutes and if you really want to hear, I'd be glad to tell you." And this is his story in his own words:

"With the advent of the present day high compression engine came a serious problem for service managers to solve, namely what to do about detonation. Almost all manufacturers inserted in their literature, the statement that by adjusting a gadget called 'the Octane Selector,' any type of motor fuel could be used, and when the sales departments added the words, 'just as well'—the set-up for future trouble was perfect. Most of our customers were using regular gasoline slightly treated with tetra-ethyl lead. For about three years we did our best to back up these claims and tried very hard to make engines deliver the smooth effortless performance promised.

"While the engines were new and clean we got by fairly well; but after about three thousand miles, on the average car, the owner would kick. We set the octane selector back to take out the 'ping' and pretty soon the owner was back complaining of loss of power. Sometimes we burned the carbon out or we hesitatingly suggested that he use Ethyl Gasoline. Many, many times we were forced to listen to a tirade about misrepresentation and in the end the motorist had to be told the full facts. He was informed that he would have to use Ethyl Gasoline or his engine would be subject to both 'ping' and loss of power and that there was nothing that the service department could do about it.

"With the opening of the 1936 season we decided to 'take the bull by the horns.' Since we had not had any luck trying to satisfy customers without Ethyl Gasoline, we made up our minds to satisfy them WITH ETHYL. Accordingly as each new car is delivered, or whenever the subject of fuel comes up, we do not hesitate to tell the owner that his car has the 'last word in performance but that it requires the best fuel to get that best performance. We try to tell them what we expect before they have a chance to 'put the bee on us.'

"On deliveries where the first contact between the service department and the customer is the 500 mile inspection, the question of fuel usually comes up, as all of our new cars are adjusted to use Ethyl Gasoline before the customers ever get to drive them. If regular gasoline is found in the tank, it is drained out, and the same quantity of Ethyl is put in at no cost to the owner. We tell him about the exchange after it has been made and request him to use Ethyl Gasoline for one month, making note of the added performance and the very slight extra cost, if any. He is told that at the end of the month, if he still feels that he wants to use regular gasoline, we will gladly readjust the engine for that fuel to the best of our ability, but that he must expect a sacrifice of performance. As the premium on the amount of gasoline burned by the average owner is only about a dollar and a half a month, there is seldom any complaint. We have not had to readjust more than three engines to date.

"The satisfying part of this way of handling the situation is that the owner feels that he is to blame for the poor results if he does not use the best fuel. He no longer blames either the car or the service department if they fail to accomplish a miracle. So far as any of us can ascertain, there has been no

(Please turn to following page)

*3 copies sent
to
H. W. [unclear]
7/13/36*

Ar
Photo Filed

FOREIGN TRADE

(Continued from page one)

of American producers are dependent on this export of surplus to maintain employment and earnings.

Now let's have a look at this foreign trade, our customers and what we buy from, and sell to them. Last year each of seventy-five foreign countries bought more than a million dollars in exports from the United States and of these, 72% bought more than in the previous year. The United Kingdom, as usual, headed the list with purchases to the value of 433 million dollars or 19% of the total. Then to complete the ten leaders, came Canada with 14.2%, Japan 8.9%, France 5.1%, Germany 4%, Italy 3.2%, Mexico, Cuba, Belgium and Australia. The whole British Empire purchased 965 million dollars worth or 42% of our total export trade and our exports showed a gain of 7% over 1934.

Unmanufactured cotton led export trade with 391 million dollars (17.4%). Second in value among our exports were automobiles, parts and accessories, reaching a total of 227 million dollars. Passenger cars totalled 173,681 and trucks and busses 90,080. Figures exceeded only in 1929. Passenger cars contributed 11% of our total production and motor trucks 24%. The ten leading markets for these passenger cars, in order, were: South Africa, Australia, Belgium, Sweden, Argentina, Japan, Mexico, United Kingdom, Brazil and New Zealand. Trucks: Australia, Spain, Japan, Mexico, Egypt, South Africa, Brazil, Argentina, Italian Africa, and India. Leaf tobacco ranked third and electrical machinery and apparatus were fourth. Gasoline, naphtha and other like products rank fifth with a value of about 64 million dollars, and in passing it may be noted that Ethyl Export Corporation has placed our product in practically all foreign countries where motor cars and trucks are in use. Lubricating oils rank sixth. Next in order among leading exports were crude petroleum, coal and coke, refined copper, lumber and agricultural machinery.

Balanced against these exports the United States imported goods exceeding two billion dollars, from seventy different countries made up of 100 main items ranging from 136 million dollars for coffee to 3.6 million for peanut oil. Coffee, which led, was the largest amount ever imported here, and the next principal items in order of dollar value were: cane sugar, crude rubber, raw silk, standard newsprint, wood pulp, tin, furs, raw hides and skins and burlaps.

Imports from 89% of our main sources of supply were greater than in the previous year. Canada came first, furnishing 14%, valued at 285 million dollars—Canada also being our second best customer for exports, valued at 323 million dollars. Our other chief sources of supply ranked by dollar value were United Kingdom 7.4%, Japan 7.4%, British Malaya 6.3%, Cuba 5.5%, Brazil 4.9%, Philippine Islands 4.8%, Germany 3.8%, British India 3.2%, Argentina 3.1%. France ranked 12th, Italy 19th, Soviet Russia 24th and Roumania 70th and last, though in excess of a million dollars.

This brief outline of our foreign trade shows the im-

ETHYL GASOLINE CORPORATION



• EXHIBIT at the Hecht Bros. Fourth Exposition in Baltimore, April 24th to May 2nd, was held for the purpose of attracting the public to the store, one of the largest furniture establishments in the country. Besides our own display, some of the features this year were the Westinghouse mechanical man, familiarly called Willie Vocalite; a "talking" kitchen, offered by General Electric; a band of Hopi Indians, and the educated dog, Bozo. Much thought was spent on making our exhibit as attractive as possible and from the favorable comments overheard by our two representatives, Messrs. Keyes and Cole, who had charge of it, it measured up to expectations. A special feature was the large sign on a pedestal in the center which told in illuminated letters the gasoline being used. "Running on Ethyl" appeared in red letters on a white ground and "Running on straight gasoline" showed in white against a black background. Estimates gave an attendance of about 150,000 people and our own check showed that of those, approximately 22,000 heard the Ethyl story.

portance of our relations with some seventy-five other countries. It is obvious that there can be no greater contribution toward world peace and prosperity than to open the channels of international trade to all peoples that they may work, and not have to fight for the food, commodities and products of other countries, that are essential to their economic well being. For ourselves it is highly essential to our continued return to prosperity, increased employment and the economic security of our citizens.

Reland 7/1/36

ORGANIZATION



Ally Filed

• JAMES E. BOUDREAU, who has been appointed manager of the Chicago Division to succeed R. L. Jordan, was graduated from the U. S. Military Academy at West Point with the class of 1925. After serving in the Army one year he resigned his commission and became associated with the Munson Steamship Company. While with them he traveled extensively in South America and other foreign countries. In 1930 he joined the Ethyl Gasoline Corporation and for a time represented us in Eastern New York State with headquarters in Albany. He was later transferred to the Metropolitan District and in 1932 was appointed manager of the New York Division in which position he has continued until the present time. He was the originator of the Truck & Bus Manual, which we published and which has been in extensive use since.

• ROY L. GOLTZ, who has been appointed Assistant Manager for the New York Division, joined our organization in June, 1932. He is a graduate of Cornell in the Class of 1923 and before coming to Ethyl was associated with the Buda Engine Company. His first assignment was in the New Jersey territory, but in the fall of 1933 he was transferred to western Pennsylvania, making his headquarters in Pittsburgh. While there he gained wide experience through his contacts with the home office of many of our refinery customers. Mr. Goltz is married and has one daughter. He will make his home in Westchester County.



• R. C. MURPHY, the new Manager for the New York Division, came to Ethyl in May, 1929. He received his education at Cornell University, and after leaving college he was, for a short time, engaged in the bond business in New York City. His first post with us was in Baltimore, where he was occupied in conducting meetings for Standard Oil of New Jersey, and later the same year, when Standard Oil of New York began the marketing of Ethyl, he covered the New England territory, holding meetings for their sales personnel. Upon completion of this assignment he went into the Atlanta Division territory to assist in the Pan-American Oil Company campaign. Returning to New York, Mr. Murphy was assigned to the western New York state territory, where he remained until 1931. In that year he was transferred to the Metropolitan District, and in 1935 was appointed Assistant Manager of the Division. He is married and has one daughter. His home is in Larchmont, N. Y.



Filed

CHANGES



• JULIAN C. GONZALEZ, who was elected Secretary of the company the 24th of April, graduated from Yale University in the Class of 1926. Before coming to Ethyl in July, 1932, he was engaged in the bond business in New York City. His first activity with our organization was special field work in the Metropolitan District of the New York Division, but later he was transferred to the Rocky Mountain Division and served as field representative in the state of Montana. The following year Mr. Gonzalez was transferred to the Administration Department as assistant to Mr. Mittnacht, making his headquarters in New York. This position he continued to hold until his recent election.



• LESTER B. ROBERTS, recently transferred to the Ethyl Export Corporation, came with the company early in 1928 after completing his education at Colorado School of Mines. For the first two years he was engaged in field activities in the Rocky Mountain Division under Mr. Durham. In 1930 he was transferred to the Yonkers Laboratory to take charge of the Gasoline Testing Department. All of the Testing Laboratories were under his direction and many of the instruments now in use were the result of his research and design. In his new post Mr. Roberts will be our representative in South America and will direct all phases of marketing and blending in those countries in the southern continent where our product is sold. His headquarters will be Buenos Aires.



• THE APPOINTMENT of Elwood R. Anderson as Manager of the Gasoline Testing Laboratories has recently been announced. Mr. Anderson came with the corporation in 1928 upon graduating from Mass. Institute of Technology. He was later appointed manager of the New Orleans Laboratory and continued in that position when it was moved to Baton Rouge, La. In his new assignment he will be in charge of all Testing Laboratories and contacts with our refining customers relative to acceptance of gasoline stocks. In addition to this he will supervise the correlation of all data from special and routine tests and the maintenance and improvement of testing apparatus.

Newsbriefs



• We hear it rumored that the grandfather of these youngsters, Thomas Midgley, Jr., had secretly hoped they would be named Cue and Ethel, but it appears their fond parents had other ideas. In any event they were christened Tom and Patricia and as far as our records show, are the first twins in the Ethyl family. It will be recalled that their father, Tom Midgley III was formerly attached to the Dayton Division. The preoccupied expression of Tom IV is probably in anticipation of Ethyl sales problems of 1966.

• A farewell dinner in honor of Mr. Robert L. Jordan, who has been our Chicago Division Manager for many years, was tendered him by a group of some forty Chicago friends prominent in the oil industry. It was held in the English Room of the Blackstone Hotel on the night of May 25th. Mr. W. J. Gerwe of the Socony-Vacuum Oil Company acted as toastmaster and on behalf of Mr. Jordan's many friends presented him with a silver service.

• One of the Dayton Division's junior field representatives, Charles Boehme, has engaged in a little biological chemistry research. Feeling a little "under the weather," the other day, Alka Seltzer was recommended by some helpful friend, whereupon Charlie proceeded to swallow a tablet. A report comes from Dayton that he has been "fizzing" ever since and he admits that this doesn't help his Sohio Ethyl demonstration one bit. However, it now develops that on one occasion Charlie ate an alligator pear, seeds, leaves and all, so he is probably fairly immune to what might be disastrous to the ordinary digestion.

• Alan Tully, who for over two years has been our chief representative in Australia and New Zealand, making his headquarters at Melbourne, is now in this country. It

will be recalled that Rik Tegner returned last fall and has since been making his headquarters in London. This leaves Dick Scales, "Beery" Noble and Bang Jeppe holding down our interests in the Kangaroo Division for the time being. Alan will spend considerable time at the Detroit Laboratory studying new developments, which have been underway since his departure for the East, and will probably return to Melbourne sometime this fall.

• On May 28th Miss Madolyn Stroup became the bride of James E. Boudreau at the First Presbyterian Church in Hollidaysburg, Pa. Following the ceremony a reception was held at the home of the bride's parents, Mr. and Mrs. H. Drew Stroup. The best man was Captain Thomas Harold, who was a classmate of Jim's at West Point, and the ushers were Harry Kaley, Leo Roberts, Ben Weston and Dick Murphy, his association in the New York office. Others from the company who attended were Mr. and Mrs. O. B. Lewis, Mr. and Mrs. J. A. Costello, Mr. and Mrs. Roy Goltz, Mr. and Mrs. Frank Stablien, Mr. and Mrs. Ellis O. Jones, Mr. and Mrs. M. A. Taylor and Mesdames Walter, Kaley, Weston and Murphy. Also Messrs. Krick, Mardock, Lambfield and Anderson. A bachelor dinner was held at the Wald Astor in New York.

• Vincent E. Keenan, late Assistant Manager of the Dayton Division, died suddenly May 28th. A graduate of the Clason Point Military Academy, he later attended Cornell University and then served as an aviator during the war. Prior to his affiliation with the Ethyl Gasoline Corporation, Vince was engaged in the oil and transportation industries in the East and Middle West. His associates and friends in the Dayton Division, as well as those throughout the corporation, will miss the forceful, dynamic personality that was his. The whole Ethyl organization extends their heartfelt sympathy to his wife and mother who survive him.

• Our new representative in South Carolina, Dwight Andrews, reports that he drove into a company owned station of one of our customers and the operator of the pump asked whether he wanted "hi-test" or regular. When Dwight asked him the difference, he replied "oh", and on further questioning said "he was not sure but that he thought the so-called hi-test gasoline (Ethyl gasoline) was imported from Russia and was of an extra special quality."

• We send our hearty congratulations to Mr. and Mrs. E. L. Cline of Oakland, California, on the birth of a son, eight pounds, plus, on April 26th. Mrs. Cline is field representative attached to the Los Angeles Division.

REFERENCES

Edwin M. May
Alice Meyer
Walter H. Meyer
H. Paul Meyer

Henry K. Hall
Donald S. Foye
Arthur C. Hulston
William J. Hall

J. M. Baker
 Elizabeth B. Baker
 Mary J. Baker
 Mrs. M. C. Baker
 Carl H. Baker
 Harry Baker
 W. G. Baker
 H. N. Baker, Jr.
 Joseph Baker

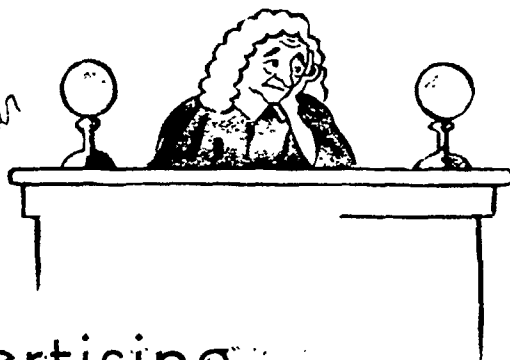
ENGINEERING DEPARTMENT

Reed B. Lewis
 Robert Minter
 Charles C. Munroe
 William B. Ransier
 Harry Prince
 Thomas J. Roberts
 August Rogers
 Edward E. Rossini
 William D. Schutte
 Frank R. Shacht
 Paul C. Sertman
 C. Walcott, Jr.
 J. E. Wilson
 J. S. Witherington

DISCIPLINE TESTING DEPARTMENT

Kenneth C. Collins
 T. J. Collins
 George T. Collins
 H. L. Mainline
 Henry F. Stomberg
 James J. Jervell
 William A. Jervell
 THE LABORERS
 Carl Bartholomew
 George H. Gier
 Walter J. Hantman

*John
Hollen*



Advertising on the stand

• IS A LARGE advertising appropriation justified? This is a topic which we frequently hear under discussion. Doubtless the query has been made in our own organization as to whether a portion of advertising and sales promotion expense might not be used to better advantage for other purposes—perhaps research. It is not our intent to offer an opinion on this controversial subject, but merely to present some arguments on behalf of such expenditures. Whether you are in agreement or not they should be of interest to anyone who gives the question thought. These remarks are included in an essay entitled "The Economic Value of Advertising," which has just been awarded first prize in a nationwide contest sponsored by *Advertising Age*. The winner was Mr. Reinhart W. Knudson, a student in the School of Journalism of the University of Oregon, and we reprint it by permission of the editors of that publication. Mr. Knudson says:

"Ever since the snake gave Eve a sales talk for the apple we have had advertising in some form or another. It has changed with the times and become more aggressive and enterprising even as life and business have become aggressive and enterprising. It hasn't been until the last few years, however, that advertising grasped the power it holds today. Now we suddenly realize that this machine incurs an expense. How much is difficult to say. Some critics, however, have quoted sums as high as two billion dollars a year. It has been condemned as the most wasteful phase of our economic organization.

"Both as consumers and producers of goods, we are asking, 'Why must this bill be paid?' Surely someone has to dig down in his pocket. So we are placing this questionable character on the stand. We are demanding quite deliberately, 'Justify and explain yourself. Either prove your usefulness or get out. Speak up!'

"Advertising sits calmly on the stand, and then, in a careful tone, and with a half-amused but patient smile, answers back, 'I earn my own way. Not only that, I save money and make life richer for each and every one of you.'

"We are skeptical of this bald statement. 'Explain yourself,' we say. 'All right,' says Advertising, raising

his voice slightly, 'You producers who would like to see me go because my wages add to your costs, see how I have assisted you, how I have succumbed to your every whim and demand. True, some of you with nothing to offer have overworked me. Some of you have used me to satisfy your demands at the sacrifice of others. Under assumed names I have been enslaved by shysters, crooks and charlatans, by demagogues, politicians, colleges, and even churches. But you must not blame me entirely for that. Because a reckless driver runs over a child, would you eliminate automobiles?'

"See how I labored night and day reaching into the homes of every family, telling them of your scientifically packed goods, your food-saving electric refrigerators and your labor-saving washing machines. Without me you could never have done this. You could never have had that marvel of national and world-wide distribution of goods and you know yourselves that without such distribution you could never have engaged in the American miracle of mass production which has enabled you to increase your profits and at the same time reduce the price of your products. Without me you would not have been able to erect your great research plants to discover more and better ways of easing the life of the American family. You needed me badly to awaken the people to the fact that you existed and to convert them to using your products.

"You consumers, you should bow your heads in shame. Any woman who would trade her electric washer for the tub and scrub board, please step forward. Any man who would turn in his 1936 automobile for a horse and buggy, please raise his hand. What, no one? Of course not. Yet oh, how hard I worked to convince you that these articles are better than the ones you were using! How I burned my light 24 hours a day trying to achieve your acceptance of these goods, these goods you can't do without now. How I sweated and cursed your obstinacy and stupidity!

"But now you accept them, in fact, you demand them. Yet at the same time you feel indignantly selfish about paying me for my pioneering efforts. In order to collect, I have had to divide my wage minutely and distribute it over the goods I advertise. Here is where you

may be amazed to learn I have paid my own salary. I did so well in my want-creating efforts that you producers were able to save money by manufacturing on a large scale. You were able to reduce the price of your goods to the consumer in spite of the addition of my thinly spread expense. You were able to sell canned soup, packaged cigarettes and styled clothes of incomparable quality at relatively the lowest prices in the history of production. In this sense I am a producer of wealth, as much a producer as your factories and mills. By aiding the satisfaction of human wants I have justified myself economically."

The writer then points out the small estimated unit expense on various articles which is chargeable to advertising—one-fifth of a cent or less—and that the country's total advertising bill is but 1.6% of the nation's gross sales. He pays a tribute to radio, not alone as a sales medium but by paving the way to fame and fortune for thousands of young musicians and entertainers. And again speaking in the first person on behalf of advertising, Mr. Knudson continues:

"You must remember first of all that I am not a single child of certain interests. I am the sum total visible expression of the entire American tradition. What you are, what you do, how you think and act determine my form and mode of expression. I am the dramatization of your culture. I am the silver screen of your daily hopes, desires, and ambitions. You hate me because I reflect your own hidden weaknesses. You resent me because my voice echoes back your inhibited desires. You believe me ridiculous because I blazon forth your image as it really is, clothed in the artificialities of your civilization. Any time that you wish to change me, you have only to reform your own characters and codes of living. Any time that you consumers wish to relieve yourselves of paying my minute fee, you have only to cease buying advertised goods, you may make your own necessities of life and do without the luxuries I display. Any time you producers feel you can no longer bear the weight of my expense you are at perfect liberty to cease using me and go back to small scale production and distribution.

"But you don't want to do that! You want progress! You want more luxuries and good things of life for more people. You want to be able to sell an automobile for every garage and double the number of garages. You want to start more businesses, put more people to work and raise the standard of living. To do so you must employ me. You must use me to keep the consumer informed and converted to progress and the producer on his toes carefully attuned to giving the purchaser just what he wants for a price well within his means to pay. This much I can do."

THIS MONTH'S COVER
IS A VIEW OF
LAKE WANAKA at PEMBROKE
SOUTH ISLAND,
NEW ZEALAND

• SOARING above the hallowed ground of San Jacinto, where Sam Houston and his army so gloriously established the independence of Texas is the Centennial Special one of the fleet of Braniff Airways.

ETHYL NEWS PHOTO FILE 28/36 No 13 AIRLINE COMPETES WITH RAIL

• The first "all expense" air cruise, similar in idea to those of the steamship, railroad and motor transport companies, has recently been announced by Braniff Airways. The Braniff system operates the mid-continent line from the great lakes to the Gulf of Mexico. The all expense tour advertised by Braniff, in which they are cooperating with Pan-American Airways, offers a two weeks' trip by air to Old Mexico.

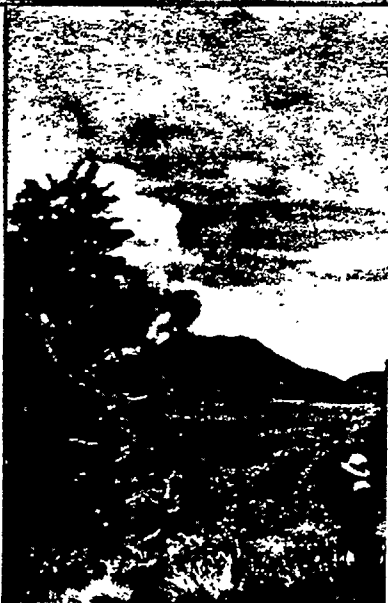
The plane pictured in this article is the "Centennial Special," one of a fleet of eight operated by Braniff Airways, which connect the principal cities of Texas with Tulsa, Oklahoma City, Kansas City and Chicago. Ten passengers, mail and express, are carried in the twin-motored, all metal, Lockheed Electras, which cruise at 180 miles per hour. They are crewed by an experienced pilot and co-pilot. Other features about Braniff's planes are, dual motors, developing 420 horsepower each, either of which will fly, climb or land a ship; two way radio which keeps pilots in constant contact with ground stations; dual sets of instruments which eliminate every ounce of guess work from flying and provide scientific guidance. Every precaution is taken to safeguard with impending and prevailing weather conditions. Passengers are never allowed to ride during undependable weather.

The intricate workings and minute details involved in these modern vehicles of transportation are such that it necessitates close supervision by, and cooperation with trained ground crews. Trite as that old expression, "A chain is no stronger than its weakest link," may be, it was never more applicable than here, and one of the most important of these links in the air transportation scheme is the availability of high grade aviation fuel. Braniff Airways in its 9,000 miles of daily operation flies with Stanavo Ethyl Aviation Gasoline.

This company has operated an air line since June 20, 1928, and has steadily grown until today it is comparable to the best air lines in the United States, both as to equipment and experienced personnel. However, it is only since January 1, 1935, that the company has operated as far south in Texas as Houston, Galveston and Brownsville. Now, with two convenient daily schedules, South Texas is well represented on the air line map of the world.

The accompanying picture shows one of the giant planes soaring over the famous battleground of San Jacinto.

—Courtesy of Humble Oil "Lubricator."



• NGAURUHOE in eruption, Tonga-
viva, National Park, North Island,
New Zealand. PHOTO FILE 7/8/36 No. 14



• MAORI child in warm pool,
North Island, New Zealand.



• Mt. Cook, 12,349 feet, North Island, New Zealand. PHOTO FILE 7/8/36 No. 16



• LAKE KANIERI, Westland,
South Island, New Zealand. PHOTO FILE 7/8/36 No. 17

THE WON OF THE



✓ • AGES AGO, New Zealand was part of a great continent in the Southern Ocean. Long before man inhabited the land, a series of terrific earthquakes, volcanic disturbances and tidal waves destroyed most of it, leaving only the small portion which exists today to bear mute evidence of the struggle between the earth and the forces of nature. The offspring of volcano and earthquake, New Zealand stands out, not only as a curio but as the "Wonderland of the Pacific."

Even its earliest inhabitants, the Maoris, seemed shrouded in mystery. Many thought they came from Hawaii, but ethnologists have traced them back to an ancient and highly-bred race of Aryan-Caucasians in Northern India. Centuries ago these people, following triumphant conquests of India, Malaya, Sumatra, and Java, proceeded by canoe into the Pacific. After death and disaster had mocked them for months—some eventually landed in Hawaii, others in Tonga and Samoa, and still others in New Zealand. Then, as though their suffering and trials had taught them a lesson, they settled down to enjoy the comforts and joy of a peaceful life.

Today we find these peace-loving Polynesians still surrounded with the beauty, art, music and religious

ETC 21211

UNDERLAND THE PACIFIC



NATIVE GIRLS. FILE 7-8/36 No. 18



• MITA TAPOKI, Chief of the Arawa tribe, New Zealand.



• MAORI women and child, Rotorua, North Island, New Zealand.

ETHYL NEWS PHOTO FILE 7-8/36 No. 20



• DAY'S CATCH of swordfish, Bay of Islands, North Island, New Zealand.

ETHYL NEWS PHOTO FILE 7-8/36 No. 21



• LAKE MATHESON, South Island, New Zealand.

ETHYL NEWS PHOTO FILE 7-8/36 No. 22



• AUCKLAND CITY from Devonport, North Island, New Zealand.

ETHYL NEWS PHOTO FILE 7-8/36 No. 23

rites which were common to their ancestors in India, and which leave a haunting memory in the minds of those who have observed them.

In 1642 Abel Tasman, the Dutch Navigator, visited New Zealand, but it was not until 1769 that, following the visit of the notorious Captain Cook, the white man tried to colonize the country. The Maori was a peaceful neighbor until the white man tried to take away his possessions—then he became a most aggressive enemy. British sovereignty was established in New Zealand in 1840—but only after years of desperate struggle.

In less than 100 years New Zealand has become a modern and progressive nation. In spite of terrific geological barriers, roads and railways have been developed to a high degree and the country's reputation for wool and other farm products is known throughout the world. Its population is now in excess of 1,500,000, of which 95 per cent. are British, four per cent. are Maori and one per cent. are of foreign descent.

To visit New Zealand is to enjoy an amazing panorama of beauty. The Rotorua thermal district contains no end of weird and extraordinary sights. Steaming

(Continued on page 18)

CUBAN NAPHTHA GASOLINE FIELD

• This article on the development of the Motembo Naphtha Gasoline fields, situated in Santa Clara Province, Cuba, was prepared for us by Dr. Arturo Macari and Mr. George A. McLoney, with whom our Mr. George Warren had the opportunity of becoming acquainted during a recent trip to the Island Republic.

The Motembo field now being worked, extends for three miles but is believed to cover a vast area. It produces naturally refined gasoline so highly refined that it is called naphtha and is used for the cleansing of delicate fabrics as well as aeroplane and automobile fuel just as it comes from the earth. Proven beyond the experimental stage the enterprise is adding new lore to Cuba's fame. It is known that Motembo Valley is neither a freak nor a legend and is being developed into one of the largest fields in the world. This outlook has been strengthened by the opinions of the most competent geologists and others familiar with the subject who have visited the field recently. They agree that the naphtha is the result of condensation of the most volatile constituents from a large reservoir of heavier hydrocarbons, situated perhaps under the naphtha field, or not far away from the present seat of operations. Most observers say that the source is a large basin of oil of such magnitude that, though producing millions of gallons of refined gasoline and ever refilling the earth cavities, it has not lost a single barrel of its solid elements, which some day the drill will find intact. Analysis would seem to prove that this gasoline or naphtha comes from oil and no other source. The report comes to us that the product as it is taken from the earth, is a crystalline white, with a gravity of 62° and 70° having about 20% of benzol equivalent, making it a high anti-knock motor fuel ready to put into the car.

ETC 21213

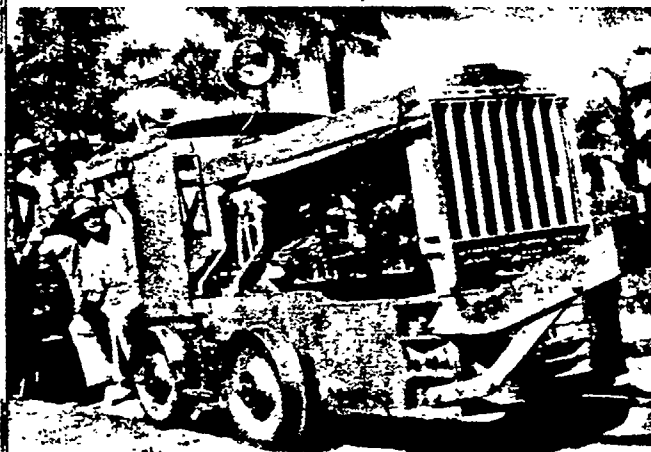


ETHYL NEWS PHOTO FILE *Motembo* 7-8/36 No. 24



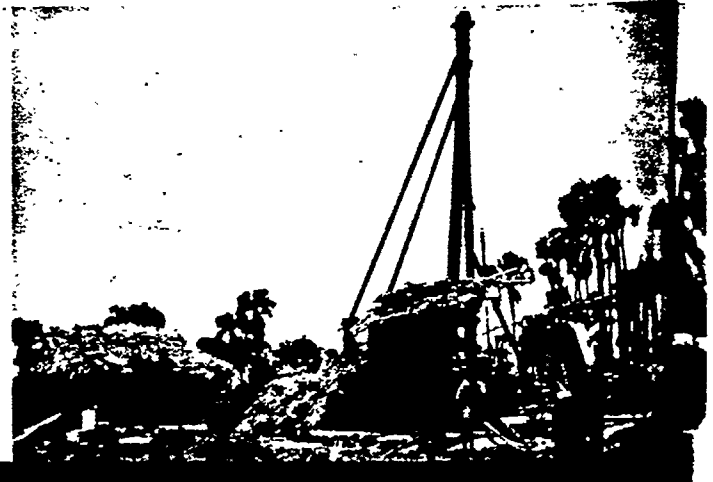
ETHYL NEWS PHOTO FILE 7-8/36 No. 25

• RAILROAD for hauling naphtha out (in barrels), Motembo.



ETHYL NEWS PHOTO FILE 7-8/36 No. 26

• DRILLING at Motembo.



Production of Motembo Field has been encountered at different horizons, ranging from 214 feet to 1,400 feet, although the largest producers have been at depths of from 625 to 985 feet and some 30 producing wells have been brought in during the past two years. The wells have come in making from 10 to 175 barrels per day and although some of them hold for several months they all finally settle down to a steady production of two to eight barrels, and as the first well drilled over ten years ago, still makes about 100 gallons, it is believed they will produce for many years. Each well is pumped by the natural gas from the well itself so the pumping cost need not be considered.

Dr. Macari and Mr. McLoney have recently located and drilled six wells several miles from Motembo and have secured production in five. They also found that by following a line of gas seeps located by Dr. Macari the major portion of all the wells drilled will be producers. These seeps have been traced and the production area mapped over a territory approximately 20 miles long and 5 miles wide. The new extension is in the Vesuvius Valley and the second well drilled came in making over 200 barrels.

It may be interesting to note that Cuba imports over 50 million gallons of gasoline annually and it retails on the Island at from 30 cents in Havana to 40 cents in the interior. The little field under discussion has, during the last two years alone produced and sold on the ground over five million gallons at 25 cents per gallon and the operators feel that they have a ready market locally for all they can pump for many years. Americans are becoming interested and one leasee has already produced and sold over two million gallons in the last couple of years from a 50-acre tract. All the wells have been drilled with spudding or water well machines, the time required ranging from one to six months and the average cost being about \$3,000 per well. It is probable, however, that the near future will see small rotaries employed for this work and a well may be completed in about ten days.

Several major companies have acquired huge acreage surrounding this proven naphtha area and it is expected that they will begin drilling within a few months time.



• WHEN over 200 Humble employees gathered in the Grand Ballroom of the Palza Hotel, San Antonio, Texas, to attend the joint banquet of the booster club and sales department. Mr. John Rollins, of our Tulsa Division, put on a demonstration to show the diners the qualities of their Ethyl product. Mr. Rollins is second from the left at speakers' table.

• MR. JOHN ROLLINS (Tulsa Div.), while talking to Mr. Tribble, owner of the Tribble Outdoor Posting Co., the other day, picked up a story which is interesting—"Believe it or Not"—The gentleman in question owns a ranch near Austin, Texas, and he told our informant that after a week of rain his sheepherders had to lay their charges in the sun to dry. As the rain caught them before they had been shorn the five inches of wool were so loaded with water that they could not get around to feed. Many of the sheep which weighed about 70 pounds were carrying from 80 to 85 pounds of water.

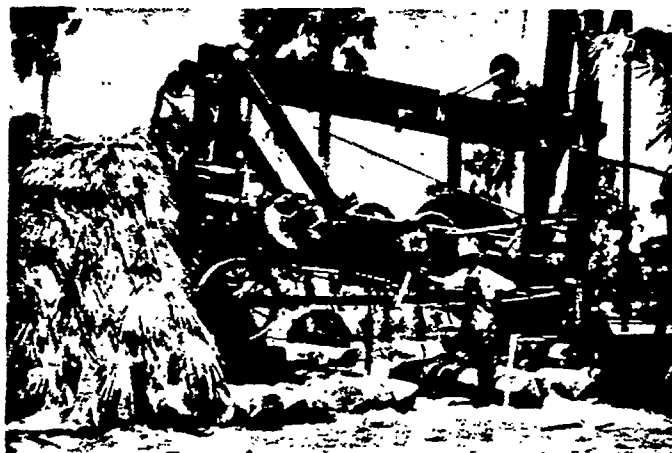
ETHYL NEWS PHOTO FILE 7-8/36 No. 27

• WATER TANK being hauled to location at Motembo.



ETHYL NEWS PHOTO FILE 7-8/36 No. 28

• DRILLING RIG at Motembo.



HERE and THERE

• Our Dayton Division Manager, quotes in part, the reactions of his men to the recent Detroit Sales Convention: "Aside from the interesting and useful facts and discussions presented one of the outstanding features of the convention was the association of the field men, not only among themselves, but with the New York officials as well. It was a rare opportunity for the younger men in the organization, as well as those who have seen more service, to be in personal contact with Mr. Webb and his official family. Such a meeting is inspiring and helpful." On behalf of the New York officials may we say that it was no less gratifying to them to be able to make the personal acquaintance of so many men throughout the organization.

• Mr. Clarence Kautz of the Kansas City Division, recently gave a talk on Ethyl followed by a demonstration during the Convention proceedings of the Missouri Valley Association of Firechiefs which was held in Davenport, Iowa. The attendance numbered 120, of which 75 were members of the Association. Mr. Kautz mentioned in the course of his address that our Automobile "Question and Answer" book was available for the asking and at the close of the meeting he was swamped with requests. As a concluding feature of the gathering the chairman announced that Mr. Kautz had been made an honorary member of the Association. Firechief Kautz now.

• Our Grand Rapids representative has been spending considerable time with the Boylan Buick & Pontiac Agency of Kalamazoo, Michigan which is the second largest agency in that territory. The results have been most gratifying. The Service Manager has purchased a 7.2 head for his own Pontiac 8 and the performance has caused much comment from his customers. The gentleman claims 95 miles per hour with the new head and guarantees it will accelerate faster than any car on the road. He says: "There is only one fuel, after all is said and done, that will give a good demonstration and that is Ethyl Gasoline. Furthermore, performance is what the public wants today."

• The following letter from Mr. E. L. Nunn, Secretary of The Tresler Oil Co., distributors of Phillips Petroleum Products in Cincinnati, was received by Mr. Mack, Manager of our Dayton office:

Gentlemen:

We wish to express our appreciation for the assistance rendered by your Mr. Fallor at a sales meeting conducted at our office on Wednesday morning. Our salesmen have from time to time, been unable to answer questions concerning Ethyl and "Q" gasoline and in order that they might receive a more comprehensive knowledge of these products the writer requested that your Mr. Fallor meet with our salesmen at his convenience. We feel certain that the information furnished and illustrations used by your Mr. Fallor will prove helpful in combating arguments used by some of our competitors against "Q" gasoline.

Thanking you for your cooperation and with kindest regards, we are

Yours very truly,

THE TRESLER OIL COMPANY

E. L. Nunn

• Our Tulsa Assistant Division Manager Kuhe accompanied by the Humble local agent recently stopped at one of their service stations. While there he witnessed an interesting example of customer reaction to our Centennial display at Dallas. A motorist drove into the station and the attendant inquired if he wished Esso or Humble. The customer replied he wanted Ethyl and was going to use nothing else in the future as he was convinced from what he learned at our exhibit at Dallas that it was the economical thing to do.

• In connection with some work with the United Fuel and Gas Company, Mr. Newman (Dayton Div.) reports that the first test conducted on the Packard Car of the Vice President of that company is very much in favor of Ethyl Gasoline. From the date of purchase of this Packard, through March 1936, the car was driven 8700 miles on 823 gallons 70 octane number gasoline for an average of 10.6 miles per gallon. During the months of April and May 1936 the car was driven 1429 miles on 109 gallons of Ethyl Gasoline for an average of 13.1 miles per gallon.

• During the General Motors "Parade of Progress" in Baltimore, Mr. Jack Cole, our Maryland representative, went down to the U. S. Naval Academy at Annapolis and invited several of the officers to attend the exhibit. A group of five came and after viewing the wonders of the Caravan said they thought it one of the most interesting and educational exhibits they had ever seen. During the stage show Mr. Ernie Foss invited one of them to come up on the stage and fry an egg on the induction coil but much to the surprise of those present they almost had fried chicken instead of fried eggs. Lt. McCoull fooled them, however, and proved that a Navy man could fry an egg under almost any conditions, although nobody would eat the egg after it was cooked.

• The officers at Fort Knox, Kentucky are taking full advantage of Ethyl Gasoline by converting their transport trucks to high-compression. In converting a two-ton F.W.D. 1930 truck equipped with a Waukesha Six MS Engine by milling 11" off the head, acceleration from ten to thirty miles per hour was increased from 38½ seconds to 19½ seconds; while in the hill climb the converted truck could be operated in the next higher gear without overheating as was the case in the low-compression run. Ethyl is the only grade of gasoline used at this government reservation.

• Our Virginia representative, Mr. R. W. Hogan, reports a new and rather interesting activity of the W.P.A. in his state. It appears that this government bureau and the Virginia State Highway Department have just completed a State air-marking program to help aviators avoid losing their way. Three hundred large yellow signs have been painted on roofs, each sign being in letters at least seven feet high by four feet wide. They tell the aviator the name of the town or post office over which he is flying, his geographical direction and the location and distance to the local landing field. These markers may be seen from an altitude of 3,000 to 5,000 feet and there is one within fifteen miles of any point in the state.

• Flash from Phoenix, the the land of Faith, Hope and Sunshine. Last spring a service station manager wandered into a company sales meeting where Mr. Carl Abell was telling the firing line squad how to get Ethyl into demonstrators and used cars at car agencies and used car lots. The S.S.M. needed a car, an increase in gallonage and a reputation for ability to sell quality products. Result, he bought his car from a used car dealer in the block next to his station, arranging at the same time to switch the dealer's gasoline business to his station. Then he got busy and converted the account to Ethyl. The previous supplier tried to crash back into the business and the used car dealer gave him a good laugh, particularly because the previous supplier had muffed the chance to show him what Ethyl and proper tune-ups would do to used car sales. The news got around to the sales manager of the previous supplier, who took Ethyl to his heart, made a survey of his territory to find out how many of his stations were located where they could get business from used car lots and called upon the Ethyl Gasoline Corporation for the material on which to base a local campaign on used car dealers.



*Return
to Fallner*

ORGANIZATION CHANGES

★



Davidson

• **RAYMOND R. FALLNER**, who has just been appointed Assistant Manager of the Dayton Division, received his Master's Degree from Yale University in 1925. The following three years he taught Mechanical Engineering at New York University and then joined the Pittsburgh Experiment Station of the U. S. Bureau of Mines where he served as Fuels Engineer. He was engaged in this work for a period of about two years. In 1931 he joined the Ethyl Gasoline Corporation and since then has served as automotive contact engineer attached to the Dayton Division. During this period he has done an outstanding job in sales promotion and educational work among the automotive and petroleum companies.

• **C. L. DAVIDSON**, who becomes manager of the Baton Rouge Testing Laboratory, succeeding Mr. E. R. Anderson is a graduate of Georgia School of Technology where he received the degree of B.S. in Mechanical Engineering. His first position was with the White Motor Company of Cleveland and later he joined the Chevrolet Motor Company as Service Representative. Early in 1929 he came to Ethyl and has been attached to the New Orleans and later the Baton Rouge Testing Laboratory ever since. Last year the degree of M.S. in Mechanical Engineering was conferred upon him by Louisiana State University. Mr. Davidson married Miss Helen Chapin Twing of Holyoke, Mass., in 1925. They have one son born in 1927.

HERE AND THERE

• At a sales promotion meeting in Cleveland of the colored service station salesmen of the Standard Oil Company of Ohio, Mr. Albert H. Bingham (Dayton Division) discussed the necessity and sale of Sohio Ethyl Gasoline. It was subsequently brought out that the service station at Cedar Avenue and East 83rd Street employs twenty-three colored attendants and moves on the average of 60,000 gallons of gasoline per month, a large portion of which is Ethyl.

• The following letter received by Mr. L. A. Dollahan of our Chicago Division from Indiana's Saginaw Branch Manager is evidence of a good job:

"Dear Sir:

We are pleased to reply to your letter of June 1st, 1936 in which you advise us of your Knock Motor Demonstration before two of our Dealers in Ithaca, Michigan. We wish to state that both of these Dealers have changed over from Standolind Gasoline to Solite with Ethyl. We appreciate your effort along these lines with our Dealers."

Yours truly,

STANDARD OIL COMPANY

C. M. Monson, Manager

• Mr. Louis M. Slack of the Dayton Division reports that the Aetna Oil Service, Inc., of Louisville, Kentucky, is stimulating the sale of their Pennzip Ethyl Gasoline through service station contacts. The prize-winning station increased its Pennzip Ethyl gallonage in the month of April 265% compared with the same month in 1935.

• Mr. Bond Hedden has just sent us the following Flash: "The City Purchasing Agent for the City of Milwaukee has just requested bids for the purchase of six carloads of Ethyl Gasoline. This Ethyl Gasoline will be used exclusively in all the equipment of the Police Department which includes motor-cycles, ambulances and squad cars. Ethyl Gasoline will also be used exclusively in equipment operated by the Sheriff's Department and Fire Department."

• Mr. Fred R. Beasley, who is reputed to be the world's largest Ford dealer, operates agencies throughout southern Ohio, Pennsylvania and West Virginia. A few weeks ago our Dayton Division Manager, Mr. Harry Mack, inquired of him what fuel was used for demonstrating purposes at his various agencies. In reply, the following letter was received, which leaves no doubt as to Mr. Beasley's views on the subject:

"Dear Mr. Mack:

In reply to your letter of the thirty-first. Wish to advise that we have in the past recommended during our sales meetings, at our various places, the use of Ethyl Gasoline in all demonstrators, as I am a strong believer that the extra cost is more than off-set in making sales."

Very truly yours,

F. R. BEASLEY

• The following, which appeared in a recent issue of the Chicago Tribune, may be of interest to members of the organization: "The fuel restrictions which several contestants in the Indianapolis 500 mile speedway race claimed cost them places in the money as well as damaged motorblocks were removed today by the Rules Committee of the contest board of the American Automobile Association. The committee rescinded the rule that limited contestants to 37½ gallons of gasoline but decreed that no more so called trick mixtures could be used. An unlimited quantity of fuel may be carried, but it must be the regular gasoline obtainable at any roadside pump."

THE ETHYL NEWS

(Continued from page 13)

geysers throwing tons of boiling water skyward at regular intervals, the splutter and bubble of boiling mud pools, the rainbow hues of silica formations and the rush and roar of restless torrents through thermal valleys suggest, in an awe-inspiring yet attractive fashion, how the country was formed. Even the few remaining active volcanoes appear as safety valves for the hidden powers which lie chained and growling beneath the earth's surface. The Northland has its great Kauri (gum) trees whose crowns have cast shadows on the lesser forest for hundreds—yes, even thousands of years. There also are lovely land-locked harbours their shores fringed with crimson-blossomed Pohutu Kawa trees and their rocky headlands and peaks bearing further evidence of the great upheavals in the days when the earth was young.

Books have, and can still be written on the attractions of New Zealand—before you pass ranges of rugged mountains capped with snow, and down whose slopes ominously creep glaciers—which finally melt and crumble into bottomless, crystal-clear, mirror-like lakes. Rivers of snow-water roar and fight their way down steep gorges, splashing over boulders, swirling around rock walls, out into fertile valleys where well fed cattle lazily munch the nutritious grasses which grow along their banks.

No "fish stories" are necessary in New Zealand. Years ago Izaak Walton or somebody transplanted some Rainbow trout and Columbia River salmon in New Zealand waters. The salmon didn't like the place and returned to America (Believe it or Not!) . . . but the Rainbow trout! Twenty-six pounds something is the record—a twenty-pounder is an ordinary catch, and ten pounders are just bait! After completely exhausting himself pulling Marlin swordfish out of the seas off the North Coast, Zane Grey said that there was only one thing he'd like to do—and that was to make the people at home believe the sights he saw at Rainbow Springs—there thousands of huge Rainbow trout fight for bread crumbs tossed in by hypnotized tourists! Yes—it's a game reserve and the fish seem to know it. But sport is not limited to fishing. Captain Cook purposely set loose several pairs of domesticated pigs. Today their countless descendants provide boar hunting which challenges the keenest of hunters. The red deer was brought over from Scotland and he certainly out-did his ancestors. The Government now pays a bounty for each deer killed. They've become public enemy No. 1 to the farmer. Then there are the usual small animals for the more timid hunter.

And so we could go on—skiing, skating and tobogganing in the Southern Alps, fishing in the rivers and lakes, hunting in the forests that border them—or we could enjoy the comforts of modern city life—an occasional game of golf; no matter what interest the visitor has, he will find attractions beyond estimation in the "Wonderland of the Pacific."

—Contributed by ALAN TULLY.

PAGE EIGHTEEN



A FATHER WRITES

• YOUR MOTHER and I were delighted to learn that your Division Manager has transferred you to another territory where you can broaden your experience. I got your point about it just being a transfer and not a promotion, especially with regard to the pay check. But, remember that though you've had some experience, you're just a greenhorn yet and the market for greenhorns is rather weak.

Your last letter reminded me of something that I've been going to mention for some time. Sounds like the rumor rummies have you on their party line. You say "word is going around that . . ." and "some of the boys tell me that . . ." and "it is understood that . . ."

We used to make fun of the ladies sewing circle for gossiping, but I think any big organization makes a sewing circle sound like an inarticulate man alone in a dark room. A big organization is bound to include people whose minds are so casually engaged in the job that the gray matter, if any, has time to process a lot of other things, including trash and rubbish off the rumor heap. Owners of such minds have so little of value and substance in themselves that they hunger for the importance of appearing to be "in the know". Being mostly on a holiday these minds find time and the inclination to listen to rumor and hearsay, ornament it with new and shallow conjectures and push it along like a dirty rolling snowball. From conjecture and twisted imaginations they fabricate rumors which they pass along as facts. The more startling the better.

You probably will have to bend an ear to the whispers of these birds, since it's easier and politer to listen than to shut them up. But for heaven's sake, don't take stock in what they pass along. And above all, don't be guilty of repeating their weird and fantastic stories. Remember that you'll be judged by the way you do your job, not by how much rumor or gossip you have in your head nor by how you flash it along.

I saw one organization nearly ruined by the rumor rummies. Please don't join their destructive gang.

—Courtesy of Esso Marketer.



ETC 21217

THE G-ADAO TAKES OFF AGAIN

PART ONE



• PILOT LUCKE (left)
with F. M. S. TEGNER

✓ • G-ADAO left London on January 23rd in order to make a tour of Africa. The objects of this trip were much the same as for a previous flight to the Dutch East Indies (see THE NEWS, Feb. 1936), namely—to inspect the Ethyl blending plants in the territory and to survey the marketing conditions of Spain, Portugal, the Canary Islands and Africa. Those making the flight were F. M. S. Tegner, Technical Representative; G. J. Frisby, aircraft engineer, and D. W. Lucke, pilot, to whom we are indebted for this article. No radio was carried but a drift sight was fitted to the machine. Mr. Lucke writes:

"Barcelona was reached the first day, after stops at Paris and Marseilles. Arriving in Spain we discovered that every aerodrome in the country was flooded due to heavy rains, but through the courtesy of the authorities we were allowed to land at a reasonably dry military aerodrome at Madrid. Here we met Mr. Tegner who had made the journey by train.

On reaching Casablanca by way of Gibraltar, we were struck by the efficiency of the French system of colonization. One instance is the weekly inspection of cab horses, of which there are thousands. As a result one is im-

pressed with the healthiness of these horses in Morocco.

Africa takes on a forbidding aspect south of Casablanca and at Cape Juby we found one of the most desolate military posts in the world but even in this outpost, Spain upholds her reputation for hospitality, and we were royally entertained by the Air Force Commandant and his wife—the only white woman thereabouts. Forty minutes flying makes one forget this sandy spot and delight in the coloring and mountains of Las Palmas and Teneriffe where we made a short stay and then returned to Casablanca.

From there we flew to Tunis via Oran and Algiers and continued an uneventful flight to Cairo where we arrived in less than three hours, while the trip by land occupies three days under very unpleasant conditions. Khartoum was reached in a day with the aid of a strong following wind. The weather was perfect and we were guided by two landmarks, the Nile and the railway south of Wadi Halfa but the desert seemed long and uninteresting. Had it not been for an unfortunate delay over customs formalities the next morning, we should have reached Nairobi by sunset but we put down at

PAGE NINETEEN

ETC 21218



ETHYL NEWS PHOTO FILE-28/36 No. 29

• A FORCED LANDING
AT KINGWILLIAMSTOWN

✓ Kisumu instead. Here unfavorable weather held us for another day. On the way to Kisumu we saw some big game, including the Bor Herd of elephant in the Sudd. The elephants did not seem in the least impressed by our flying low over them. In fact they treated us with disdainful contempt.

At last arriving at Nairobi we took off for Kondoa Iringa, with the intention of continuing to Dodoma. We passed Moshi and Arusha without being able to see these aerodromes on account of low clouds and eventually reached a point some twenty miles from Kondoa Iringa. Here the weather was such that we were obliged to turn back. Moshi and Arusha were unapproachable and by now the cloud was too low to allow us to reach Nairobi. Casting about for a suitable landing place we came down in an old pasture on the side of a hill and promptly bogged on finishing the landing run. The property turned out to be that of Major Sir Robert Shaw who entertained us while his boys were engaged in filling in bear-holes and clearing a runway. We took the machine further up hill and, lightening it of passengers and luggage, took off and returned to Nairobi. Here Mr. Barrington Mason, of the Shell Company, was surprised to see us again so soon but was very helpful and had a message broadcast by wireless for the benefit of the Tanganyika Police who would be alarmed over our non-arrival at Dodoma.

At Iringa we took part in a shove-halfpenny "needle-match," a Leap Year Dance and the annual cricket match between town and outsiders. Both the aerodromes at Iringa, each about 700 yards in length, were too small

for a take-off with the rather heavily loaded Rapide. So again passengers and luggage were sent ahead to Matana, about 70 miles away, where there is a landing ground about 1200 yards long at an altitude of 5,000 odd feet. The almost empty machine left the ground at Iringa with very little to spare.

At M'pika, where in due course we set down, we had lunch with the southbound Imperial Airways crew. They confirmed an unusual change of wind we had noted and explained that it was quite frequently found in that district. They were also extremely helpful in giving us tips on the route south, as the maps leave a lot to be desired and in some cases are distinctly misleading. We were particularly grateful to Mr. W. K. Brett, the Shell pilot, who was kind enough to lend us some good maps of the Belgian Congo and French Equatorial Africa and were sorry to hear later that he had an unfortunate crash while attempting to reach M'beya.

In the hotel at Broken Hill we were introduced to Mr. Llewellyn. He was then on his return flight, this time as a passenger in an Imperial Airways "Atalanta." He gave us some of his impressions on a flight from England to Johannesburg. By the time we reached Johannesburg our compass was causing trouble and we later learned that the mine workings underneath the aerodrome were quite capable of affecting an aircraft compass. In this connection we talked to Mr. "Taffy" Drew of the Shell Company, Mr. Stanley Walters of the Vacuum and Mr. Rod Douglas of DeHavillands. Each gentleman advised us as to procedure when lost. Mr. Drew advocated we throttle back our motors over any



• NATIVE HUT,
KINGWILLIAMSTOWN

ETHI NEWS PHOTO FILE 7-8/36 No. 30

farmhouse and to yell when a white face appeared. This method was infallible, as local farmers were used to that sort of thing and would automatically point in the required direction. Mr. Stanley Walters recommended the South African Air Force system. They carry a large mirror, and after forced landing catch the attention of searching aircraft by reflecting light in the faces of the pilots. Mr. Rod Douglas told us that a D. H. aircraft just naturally could not get lost anyway, so we carried on to Durban. Mr. Walters joined us as a passenger and navigated us to Durban and Cape Town. En route we made a forced landing at King Williamstown, as the aerodrome at East London was covered in clouds of sea fog.

A delightful three weeks was passed in Cape Town, where much time was spent on the aerodromes at Maitland and Wynberg. The Union is amazingly air-minded as distances are great and weather on the whole, very favorable to flying. While at Cape Town we swung our compass very carefully, only to find a rather bad coefficient "D" which affected the needle by as much as nine degrees on quadrantal points. Pilots told us that this was not unusual in aircraft which had arrived from Europe, so we started North determined to check the compass at every opportunity. At Bulawayo we found that 50 per cent. of the error had disappeared.

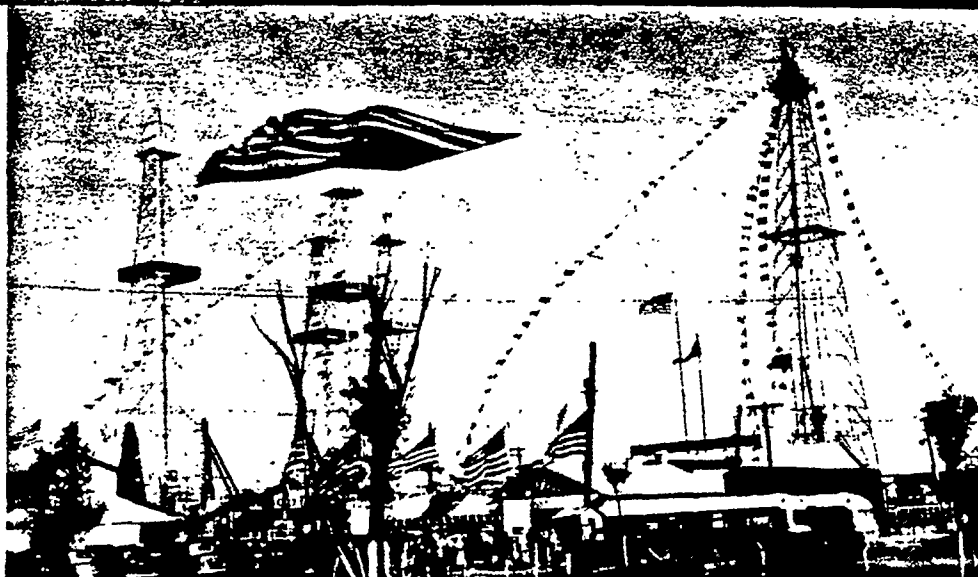
In the next issue of the "News" this narrative will be continued with the return flight to London.

ETC 21220



• G. J. FRISBY making friends
with natives at Dodoma.

ETHI NEWS PHOTO FILE 7-8/36 No. 31



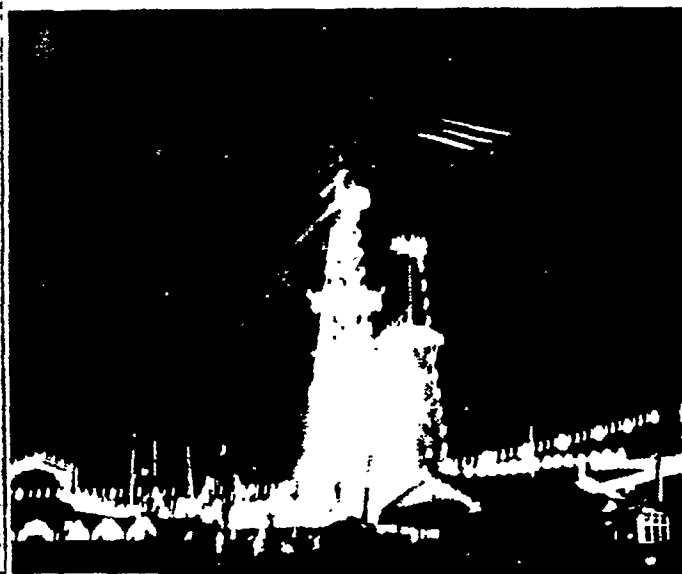
ETHYL NEWS PHOTO FILE 2-8/36 No. 32 GENERAL VIEW AT THE EXHIBIT.

TULSA TESTING LABORATORY PINCH HITS FOR SALES DEPARTMENT

✓ • THE NINTH INTERNATIONAL PETROLEUM EXPOSITION, which was held at the Fair Grounds in Tulsa the last of May, conflicted with the Ethyl National Convention at Detroit and as all the fieldmen were due to attend, the Tulsa Division sought the aid of the Testing Laboratory. How well Mr. George H. Gier of the Laboratory rose to the emergency is indicated by the fact that during the eight days of the exposition he conducted 406 demonstrations, reaching an audience of close to 6,000 people. Our display was set up in the booth of the University of Tulsa, who cooperated

with us in every way possible. Mr. Gier feels that this was a particularly fortunate location as it gave him an opportunity to contact many technical men who were especially interested in the exhibit and what he had to say. However, there were many other classes of people in his audiences, including oil fieldmen, farmers business men and the average motorist. He was particularly interested to find that so many women motorists seemed anxious to get the best performance out of their cars and wanted to use the proper fuel.

ETHYL NEWS PHOTO FILE 2-8/36 No. 33 • FAIR AT NIGHT



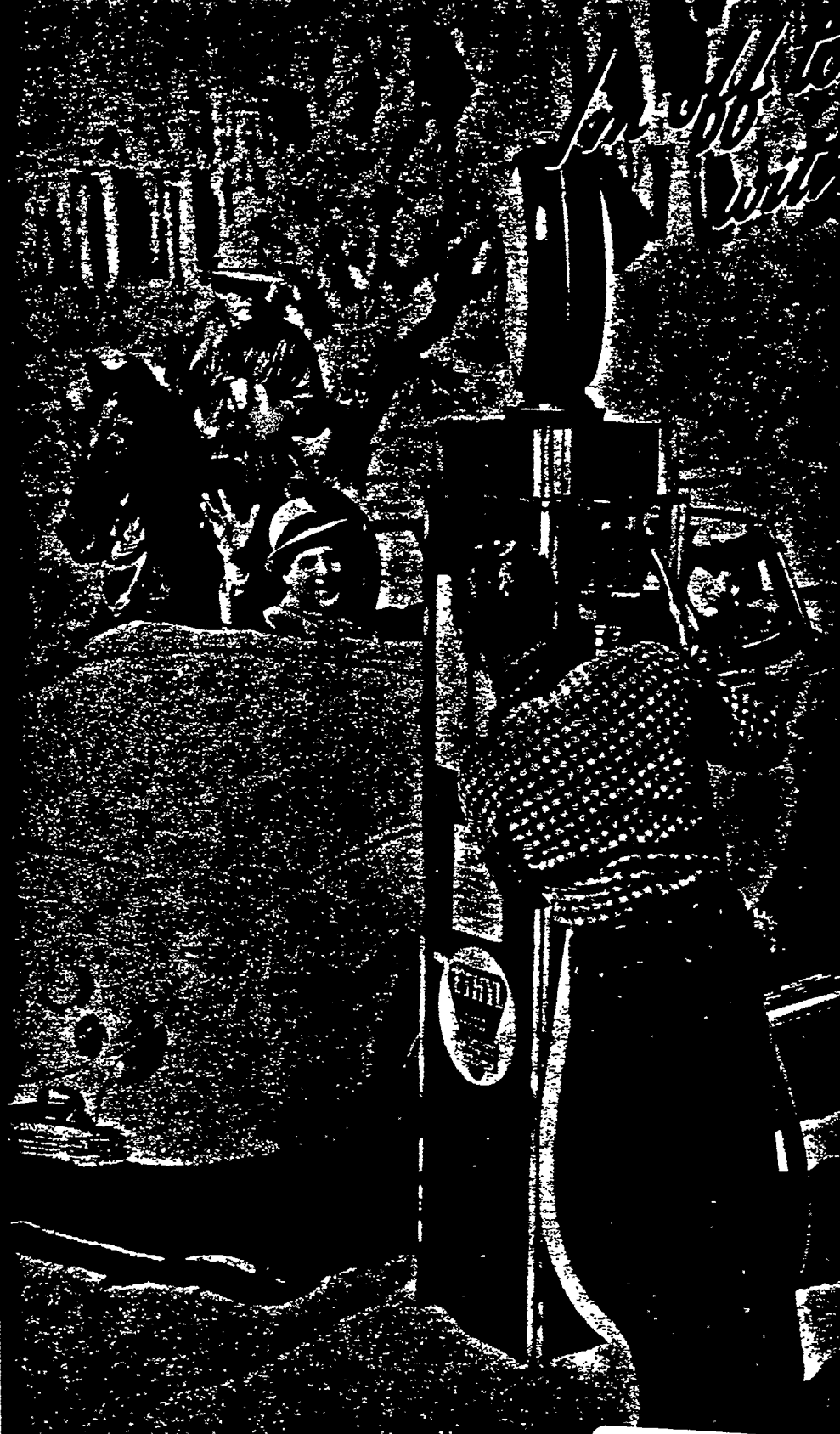
ETHYL NEWS PHOTO FILE 2-8/36 No. 34

• MR. GIER answering inquiries at Ethyl Exhibit.



SO LONG, GAS STATION!

Go to New York
for 60 with Ethyl!



Get it! And the better
way! The more you know!

HERE'S A HOT TIP FOR DRIVING THIS SUMMER

It's to use Ethyl.

Why? Because Ethyl is the only gasoline that's been tested and proven to give you the most miles per gallon. And it's the only gasoline that's been tested and proven to give you the most power. And it's the only gasoline that's been tested and proven to give you the most protection. And it's the only gasoline that's been tested and proven to give you the most economy. And it's the only gasoline that's been tested and proven to give you the most satisfaction.



When it comes to gasoline, there's nothing else out there that can match Ethyl. It's the only gasoline that's been tested and proven to give you the most miles per gallon. And it's the only gasoline that's been tested and proven to give you the most power. And it's the only gasoline that's been tested and proven to give you the most protection. And it's the only gasoline that's been tested and proven to give you the most economy. And it's the only gasoline that's been tested and proven to give you the most satisfaction.

For more information, write to Ethyl, Inc., P.O. Box 100, New York, N.Y. 10001. Or call 1-800-ETHYL-1000. Or visit our website at www.ethyl.com.

The Government, in fact, has
recommended driving special gasoline
during the summer months. Ethyl is the best.



So why not Ethyl? Because
it's the only gasoline that's been
tested and proven to give you the
most miles per gallon. And it's the
only gasoline that's been tested and
proven to give you the most power.
And it's the only gasoline that's been
tested and proven to give you the
most protection. And it's the only
gasoline that's been tested and proven
to give you the most economy. And
it's the only gasoline that's been
tested and proven to give you the
most satisfaction.



GIVE YOUR CAR
the best fuel there is.
Avoid knock, low
compression, overheating.
The power from
Ethyl gasoline will
keep you going.

NEXT TIME GET ETHYL

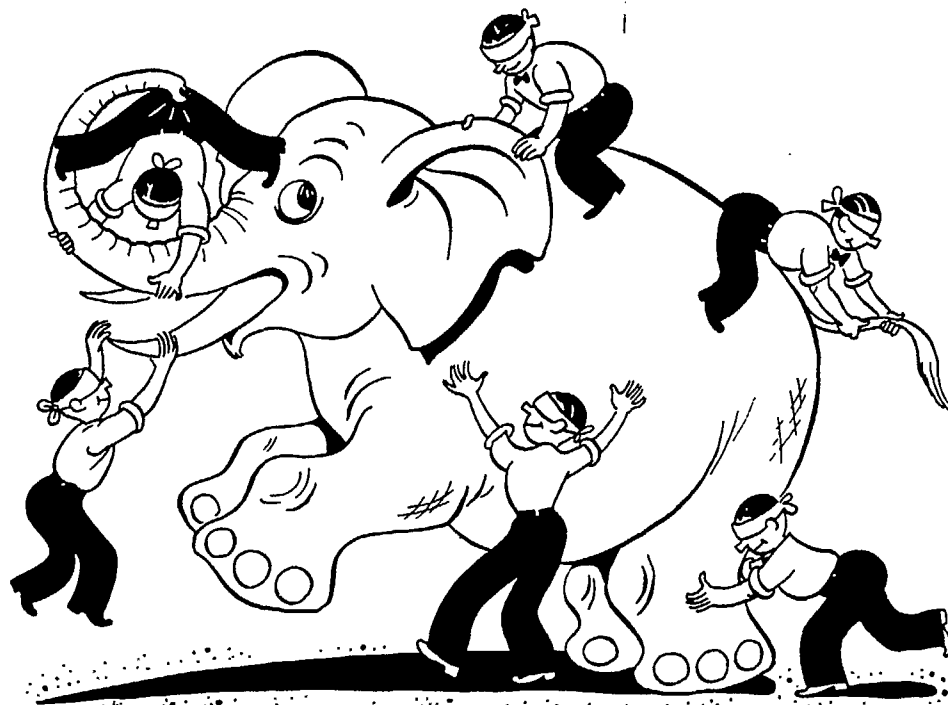


FILE COPY - W. CARY HARRIS

ETHYL NEWS PHOTO FILE 7-8/26 No. 1



ETC 21223



SIX BLIND MEN

Six blind men who had heard a great deal about Elephants, but didn't know what one was like, were taken to the Zoo. The first felt the elephant's hard skin:

"Ah, the elephant is like a wall," he said, "because it is so hard and steady."

The second one felt his tusk. "No, the elephant is like a spear," he shouted. "Is it not sharp and smooth and hard?"

"You are both wrong," said the third, as he grasped the elephant's tail. The elephant is like a rope. See how I can swing back and forth on it!"

Grasping one of the huge animal's ears, the fourth one laughed. "Hear those silly fools," he laughed. "This elephant is neither like a wall, a spear, nor a rope. It is like a fan. Look!" And he flapped the ear to and fro.

"All of you are foolish," said the fifth man. "This elephant is like a post." He clung to the elephant's leg, convinced that he was right.

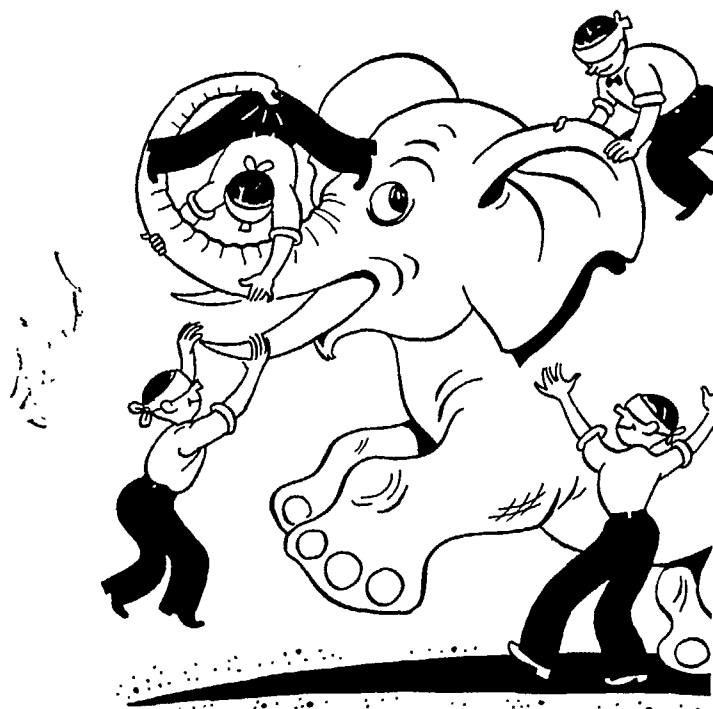
The sixth one sneered at his five companions. He had taken hold of the elephant's trunk. "You all five are wrong. I have hold of the elephant and he is like a snake."

* * * * *

Each of these men was partly right and it reminds us of the way people sometimes look at business. The sales department, the administration department, the cost and accounting branches, research and manufacturing departments are all merely parts of a complete whole. Yet oftentimes the members of each single department become blind to the others and think that what they have taken hold of is the one and only part of the business.

* * * * *

Business, like elephants, is made up of many parts. Those who think that the other fellow is always wrong and that the other fellow's work is of no importance, are making the same mistake as the six blind men.



Unless otherwise indicated, all artwork and photographs destroyed
May 1957.

SIX BLIND

Six blind men who had heard a great deal about Elephants, but didn't know what one was like, were taken to the Zoo. The first felt the elephant's hard skin:

"Ah, the elephant is like a wall," he said, "because it is so hard and steady."

The second one felt his tusk. "No, the elephant is like a spear," he shouted. "Is it not sharp and smooth and hard?"

"You are both wrong," said the third, as he grasped the elephant's tail. The elephant is like a rope. See how I can swing back and forth on it!"

Grasping one of the huge animal's ears, the fourth one laughed. "Hear those silly fools," he laughed. "This elephant is neither like a wall, a spear, nor a rope. It is like a fan. Look!" And he flapped the ear to and fro.

"All of you are foolish," said the fifth man. "This elephant is like a post." He clung to the elephant's leg, convinced that he was right.

The sixth one sneered at his five companions. He had taken hold of the elephant's trunk. "You all five are wrong. I have hold of the elephant and he is like a snake."

* * * * *

Each of these men was partly right and it reminds us of the way people sometimes look at business. The sales department, the administration department, the cost and accounting branches, research and manufacturing departments are all merely parts of a complete whole. Yet oftentimes the members of each single department become blind to the others and think that what they have taken hold of is the one and only part of the business.

* * * * *

Business, like elephants, is made up of many parts. Those who think that the other fellow is always wrong and that the other fellow's work is of no importance, are making the same mistake as the six blind men.

ETC 21225

COURTESY OF "THE DIAMOND"



Vol. 3, No. 7

ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

JULY-AUGUST, 1936

Published monthly by the Ethyl Gasoline Corporation for the entertainment and benefit of the members of its organization. Address all news items, correspondence or other material to the Editor, W. Cary Harris, 35th floor, Chrysler Building, New York City.

W. CARY HARRIS - - - - - Editor

Associate Editors

EDWIN DOWNS
RUSSELL B. WESTON

CORRESPONDENTS

Atlanta Division	GEORGE W. WARREN
Baltimore "	L. W. SHANK
Boston "	DONALD S. FLYNN
Chicago "	H. C. DEES
Dayton "	R. R. FALLER
Kansas City "	C. M. BERRY
Los Angeles "	CARL ABELL
New York "	R. L. GOLTZ
Toronto "	J. N. FITZGERALD
Tulsa "	HARRY KUHE
Engineering Dept.	JULIAN J. FREY
Manufacturing Dept.	ARTHUR P. STOVER
Gasoline Testing Dept.	E. R. ANDERSON
Export Dept.	HUBERT FOSSETT

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH

SOHIO EXHIBIT AT GREAT LAKES EXPOSITION

• WHEN the doors opened on the colorful Sohio Exhibit at the Great Lakes Exposition at Cleveland the first of July, visitors saw one of the most complete and unusual varieties of petroleum products and automotive displays ever assembled. Follows a brief outline of the features which will intrigue visitors:

1. Driver's Test Machines where visitors can test their own ability on quick braking reaction, on red-and-green color vision, on headlight glare and on speed estimation. This will prove to be one of the most popular features at the Exposition.

2. Gasoline Demonstrator—to show by motor dynamometer the superior mileage and acceleration qualities of X-70.

3. Ethyl Gasoline Demonstrator—showing compression ratio increases over the past 10 years, illustrating how flame travels under low and high compressions, and the Knock-Tester—which shows how Sohio Ethyl reduces knocks in motors.

4. Illustrative demonstration of Sohio's famous "Floating Body" method of car lubrication.

5. Demonstrations on oil and greases.

6. Cold test demonstrations for Sohio Gear Oils.

7. Cold test demonstrations for Sohio and Esso Motor Oils.

8. Illustrated demonstration showing the need for different viscosity motor oils for different seasons of the year.

9. Illustrated demonstration showing carbon-accumulation which would result from hot-running and knocking engines.

10. Demonstration on the important reasons for regular oil-changes.

11. Illustrating sludge in motor oil and how it tends to gum up the engine.

12. Demonstration of "blow-by" in the crankcase.

13. Sohio Little Theatre—air-conditioned—where visitors may see Sohio's new and interesting movies.

14. Many beautifully designed and illustrated picture charts and model displays.

15. Additional displays on other Sohio products, Specialties, Asphalt, Tires, etc.

16. Sohio Information Booths—where visitors may obtain information about the Exposition, about Cleveland, get state and city maps, road information and use the Sohio Directories of Cleveland and suburbs for special information.

Mr. Bingham of our Dayton Division will spend much time with our own display and will be in close touch with the Sohio Exhibit during the entire 100 days it is showing.

—GE ONE

ETC 21226



MEET MR. RONAN

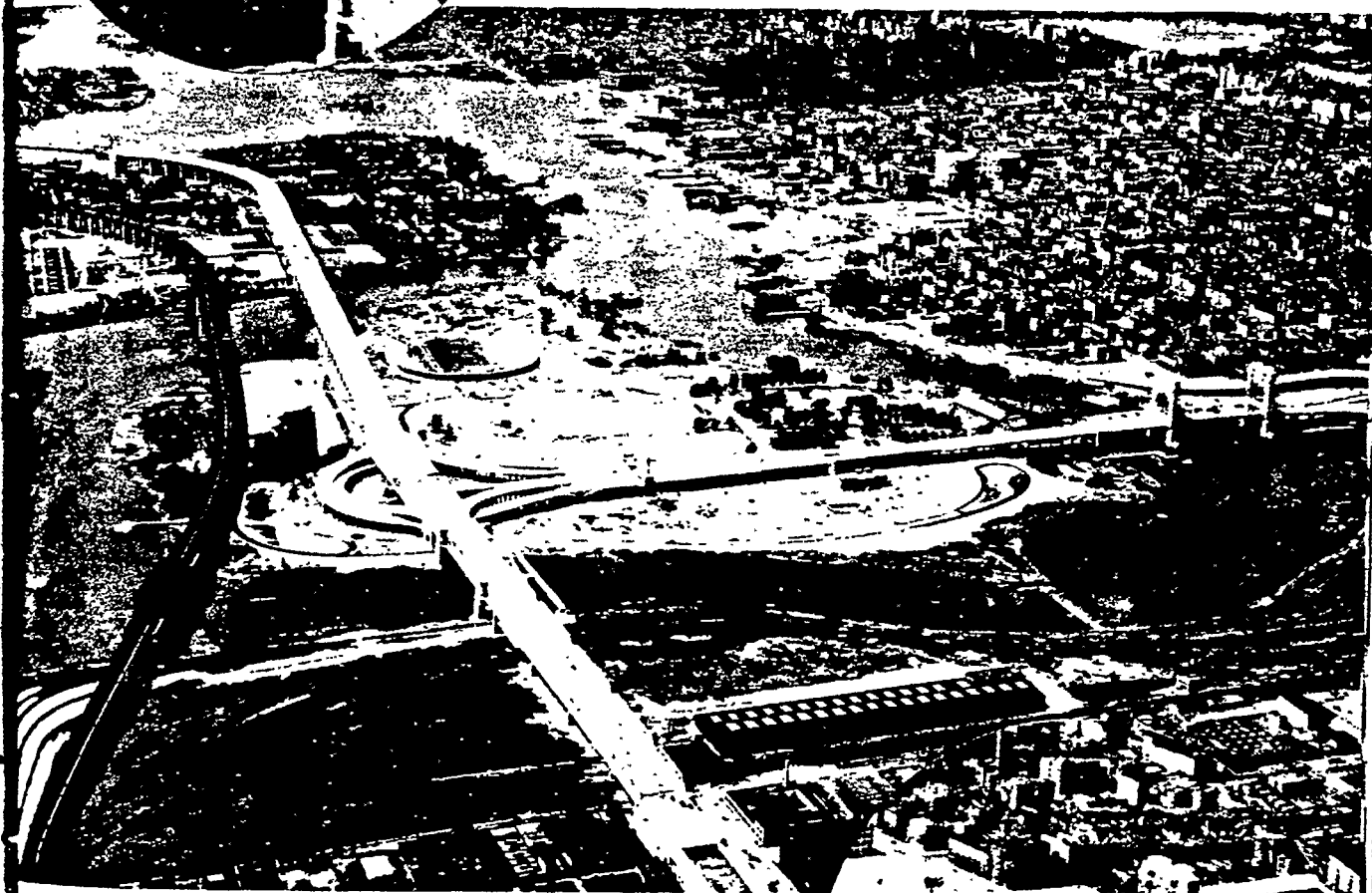
• THOMAS E. RONAN was born at Athens, Pa., October 15, 1898. Receiving his early education at the local schools he entered Holy Cross College at Worcester, Mass., in the class of 1921, from which institution he was graduated with the degree of A.B. and in 1923 his Alma Mater conferred upon him the degree of Master of Science in Chemistry. Mr. Ronan also did graduate work at both Cornell and Columbia. During 1923-1924 he was engaged as a chemist at the Astoria Laboratories of the Consolidated Gas Company of New York, and in 1925 was associated for a short time with the New York Central Railroad. Early in January, 1926, he joined the Ethyl Gasoline Corporation as a research chemist in the Yonkers Laboratory. Subsequently he engaged in field work in the Denver, Chicago and New York Divisions. In the latter part of 1929 he was appointed manager of the Gasoline Testing Department which office was created at that time. In this capacity he supervised the erection of both the Kansas City and Tulsa Testing Laboratories. In 1930 he again returned to the Sales Department as manager of the New York Division, where he remained until 1932, when he was assigned manager of the Tulsa Division, which position he still holds.

Mr. Ronan is married and has two sons. He makes his home in Tulsa, Okla.

NEW YORK CITY CELEBRATES OPENING OF \$63,000,000 TRIBOROUGH BRIDGE



filed



ETHYL NEWS PHOTO FILE 7-8/36 No. 2

• A NEW TRIUMPH in engineering, the Triborough Bridge, was opened to the public on July 11th, 1936. It is much more than a bridge; it is a model express highway system with a series of viaducts, over-water jumps, depressed roadways, ramps and the most elaborate clover leaf junction of any highway in the world. Its over-all length is 19 miles. The elevated portion, comprised of four bridges and long stretches of viaducts, measures a little more than three and one-third miles.



PAGE THREE

The span has two roadways, each 40½ feet wide, separated by a raised steel centerpiece three feet in height. A unique feature of this project is the multi-ramped traffic sorter on Randall's Island, which is devised to prevent congestion by opposing traffic streams flowing to and from each of the three boroughs. Every effort has been made to minimize the unpredictable mistakes drivers will make. For example, the main junction at Randall's Island, where all tolls will be collected, brings twelve roads together in such a way that none of them crosses on the same level. There are three decks at the junction. Engineers have produced roads on which the only stop will be for the payment of toll. There will be no traffic lights and except in cases of breakdowns, traffic will keep right on moving.

Over the Manhattan roadway one passes between two towers rising to a height of 220 feet. Between the towers stretch a roadway 310 feet long and 92 feet wide. This actually is not a roadway, but an elevator comprising 4,000,000 pounds of steel and concrete. A signal from a craft in the Harlem River puts the elevator operator to work. He will then throw the switch to start four 200 horsepower motors and the 100 yards of massive roadway will begin to rise, hauled by cables until it comes to rest 135 feet above the Harlem—eighty-five feet higher than its normal position and ample for the clearance of any river craft. The Harlem span is the largest "vertical lift" bridge in the world.

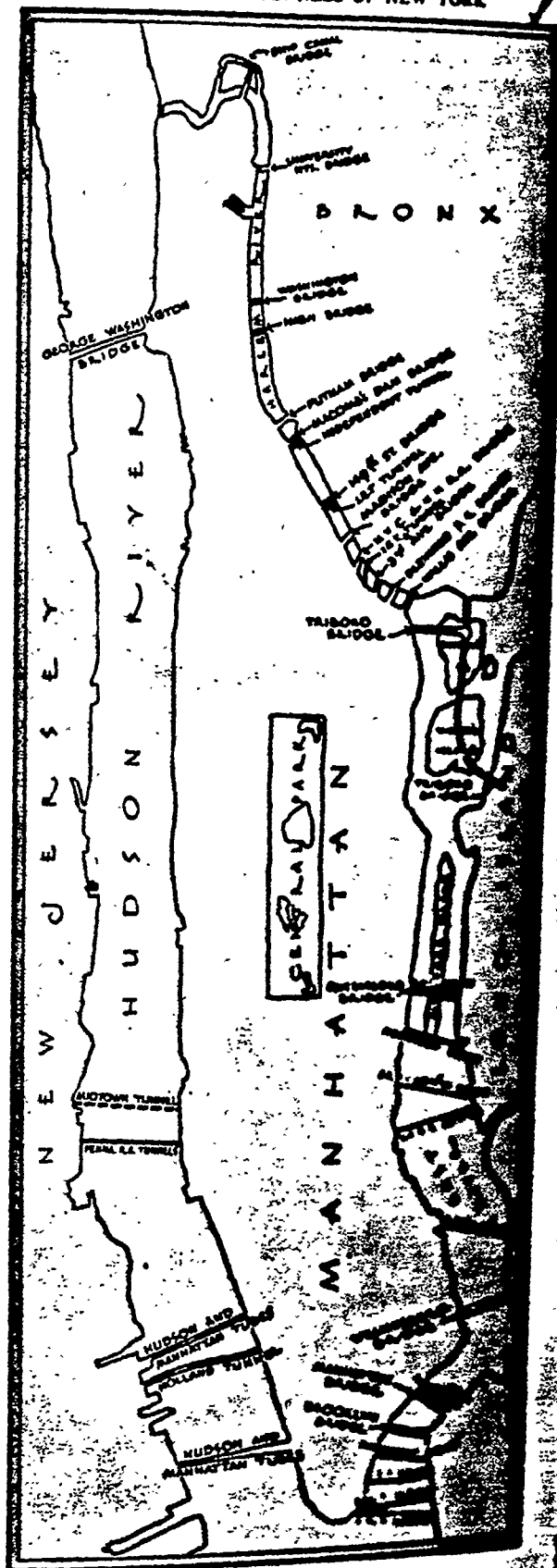
The road surface is constructed of Johns-Manville mineral surface asphalt bridge plank. It was selected because it filled all requirements for a surface that would be light in weight yet extremely durable; water-proof; shock-absorbing and resilient enough to minimize vibration. This new surface also offers unusually safe traction, equal when wet, to that of concrete.

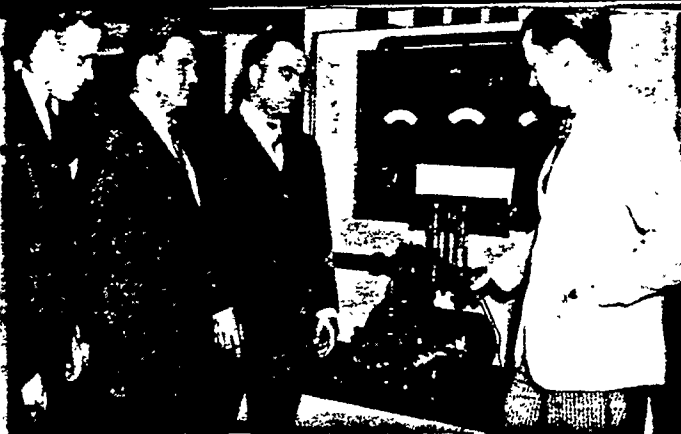
The giant cables which loop above on one of these bridges weigh 988 pounds a linear foot. Each cable contains 9,176 wires which are but three-sixteenths of an inch in diameter, yet capable of lifting a seven-ton truck.

While the Triborough is called a bridge it actually includes four bridges and, with its approaches in Manhattan and Queens is not so much a single structure as it is a new highway system thrown ready-made in the heart of the most congested area on earth.

• THE SKELLY OIL COMPANY, with their office at Kansas City, Mo., recently released some novel art work with copy in their "Skelly News" and other company publications. Advertising Director Harry Clifford has used the following slogan under the caption, Smooth: "The Two Greatest Names in Gasoline—Now, in One Great Product". Mr. Clifford should be congratulated on securing these models from their home office in Kansas City. Reproduction of this very attractive advertisement is shown on the third cover of this issue.

BRIDGES AND TUNNELS OF NEW YORK





• SOME of the Baltimore Division visit the Parade of Progress. From left: Dwight Andrews, Lowell Mason, Manager Louis Shank and Frank Cronin our representative with the Caravan.

• A PHOTOGRAPH taken by Mr. Walter Rantanen of the Tulsa Laboratory, which depicts a layman's idea of the taxes that the family car has to support.

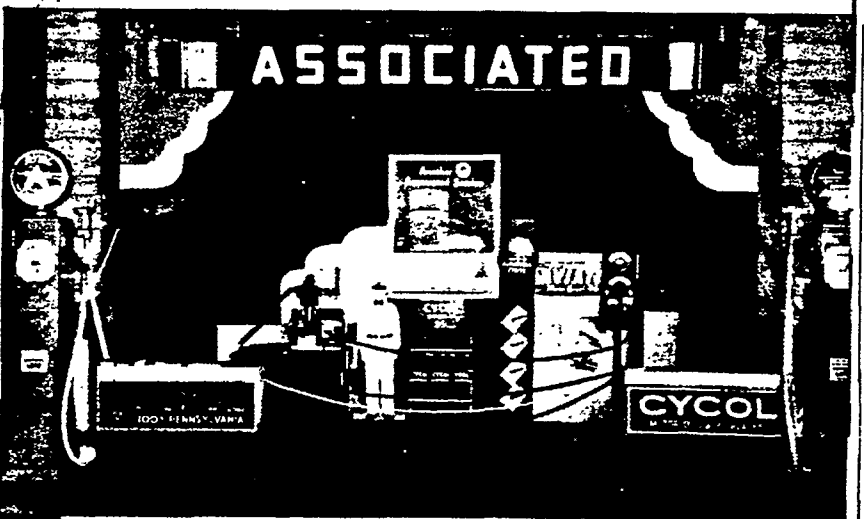


ETHYL NEWS PHOTO FILE 7-8/36 No 4

✓ • FOR a hundred years lumbering has been going on in the district where this picture was taken near Gracefield, Quebec. The time-honored method of taking out the spruce pulp logs to the dump ready for the spring drive has been by horse-drawn sleigh, moving on an iced road. Recently a Ford V-8 two-ton truck, equipped with six wheels, was put on this operation. A heavy team of horses made four round trips a 10-hour day, hauling one sleigh-load out and the empty sleigh back into the bush, over the seven-mile ice "railway". The Ford V-8 truck hauls from five to ten sleigh-loads per trip, depending on the condition of the iced road, and makes ten round trips a day. On an average, a Ford truck performs the work of 10 to 12 teams.

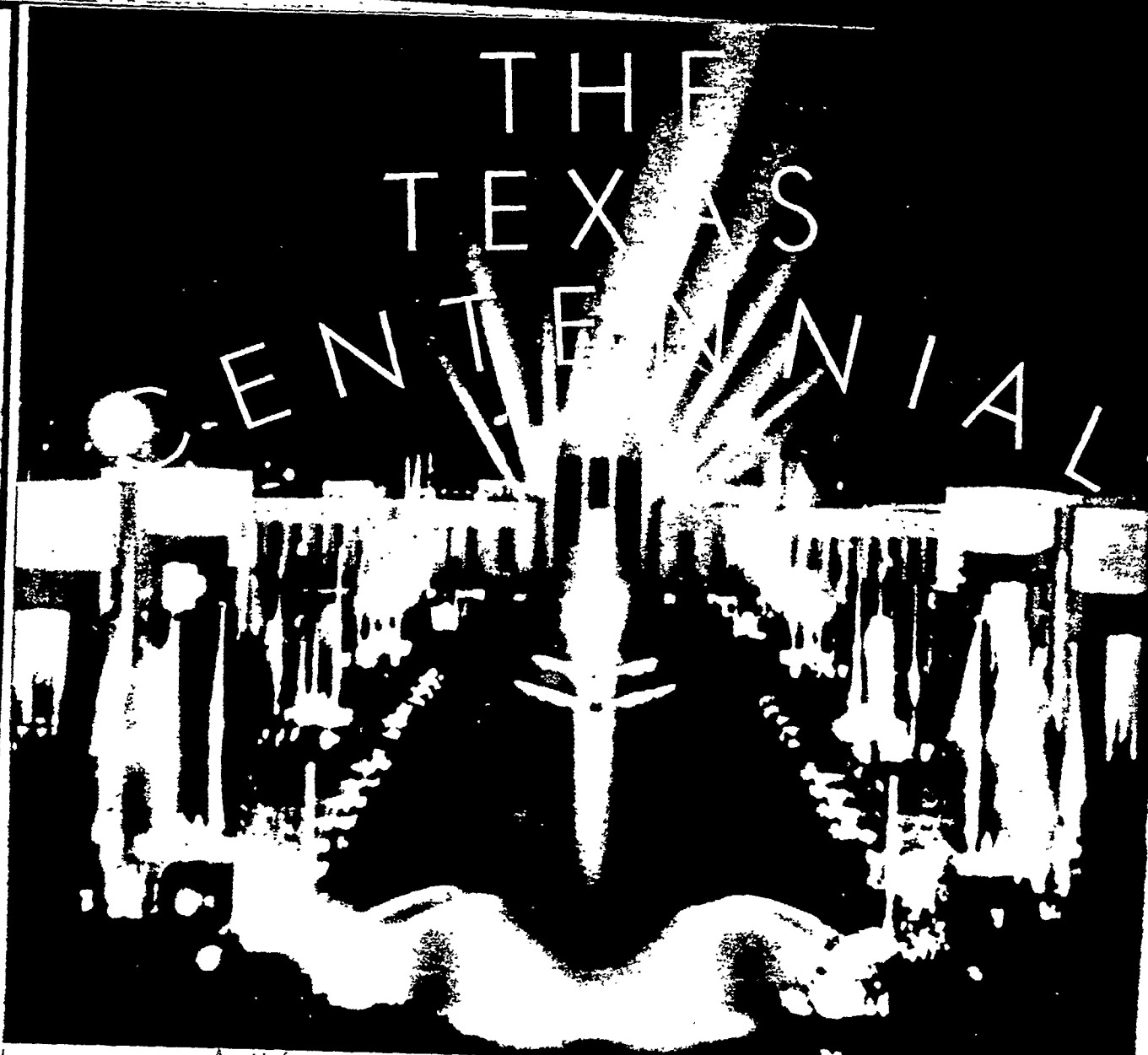


✓ • ASSOCIATED's booth at the Ford Exposition recently held at the Ford Factory Branch at Richmond, Cal. This exposition was sponsored by Ford for the purpose of stimulating their dealers and dealers' service men along merchandising lines. The booth was attended by Mr. Ed Cline of our company and Mr. Ankeny of the Associated Oil Co.



• THIS DISPLAY was arranged by Mr. St. Germain of the Baltimore Division for the Science Open House Day at the Eastern North Carolina Teachers' College. Note the excellent reflection of the motor in the mirror which enabled the audience to view the combustion flame in the quartz window. About 1750 people witnessed the demonstration and heard the Ethyl story. The "Baltimore Kit" may be seen at the right.

PAGE FIVE



• ESPLANADE AT NIGHT.

ETHYL NEWS PHOTO FILE 28/36 No. 5

✓ AS ONE ENTERS the main gate of the grounds of the Texas Centennial Exposition there unfolds a beautiful and imposing vista of An Empire on Parade. The Esplanade of States, 300 feet wide and 1000 feet long, leads from the main entrance to the stately Texas Hall of State which dominates the entire scene. The central feature of the Esplanade is a shimmering reflecting basin, 70 feet wide and 700 feet long, which is fed by fountains at either end. At night its mirror-like surface glows with many colored changing lights which play from pool to buildings and back. Light sources are concealed, giving the effect of gay, brilliant illumination unmarred by mechanical equipment.

Flanking both sides of the Esplanade are some of the finest exhibit halls of the Exposition. On the left, running the entire length is the Hall of Travel and Trans-

portation and the building to the right is dedicated to Varied Industries, Electricity and Communications. Many of our leading industries have their exhibits in these buildings including Chrysler Motors, Western Union, American Telephone and Telegraph, Westinghouse Electric and Pennsylvania Railroad. The Texas Hall of State, a monument to the participation of the entire commonwealth in the Exposition was built at an expenditure of one million dollars for construction and two hundred thousand dollars for decoration and equipment.

The General Motors Building—which was formerly the State Fair's Auditorium—is the first building to the right inside the main entrance. The interior has been completely transformed and modernized for the purpose of the display. Walls covered with beautiful

leather surround the main auditorium which includes all of the original theatre, except the stage, back to the balcony. A similar wall has been built from the bottom of the balcony to the floor, giving the whole exhibition hall a tailor-made effect. The leather for the first four feet is brown, while above this three different shades of blue circle the walls. Probably the most important feature from the point of view of visitors is the 1,800 seats in the balcony for relaxation purposes, the whole being cooled by Delco-Frigidaire air conditioning. In the main exhibition hall 16 motor cars are on display. The four cars grouped around the center are finished in bluebonnet blue, a tribute to the State flower of Texas. Located in a most strategic position just outside the exit of the main exhibition hall where nationally known orchestras entertain daily, is the ETHYL Exhibit. The demonstrating engine is mounted on a very striking blue and chromium cabinet. It is attracting large audiences who, with the aid of a public address system, hear the facts about ETHYL Gasoline. The demonstration has made a reputation for itself among Centennial visitors, as being one of the most interesting and convincing exhibits in the Fair.

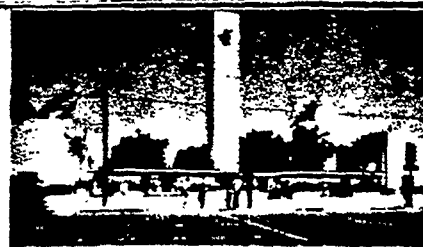
Other interesting exhibits are, du Pont's vivid dramatization of "The Wonder World of Chemistry", Sinclair's mechanically controlled monsters which move in realistic fashion and Texaco's working models that show the complete stages of oil production, refining and marketing.

Located on Federal Plaza is the Ford Exhibition Building which is the largest single exhibit building erected by an individual exhibitor especially for the Centennial. The theme of the display is the use of raw materials of the Southwest in the manufacture of Ford, Lincoln and Lincoln-Zephyr cars.

The Gulf Oil Corporation's \$150,000 radio and public address system fills a long-felt need, and gives radio, for the first time, the part it deserves at a World's Fair. The low, one story, sun-colored structure, built at a cost of \$50,000 is the hub of a radio and public address system the scope and operation of which are comparable to a transcontinental network. The public address system consists of twenty-six sound amplifying units which can best be described as "Singing Towers". These units, or towers, are located at various points all over the grounds. The main building is constructed in the shape of an open letter "U" with studios in the wings, control rooms between and administrative offices in the rear. The court between the wings is for the audience and is capable of accommodating more than 500 spectators. As one stands in this court he is able to get a very clear picture, both visible and audible, of radio broadcasting.

No fair, large or small is complete without its Midway and The Texas Centennial has enough in its amusement area to keep one entertained for many days. Among the most interesting attractions are "The Black Forest" where one can sit at ease in the pine grove that surrounds an ice rink and watch exhibition skaters. After the ice floor show one may dance on the rink as a rolling platform, electrically controlled, covers the ice after each performance; the "Streets of Paris" where the gaiety of Paris night life is created within the huge reproduction of an ocean liner. Inside you find a brilliant night club, gay Paris street scenes and many amusing entertainments, including the famous apple dancer.

Warden Lewis E. Lawes, senior penitentiary official of New York State, presents for the first time in the history of World Fairs, a Crime Prevention Exhibition. The Texas Centennial Exposition is more than a World's Fair, it is a drama that was born and the scenes rehearsed in the mountains and on the plains, in the oil fields and on the broad ranges of Texas. Workers in cotton fields, farmers on the fringe of the wilderness and all the men and women who have made Texas are the authors of this fast-moving spectacle. Contributed by G. E. Townsend, Tulsa Div.



• MAIN ENTRANCE.
ETHYL NEWS PHOTO FILE 7-8/36 No. 6



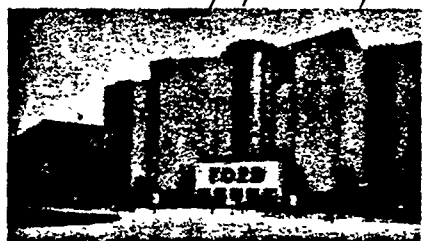
ETHYL NEWS PHOTO FILE 7-8/36 No. 7



ETHYL NEWS PHOTO FILE 7-8/36 No. 8



ETHYL NEWS PHOTO FILE 7-8/36 No. 9



ETHYL NEWS PHOTO FILE 7-8/36 No. 10



• GENERAL MOTORS BUILDING

ETC 21232

ETHYL NEWS PHOTO FILE 7-8/36 No. 11



✓
 NEWS PHOTO FILE 7-8/36 No. 12

FORT WORTH FRONTIER CENTENNIAL

• SECOND only perhaps to the Texas Centennial in historic interest this summer is the Fort Worth Frontier Centennial which in fact, is really an adjunct of the larger show. In any event all roads will lead to the Lone Star State for some time to come. Fort Worth opened its gates to the tourist on July 1st and already thousands have experienced the hospitality and marveled at the showmanship of the southwest.

The genius of that master entertainer, Billy Rose, backed by local pride to the tune of approximately \$5,000,000, bids fair to make this in many respects the show of shows. Rose is said to combine the audacity and showmanship of P. T. Barnum with the artistry of Ziegfeld. For stage setting, costumery and directing he has solicited the aid of the leading experts from London, New York and the west coast. He likes big names and has signed up as attractions, world famous artists of stage, screen and radio, among them Shirley Temple, Paul Whiteman and Dick Powell. However, local color predominates the exposition. "The Last Frontier" is presented on a specially constructed outdoor stage the size of a city block and surrounded by hills, canyons and trails. Colorful scenes of frontier days are enacted wherein wagon trains, stage coaches, cow boys, Indians, cattle and buffalo pour into the vast arena. All the lusty flavor of the old West is presented in a

series of pageants which finally merge into a great musical spectacle presenting a chorus of 500 beautiful girls.

Another spectacular feature is the Casa Manana. A revolving stage 120 feet in diameter, the largest ever built, floated on an enormous lagoon and in the waters about it, beautiful nymphs disport. Tables and chairs sufficient for 4,000 people spread in a fan-shape formation in front of the stage. The whole is illuminated by the largest theatrical lights ever built. In the Pioneer Palace is depicted the night life of frontier days. "The Lady Who's Known As Lou" presides over a typical dance hall, which is 300 by 175 feet in dimension. The Jumbo Show, which played to 1,200,000 during its New York run is housed in a huge circular structure on the type of the old French buildings in which circuses were presented.

These are but a few of the outstanding attractions that are presented on the W-shaped midway, which is one-half mile in length. Beginning October 2nd an International horse show will be staged. Entries have already been received from most of the leading stables in the United States as well as from several foreign countries. An old time rodeo, for which most of the outstanding stars of the country have already been engaged, will open October 9th.

"When we sell 'em
They stay sold"



C. GARY

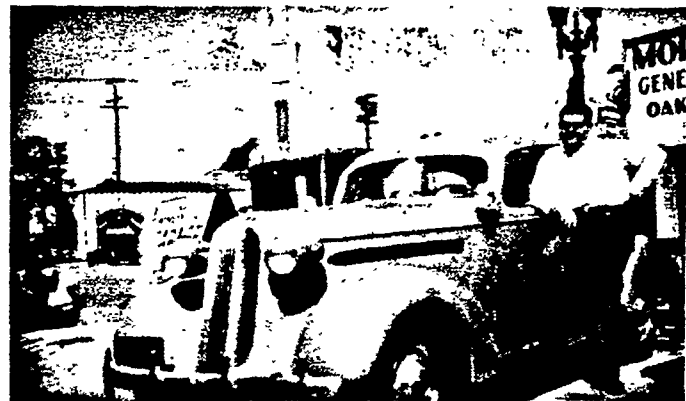
E. T. MORGAN

✓ • "WHEN WE SELL 'EM, THEY STAY SOLD" is the slogan of Messrs. E. T. Morgan and J. C. Gary, who operate the Morgan & Gary Garage in Glendale, California. These enterprising independent garage men specialize in Pontiac work and have built up a reputation for themselves in connection with their high compression conversion jobs. Shown here are the two owners and also a picture of their prize customer, Mr. Stillman Lovern of Santa Barbara, who has had four of his own cars high compressioned. His enthusiasm over the performance he has gotten as well as the workmanship put on the job is such that he has been responsible for the conversion of several cars belonging to his friends. As one of these expressed it, "his enthusiasm has as much horsepower as his engines".

Morgan and Gary started high compressioning automobiles in 1931, at the suggestion of Ethylman Abell. This has been a major activity in the shop ever since, due partly to the fact that the Pontiacs of past years are so well adapted to compression increases, and partly that the boys had the foresight to realize that they can increase their clientele by making their customers' cars perform better than they did even when new. During the past year they have raised the compressions on more than 70 automobiles, which is a

lot of potential Ethyl gallonage to be produced by a two-man shop. They never miss an opportunity to talk to an owner about getting more efficiency, whenever an unshaved head is to be opened for valve grinding or other purposes.

To illustrate the way this business builds up, one of their earlier jobs was turned out for a customer in Glendale. Shortly thereafter, the customer's brother-in-law came over from Arizona, rode in the car, and went back home, got his own car and had the boys fix it up. Recently he sold that car and bought a new model. Morgan and Gary received an inquiry from him about the possibility of improving the performance of the new car by taking a cut off the head—and if they recommended the raise, he told them he would bring the car over.



- MORGAN & GARY's prize customer, Mr Lovern, with his high compression Pontiac.

See E.R.-SP-1



- THE following Service Awards have been made for July and August:

TEN YEARS

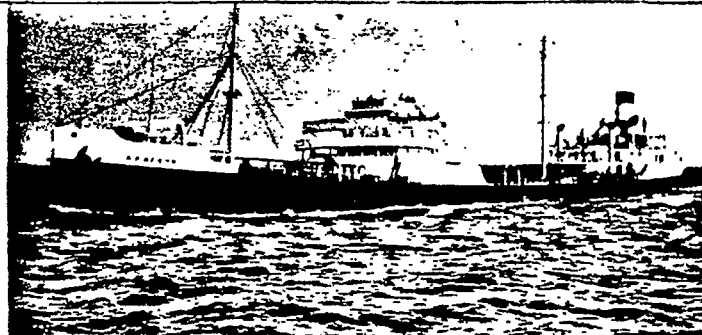
EARL BARTHOLOMEW *Detroit Engineering*
GEORGE CALINGAERT - *Detroit Chem. Research*
C. H. JOHNSON - - - *Manufacturing Dept.*

FIVE YEARS

RAYMOND R. FALLER *Dayton Div.*
EMIL N. GILIG - - - *Detroit Engineering*
D. E. HAMILTON - - - *Tulsa Div.*
WALTER S. MAYES - - *Dayton Div.*
IDA S. MILSTIN - - - *Detroit Gas Test. Lab.*
JANET F. WOOD - - - *N. Y. General Office*



See E.R.-SP-1



• VIEW of the "R. P. Resor" soon after launching. This is the first American tanker of Isherwood Arcform design and has a capacity of 100,000 barrels of gasoline.

100,000 BBLs. OF GASOLINE GO SAFELY TO SEA IN AMERICA'S FIRST ARCFORM TANKER

• To THE uninformed layman, a gasoline tanker, as ships carrying that type of cargo are designated, calls up a vision of heavy steel plates outlined by countless rows of rivet heads and a general impression of greasy dirt and grime. And to this same uninformed layman, the thought of boarding a tanker for a trip, no matter how short, is anathema. He wants no part of what, to him, would be about as safe as inspecting the contents of his automobile gasoline tank in the light of a burning match.

But if that layman could be persuaded to board the Standard Shipping Company tanker, the "R. P. Resor", his illusions about tankers in general and this tanker in particular would be quickly dispelled. He would find that the cabins on the "Resor" are superior in comfort to all except the most modern and luxurious of passenger vessels. And to this physical comfort, he would find there has been added mental comfort in the fact that cabin bulkheads and passageway enclosures (walls and partitions to us landlubbers) are fire-proof.

Naturally the potential fire hazard on a gasoline tanker due to the cargo's high volatility is far greater than on a passenger vessel, but in reality, through the use of the latest development in fireproof construction, "she" is in less

danger of fire than a great many of the passenger ships now in regular service.

"The Resor", which was named after Mr. R. P. Resor, treasurer of the Standard Oil Company of New Jersey, in addition to having the most modern fire-proofing methods employed in its construction, embodies other of the latest methods of construction. It is the first American tanker to be built on the Isherwood Arcform design. The details of this design are far too technical for your editor to understand offhand, since he lays no claim to being a marine engineer, but this design is said to "maintain the propulsive efficiency of a ship within very narrow limits over a wide range of speeds." Propulsive machinery, auxiliary machinery, piping, fittings and valves subjected to a temperature in excess of 130 degrees Fahrenheit are insulated with various types of Johns-Manville high temperature insulations.

The performance of the "Resor" is being watched with a great deal of interest by American tanker operators inasmuch as there is at present a great need for new American tanker tonnage. If the "Resor" lives up to the confident expectations of her builders, both

in performance and economy of operation, it may be that her design will set the pattern for a majority of future tankers.



• STERN VIEW of the new tanker, showing the design and installation of the combined streamline rudder and contra propeller known as the Contra-guide Rudder. It is the first of this type rudder on a new vessel in this country.

NEWS BRIEFS

✓ Our hearty congratulations go to Mr. and Mrs. M. P. Murdock on the birth of their first child, a son, Douglas Fulkerson Murdock born June 25th, 1936 at Olean, New York. Master Murdock tipped the scales at 6 pounds 12 ounces.

✓ History was made in the Baltimore Division on June 26th when that well known bachelor Manager Louis Shank took unto himself a wife. The damsel who was finally successful in breaking down his resistance was Miss Lillian Swift of Iowa City who has been making her home in Baltimore for the last few years. The festivities got under way on the evening of June 24th when a dinner was tendered the groom by a number of his friends and business associates. Among those present were Joe Costello, John Keyes, Jack Cole, Lowell Mason, Joe St. Germain and Dwight Andrews, all of the Baltimore Division; Jack Taylor from the Detroit Laboratory and Cary Harris of the New York office; Boynt Hayward from the agency; also Messrs. Stone, Hall, Katenkamp, Kelly and several others of Lou's friends. It was a grand party and Lou was the recipient of much sage advice and many useful gadgets. The affair was finally brought to a close in the "wee sma" hours with a dairy lunch served in the groom's hotel suite. The following day saw the arrival of a number of out of town guests who motored on for the occasion. These included Mr. and Mrs. Harry Kaley, Mr. and Mrs. Oscar Lewis and Mr. and Mrs. Russell Weston, all of New York. Also Bob Jordan, Field Personnel Director and Frank Cronin of the Baltimore Division, who is now with the G-M Caravan. The ceremony, which took place at 3 o'clock, was attended by some fifty friends and relatives. The bride was attended by her sister, Mrs. John Kelly of Iowa City as matron of honor and Mr. William R. Stone of Baltimore acted as best man. A reception followed at the home of Mr. and Mrs. Warren Shank. The happy couple sailed about six o'clock for a honeymoon in the south amid the rousing cheers and well wishes of the many friends who accompanied them to the steamer. We all extend our hearty welcome to Lillian as a new member of the Ethyl family.

✓ Word has just reached us from Melbourne, Australia of the arrival of a baby daughter to Mr. and Mrs. Dick Scales. The happy event occurred on April 6th and the young lady has been christened Beverly Jane. May we extend our heartiest congratulations to Dick and his wife on this addition to their household. The Ethyl spirit still carries on both here and abroad it would seem.

✓ On June 26th Miss Elizabeth Baird, of Vernon, Texas, became the bride of Richard Sneed of the Detroit Lab. The marriage took place in the garden of Miss Baird's home at 8:15 P.M. under a Texas moon. Congratulations, Dick, and welcome to the Ethyl family, Mrs. Sneed.

✓ A new "Weary-Willie-of-the-Wastelands" has come into being by the transfer of Bill Trelease to the North and South Dakota territory. Last June Bill sniffed the hot blast—called a Dakota breeze—and set out on the scent of high compression tractor prospects. Bill Heck, on the other hand, whom Trelease replaces, is now located in Wausau, Wis. territory covering northern Wisconsin and the upper peninsula of Michigan. Let's hope the many lakes in the region will help to cool "Willie" Heck's fevered brow.

✓ A word of cheer to Mrs. Robert Mescher (San Bernardino), who has been very seriously ill but is now well on the road to recovery, and also to Helmer Abramson, of the Detroit Chemical Lab., who is up and around after the removal of a ruptured appendix.

✓ Dan Guy puts on a show for the children and at the same time gets some Ethyl publicity. Mrs. Guy writes our Tulsa correspondent that Dan had picked up the Ethyl sound film from Bill Munding preparatory to holding a meeting. That night the neighbors were invited to bring their children in and supplementing our film with a Mickey Mouse and one or two others, a real show was put on. Mrs. Guy says the entertainment was pronounced a grand success.

✓ The Atlanta Division announces an addition to its force of field "muffs" in the person of Mr. Thomas H. Tennant. He graduated from Georgia Tech in the class of 1921, with a degree in Chemical Engineering. Tom was formerly Chief Chemist for a Cuban Sugar Company. He will be stationed in Jackson, Miss. and says that he intends to use his chemical knowledge in mixing cotton, punctures, and Mississippi mud to make gold for Ethyl. He is married and has two children.



THOMAS H. TENNANT

✓ Mr. and Mrs. Harold Shaw are receiving congratulations, in which we heartily join, on the birth of a daughter which arrived June 19th. The young lady tipped the scales at 6 pounds 12 ounces. Harold has been with our organization since 1930 and is attached to the Tulsa Testing Laboratory.

✓ The news has just reached us of the birth of a daughter to Mr. and Mrs. Dale Thompson on May 6th, last. Dale is a member of the Baton Rouge Laboratory staff. We send our best wishes to the father and mother and little Terry Ann.

✓ Miss Agnes McCool, of the Accounting Department, was married to Mr. Joseph Sweeney on May 30th, 1936. They spent their honeymoon at the home of her family in Savannah, Georgia.

✓ We welcome to the Ethyl family Miss Mildred A. Ruger. She is attached to the Sales Department in New York as Mr. Kaley's secretary. After graduating from Pace Institute Miss Ruger was associated with Standard Oil of New Jersey until June 19th when she joined our organization.

✓ Robert C. Burns is another new member to be welcomed to our ever increasing family. Bob is in the Administration Department and comes to us from Nassau College where he has just completed his sophomore year.

✓ The Gasoline Testing Department has recently obtained the services of two new men and we are glad to take this opportunity of welcoming them to the Ethyl family. Kenneth P. Marway joined our organization on May 4, 1936 and is located at the Yonkers Laboratory. He graduated from Manhattan College in 1934 with a B.S. Degree in Chemistry. Before coming to us Kenneth was an instructor for two years at his Alma Mater. Donald H. Pulleyblank entered Ethyl service on June 17th last and has been assigned to the Detroit Testing Laboratory. Donald is a graduate of University of Michigan and holds degrees in Mechanical Engineering and Aeronautical Engineering. He was formerly associated with the Holley Carburetor Co.

✓ Congratulations to Harold Gibson, of the Detroit Lab., on the birth of a daughter, Arlene, 8 lbs. 4 oz. on July 10th. Harold now has a family of two and claims the most remarkable thing about these children is their father.

✓ On June 18th Miss Florence Deary became the bride of Frederick Hughes of the Detroit Lab. The ceremony took place at St. Rose Church and was followed by a wedding breakfast at the Savarine Hotel. Congratulations to the bride and groom.

Smooth



The two greatest names in Gasoline
—Now, in one great product

Smooth—cushioned power that lets you glide through traffic snarls—smooth acceleration that puts you nimbly and swiftly “ahead of the pack”—smooth, deep power that conquers hard going without stress or strain—smooth sustained power that brings you to the end of a day-long drive—fresh—and free of driving fatigue—this is the story of Aromax Ethyl—the Aviation Type motor fuel that combines the two greatest gasoline achievements—(Tailor-Making and Ethyl) in one great product!

To really know the thrilling performance that was built into your car—use Aromax Ethyl—and you’ll find too that its smooth, cool running, knockless operation is genuinely economical.



NEXT TIME—TREAT YOUR CAR TO

AROMAX AVIATION TYPE ETHYL

IT'S “TOPS” IN GASOLINE

ETC 21237

*"Henr-e-e! Here comes a new car...
you sell 'em Ethyl!"*



in 43 seconds

**NEW CARS NEED ETHYL TO
KEEP OUT SUMMER KNOCK**

BEWARE a "pinging" sound this summer when you "step on the gas" for pick-up, or hills. It is your engine's way of saying: "I feel hot weather, too. I'm *losing* power, wasting gas and overheating. Give me better gasoline."



KNOCK is the name of that warning "ping." It occurs when a gasoline breaks down (burns too quickly) under the heat of a modern high compression engine.

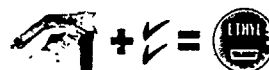
Cars built in recent years have high compression engines. And in summer the knocking evil is at its worst because hot weather increases engine heat.



THE CURE—and preventive—of knock is better gasoline. That is why most oil companies now improve gasoline by adding anti-

knock fluids (containing tetraethyl lead) made by the Ethyl Gasoline Corporation.

They recommend, as their *best* fuel for summer driving, special gasoline sold at pumps marked "Ethyl" on the base or globe.



YOU GET at the "Ethyl" pump:

Enough anti-knock fluid to stand up under the highest engine compression on the hottest day.

All-round quality that is double-checked—by the oil companies and the Ethyl Gasoline Corporation—at the refinery and at the pump.



Give your car the *coolest* fuel this summer. Avoid knock, with its power loss, gasoline waste and overheating. Get more power from each gallon of gasoline you buy!

**FOR 100% ENGINE
PERFORMANCE**

Next time get Ethyl

Hand Folder

FILE COPY - W. GARY HARRIS



ETC 21239

This is a new Ethyl song—"Ethyl has it" which was written by a few individuals connected with the Vacuum Oil Company Pty. Ltd. and presented at their annual staff ball in Sydney on July 11, 1936.

Ethyl has it!

Music by
TEDDIE GARRATT

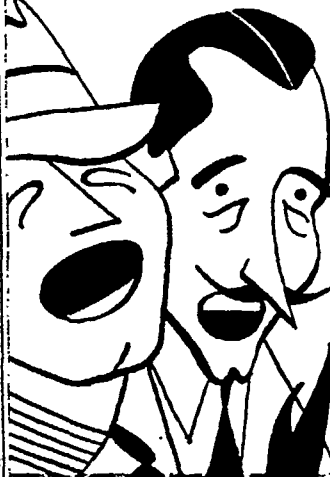
Lyrics by
J. E. PYKE

Verse

There's a girl who's popular
With ev'ry fellow with a car—
Her name is Ethyl,
High-stepping Ethyl.
When you take her for a run
You never have to stop for fun,
She can thrill you as you drive,
Make you glad that you're alive!

Chorus

Other girls you may have tried,
But just take Ethyl for a ride,
'Cos ETHYL HAS IT! ETHYL HAS IT!
She's got ev'rything.
When you're at the steering wheel
She knows just how to make you feel,
For ETHYL HAS IT! ETHYL HAS IT!
She's got EV'RYTHING.
Betty, Janet, Joan or May
Compared with her are slow,
Your slightest wish she will obey,
For Ethyl simply can't say "No".
Many girls walk home, you bet,
But Ethyl's never walked home yet!
ETHYL HAS IT! ETHYL HAS IT!
She's got ev'rything!



JACQUES



This is a new Ethyl song—"Ethyl has it" which was written by a few individuals connected with the Vacuum Oil Company Pty. Ltd. and presented at their annual staff ball in Sydney on July 11, 1936.

Unless otherwise indicated, all artwork and photographs destroyed
May 1957.

Ethyl has

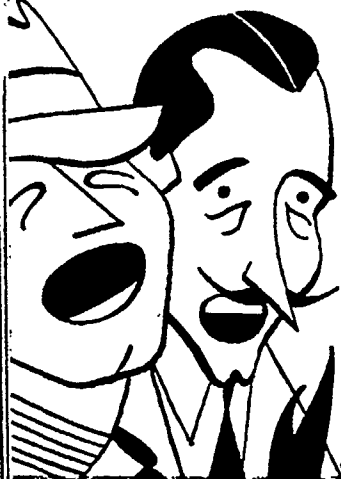
Music by
TEDDIE GARRATT

Verse

There's a girl who's popular
With ev'ry fellow with a car—
Her name is Ethyl,
High-stepping Ethyl.
When you take her for a run
You never have to stop for fun,
She can thrill you as you drive,
Make you glad that you're alive!

Chorus

Other girls you may have tried,
But just take Ethyl for a ride,
'Cos ETHYL HAS IT! ETHYL HAS IT!
She's got ev'rything.
When you're at the steering wheel
She knows just how to make you feel,
For ETHYL HAS IT! ETHYL HAS IT!
She's got EV'RYTHING.
Betty, Janet, Joan or May
Compared with her are slow,
Your slightest wish she will obey,
For Ethyl simply can't say "No".
Many girls walk home, you bet,
But Ethyl's never walked home yet!
ETHYL HAS IT! ETHYL HAS IT!
She's got ev'rything!



JACQUES



ETC 21241



Vol. 3, No. 9

ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

SEPTEMBER, 1936

Published monthly by the Ethyl Gasoline Corporation for the entertainment and benefit of the members of its organization. Address all news items, correspondence or other material to the Editor, W. Cary Harris, 35th floor, Chrysler Building, New York City.

W. CARY HARRIS - - - - - Editor

Associate Editors

EDWIN DOWNS

RUSSELL B. WESTON

CORRESPONDENTS

Atlanta Division	GEORGE W. WARREN
Baltimore "	L. W. SHANK
Boston "	DONALD S. FLYNN
Chicago "	H. C. DEES
Dayton "	R. R. FALLER
Kansas City "	C. M. BERRY
Los Angeles "	CARL ABELL
New York "	R. L. GOLTZ
Toronto "	J. N. FITZGERALD
Tulsa "	HARRY KUHE
Engineering Dept.	JULIAN J. FREY
Manufacturing Dept.	ARTHUR P. STOVER
Gasoline Testing Dept.	E. R. ANDERSON
Export Dept.	HUBERT FOSSETT

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH

AMERICAN BUSINESS SAVES PUBLIC BILLIONS —Creates New Markets for the Farmer

• Do you remember the old carbon-filament incandescent electric lamp—a scientific marvel in its day? But the modern gas-filled tungsten-filament lamp is one hundred times more efficient. If all the electric lamps now in use were replaced by the old lamp of 1904, the cost to the American people for electric current would be increased \$5,000,000 a day! And not only do these modern lamps reduce electric current charges to one-fifth of the 1904 bill, but they give vastly more light.

This is a classic example of what is being accomplished by industrial research in America . . . the motivating force of modern industry and one of the most potent factors in our continued progress and future prosperity. The inventor, Thos. A. Edison's early lamps were crude indeed in comparison with those which we use today. The work of developing it was done almost entirely in the laboratories of a great industrial corporation. That corporation spent \$100,000,000 in a five-year period on research and engineering advancement. Yet it is conservatively estimated that for every dollar the company has made on its innovations, the public has saved anywhere from \$10 to \$100. The \$2,000,000,000 annual public saving on electric lamps alone is more than ten times the company's capitalization.

And out of the same laboratory, in the course of its thirty-five years, have come many other momentous discoveries. But these, it must be remembered, are but part of the fruits of the research activities of only one corporation. American industry as a whole is spending \$200,000,000 yearly on research, and maintaining

(Continued on Page 14)

PAGE ONE

ETC 21242

Filed

MEET MR. WARREN



• GEORGE W. WARREN was born at Clifton Forge, Virginia, on January 30, 1900, but shortly thereafter the family moved to Beckley, West Virginia, where his father engaged in the banking business. After attending the local high school he entered a preparatory school at Annapolis, Maryland, and upon graduation was, for the next few years, engaged in the coal mining business. In 1921 Mr. Warren entered the University of West Virginia at Morgantown, where he continued his studies until his father's death in 1925, when he accepted a position in the bank. Here he remained until May, 1927, at which time he became associated with the Ethyl Gasoline Corporation. His first assignment with the company covered the states of Alabama and Mississippi with headquarters in Birmingham. In September, 1929, he was transferred to Atlanta and in addition to his former territory was given the states of Florida and Georgia. Early in 1930, when Tennessee was transferred from the Dayton to the Atlanta Division, Mr. Warren was appointed manager, which position he continues to occupy.

Mr. Warren is a member of Phi Kappa Psi national fraternity, a Mason and a Shriner, and among other civic interests is active in the Atlanta Rotary Club. In 1931 he married Miss Minerva Apel Stoughton of Augusta, Georgia. Mr. and Mrs. Warren make their home in Atlanta.

G-M EXHIBIT AT TEXAS CENTENNIAL

ETHYL NEWS PHOTO FILE 9/36 No. 1



• THE GENERAL MOTORS AUDITORIUM

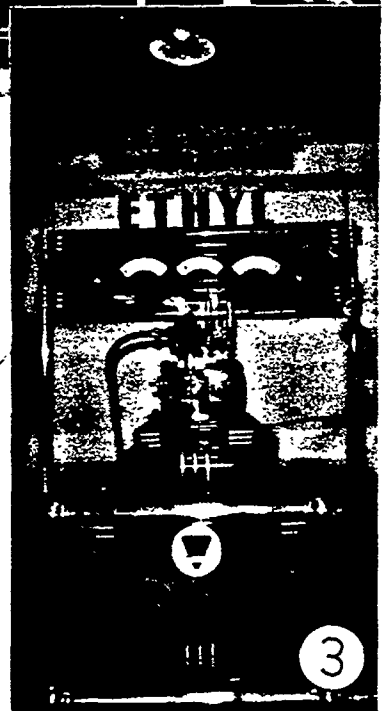
It is located near the main entrance to the exposition grounds and is completely air-conditioned with 1800 comfortable seats for visitors, a haven for relaxation and rest. On the stage, big-name orchestras are presented in complimentary afternoon and evening concerts.

1 PHIL HARRIS, orchestra leader, and Lea Ray, singer, are shown as they inspect one of a series of scientific laboratory displays in the Research Room of the General Motors Exhibit.

2 FRANCES NALLE, Texas "Bluebonnet Girl" and official hostess for the Texas Centennial Exposition in Dallas, is shown as she "sees" the music of Jan Garber's magic violin. Through the medium of an oscillograph, one of a series of scientific laboratory displays in the General Motors Research Room, Miss Nalle is watching the actual sound wave of Garber's fiddle.

THE ETHYL DISPLAY.

4 A VIEW of the main exhibit room of the General Motors Auditorium at the Texas Centennial Exposition in Dallas.



er
er
a-
l-
e
d
,
s
e
h
e
y
h
,
is
d
-
r.
ie
r-
g
y
el
m

ETHYL NEWS PHOTO FILE 9/36 No. 4



- ABOVE: General View of Valley
- AT RIGHT: Looking Up from Floor of Dam



fully loaded, 106,000 pounds each. They were powered by Model A P engines, 5 inches by 6 inches, six cylinders, 706 cubic inches displacement and 4.4:1 compression ratio. Later, five additional jobs were ordered with 5.3:1 compression heads with the intention of operating them on Butane. Operating difficulties developed, however, and it was decided to run them on gasoline and the Mack company was consulted in regard to lower compression heads. Mr. George Duesler, Service Superintendent at the Los Angeles factory branch of the Mack Company, recommended that the 5.3:1 heads be left on, and the trucks be operated on Ethyl Gasoline. He sent Mr. Frank Elliott, of our Los Angeles Division, up to work on the account and after getting the carburetion and ignition worked out, the results with these trucks led to the high compressioning of the whole fleet.

Owing to the size of the loads and the steepness of the route, operation of the original trucks on regular gasoline had shown a fuel consumption of one gallon for every half mile. The Ethyl jobs showed an economy record of .7 mile per gallon.

There were no wide places in the road where one truck could overtake another—they all had to stay in line. As the superintendent expressed it: "The trucks on regular gasoline got in the way of the Ethyl jobs so badly that something had to be done." With a 40% advantage in fuel consumption in favor of Ethyl and the ability to do more work, the answer was obvious. All the other trucks were high compressioned and put

on Ethyl Gasoline and the performance and economy matched the first Ethyl jobs.

As a factor of safety these engines had been equipped with both magneto and battery ignition systems, with the intention of running on the magnetos and using the battery set as "stand-by." Mr. Elliott made a special device similar to the standard Waukesha timing gauge and used the two ignition systems at once. The battery distributor was set with a range of from 5° to 20° ahead of top dead center, and the magneto was readjusted to fire at 16° ahead, as the best combination.

Later operations required more trucks and ten more of the "big jobs" were ordered. These were equipped at the factory with the complete Ethyl setup, which the Mack Company is in position to supply on special order. In addition, ten more smaller trucks for hauling clay were also purchased, and these likewise came equipped for Ethyl. On any other type of operation these "small trucks" would be considered fairly sizeable. They have seven cubic yard bodies and when loaded with clay, weigh close to 40,000 pounds, which is three tons over the legal limit on California highways, but of course, they are not in use on state roads. The big trucks were above the legal limit when empty and required special permits to be moved over the roads to the dam site.

At the present time, the Ethyl consumption on this project is 56,000 gallons per month. Various other equipment not yet on Ethyl brings the total gasoline gallonage up to 80,000 gallons per month.

PAGE FIVE



• ON THE fifth tee—E. M. Clark, Bruce Barton, Harris, Anderson, Pres. Webb and E. N. Downs.



• ONE OF THE FOURSOMES—left to right, Weston, McNulty, Lindsey and Jordan.



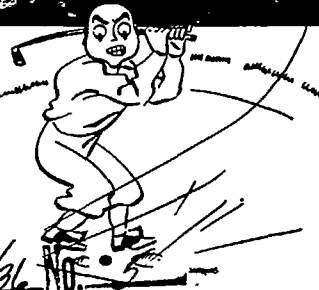
• MAKING the match on first tee—left to right, McElroy, Hayward, Harris and Kaley—in background, John Evans.



• SALES MGR. COARD TAYLOR is up as he goes down off the fifth.



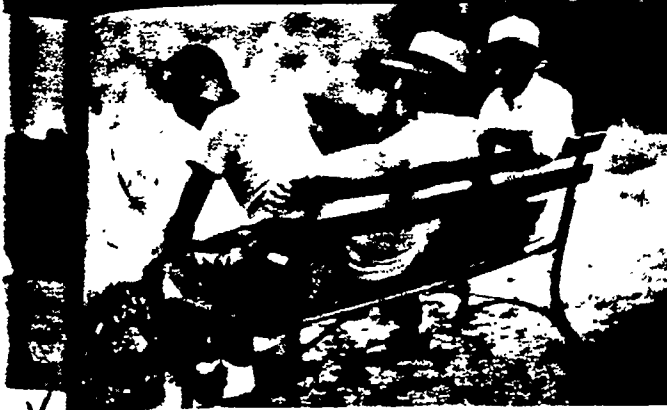
• THE FIRST FOURSOME away—E. M. Clark, Pres. Earle Webb, Coard Taylor and Bruce Barton.



• BRUCE BARTON on first tee.

BBDO HOSTS TO ETHYL IN ANNUAL GOLF OUTING

• ON JULY 10th Mr. Bruce Barton, of the agency, entertained a group from the New York office at the old St. Andrew's Golf Club, where were gathered an equal number of the agency's representatives. Golf was the order of the day and the contestants got off shortly after ten o'clock. Nine holes were played in the morning for the purpose of establishing handicaps for the afternoon matches. Prizes, which were donated by our own organization, were for low gross and low net in Class A and Class B, and a first prize and consolation for each foursome. After the morning round a swim in the pool was followed by a luncheon and the afternoon play began at 2:30. Those representing the Ethyl Corporation included President Earle Webb and Mr. E. M. Clark of the Board, and Messrs. Taylor, Kaley, Lewis, Jordan, McElroy, Volz, Gonzalez, Anderson.



• RESTING UP—Volz, Lewis and E. M. Clark.



ETHYL NEWS PHOTO FILE 9/36 O. 6

Harris, Schaefer, Weston, Downs, R. C. Murphy, John Murphy and Goltz. Mr. Barton was assisted in upholding the honor of the agency by Messrs. Champlin, Scharps, Rau, Duffy, Velsey, Hayward, Donohue, Chiquoine, McNulty, Lindsay and O'Donnell.

In Class A the low net went to Mr. Oscar Lewis and Mr. Barton captured the low net. In Class B it was all Murphy—John of the Yonkers Lab. gathered in the gross prize, while New York Division Manager "Dick" Murphy took the net. In the foursomes the honors went to the agency, who took eight, whereas the Ethyl representatives had to content themselves with but six. Foursome prizes for Ethyl were won by Messrs. E. M. Clark, Volz, Anderson, Harris, Kaley and Jordan, and for the agency Messrs. Champlin, Scharps, Duffy, Hayward, Donohue, McNulty, Chiquoine and O'Donnell. In the evening a dinner was served, prizes were presented and a few informal talks were given by various members of the gathering. Notwithstanding the intense heat (it was 109 on the club veranda) a perfect outing was enjoyed.

ATLANTA DIVISION MEETING

• THE ATLANTA DIVISION held a "Reorganization" Meeting on July 10th at the Atlanta Athletic Club. This term is used because of the numerous territorial changes which were officially announced involving four of the five states in the Division.

Mr. M. M. Smith, former Georgia representative with headquarters in Atlanta, has been replaced by Mr. Sidney Pruitt erstwhile Tennessee representative. Mr. Ernest Smith of Birmingham was transferred to Nashville and to replace him Mr. W. C. Petty was moved to Birmingham from Jackson, Miss. The Mississippi territory is being covered by Mr. Thomas H. Tennent who joined our organization in June.

The meeting, which was one of the most interesting held, was about evenly divided in discussion of routine matters, sales and sales promotion and the showing of 16 reels borrowed chiefly from the Bureau of Mines. These films included: The Story of the Gasoline Motor, The Story of Gasoline, Along the Firing Line (The Story of the Sparkplug), The Power Within, The Metals of the Motor Car, and Petroleum, the Liquid Mineral.

Among the routine matters discussed were Ethyl distribution in the smaller towns and promotional and educational meetings. As regards the latter, it was pointed out that while a great deal of work had been done with men's colleges, two fields had been neglected—the women's colleges and the negro institutions. Mr. Warren named eight large negro colleges in the territory which were maintained by the Episcopal Church alone and brought out the point that in the Atlanta Division a large percentage of gasoline is bought by colored people. Arrangements were also made for ten weeks of demonstration work with Gulf Refining Company at state fairs in September and October.



• THE following Service Awards have been made for September:

TEN YEARS

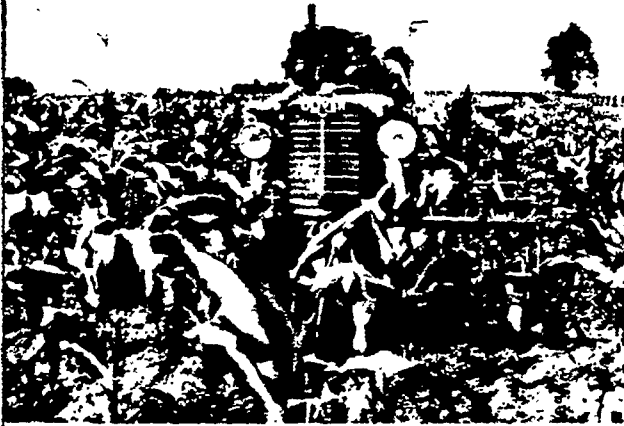
H. M. GRIERSON - - - Accounting Dept.
JOHN HALLAY - - - Yonkers Lab.

FIVE YEARS

GEORGE RICK - - - N. Y. Sales
HELEN A. WELCH - - - Boston Sales
MARIAN ZIEGLER - - - Detroit Sales
EDWIN F. REHWOLDT - - - Accounting Dept.



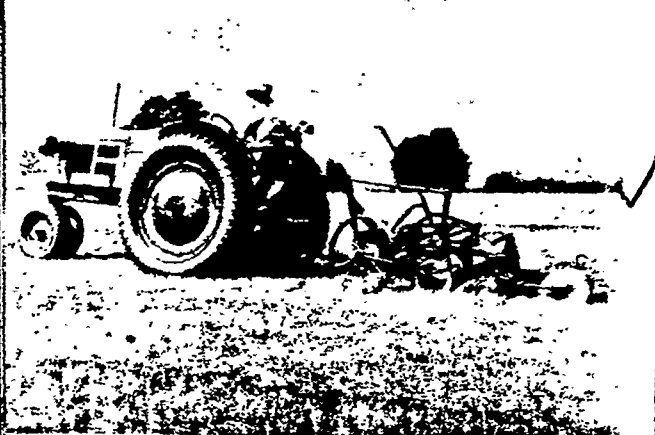
MECHANICAL REVOLUTION REACHES THE FARM



• OLIVER 70 with cultivator.



• MINNEAPOLIS-MOLINE ROW CROP operating with drill planter for small grain.



• OLIVER ROW CROP with two bottom ploughs.

• A MECHANICAL revolution is under way in American agriculture, which, engineers declare, faces the greatest economic change since the invention of the reaper by Cyrus H. McCormick in 1831. Power farming is the mainspring of the advance and its chief instrument is the tractor, endowed by the automotive engineer and the motor fuel expert with a new and unsuspected capacity for balancing the farm budget.

Already "unprecedented progress" has been made in the more economical production of power, the greatest need of the farmer, according to Mr. Krieger of our Detroit laboratories. "Six months ago," he tells us, "farm tractors were ten years behind automobiles in engine and fuel development; today they lead in power efficiency." Spanning a decade of automotive achievement in half a year, tractors now finding their way to the fields, surpass automobile engines on the basis of engine efficiency.

Economic realities are working a rapid change in the policies of the farm equipment industry and practices which for twenty-nine years governed tractor design, production and merchandising are being modified to comply more nearly with those employed in the automobile field. It is now possible to reduce the power cost per acre by 50%, thus increasing the farmer's

ETHYL NEWS PHOTO FILE 9/3/47 No. 147
OLIVER ROW CROP 70

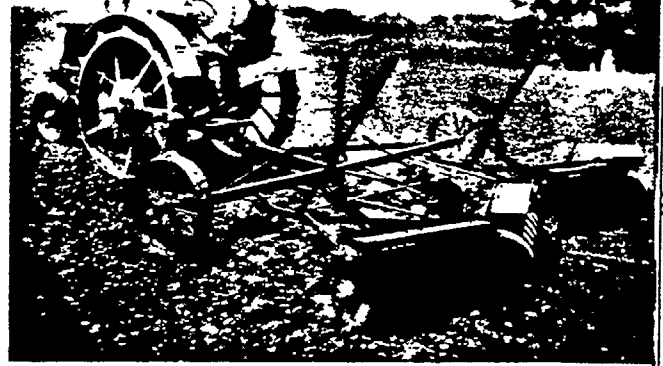
See for -
Tractor



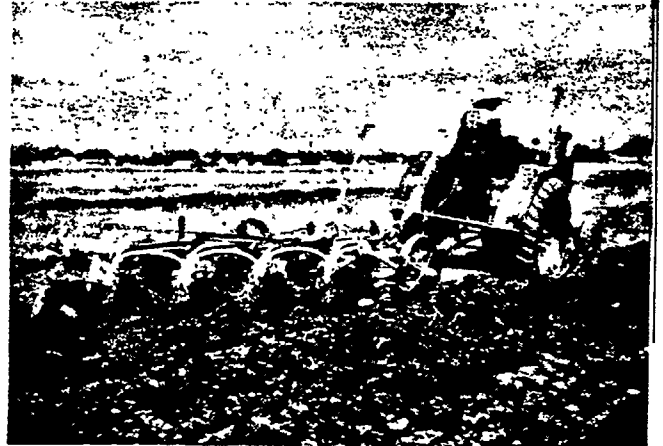
EVOLUTION THE FARM

margin of profit. This results from the use of better designed and higher compression engines and from the utilization of rubber tires. It can conservatively be said that with better engines in tractors in place of the type heretofore in general use the power output will either be increased by at least 25% or the fuel consumption will be decreased by a like amount. Rubber tires will also either increase the drawbar pull of the tractor by no less than 25% or will accomplish a 25% reduction in fuel consumption.

A recently tested tractor with a six to one compression ratio burning regular gasoline of 70 octane number, established new records for fuel economy and horsepower output for this type of engine. The overall efficiency of the new tractor is well above that of current production automobile engines. The low first cost, low operating cost, and low maintenance cost of the tractor



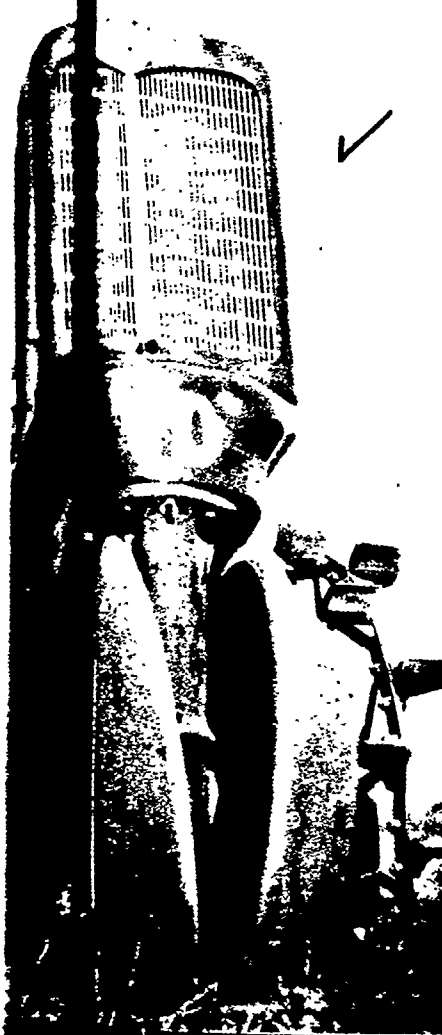
• MINNEAPOLIS-MOLINE Row Crop with wide cut disc harrow



• MINNEAPOLIS-MOLINE farm tractor pulling four bottom plough.

are ushering in a new day in the production of more economical power for American agriculture.

The trend in farm power equipment seems closely parallel to that in the automobile industry, where the greatest volume is attained with the smaller and less expensive cars. The small tractor is relatively so inexpensive that many farmers who have previously felt that they could not afford such equipment are now buying them. The average tractor works about 500 hours a year, using about 1,000 gallons of motor fuel and thirty gallons of oil. If the 1,250,000 tractors now in service were changed over to "high compression," there would be a saving of over \$30,000,000 in fuel and of \$13,750,000 in oil costs per year for American farmers. Expansion of industrial activity will be supported by the agricultural need of improved power equipment, Mr. Krieger holds. He foresees continuing prosperity for tractor manufacturers, pointing out that if the nation's farmers purchase only a fraction of the machinery which they require, the farm implement factories would be taxed beyond their capacity.



THE G-ADAO TAKES OFF AGAIN

PART II

Last month the first installment of this flight over the "Dark Continent" took us to Capetown. In this issue Pilot Lucke gives us his impressions of the journey back to the home port. He says:

• ON OUR RETURN TRIP to London we took the Westerly route via Livingstone and Kimberley. We flew over Victoria Falls and were fortunate to be there when the moon was full and witness a Moon Rainbow in the spray, the beauty of which is beyond description. We were inclined to agree with the American who, coming straight to Victoria from Niagara was forced to admit that he "Hadn't seen nuthin'."

Leaving Broken Hill, we made for Elizabethville and Leopoldville, over country which does not invite forced landings, the surface being one enormous forest crossed by many large rivers. We were much impressed, however, with the development work done by Sabena and the Air Afrique Lines, the former having landing strips hacked out of the forest every 20 or 30 Kms. It would be impossible to take off from a lot of these landing grounds, but they are all either on the railway or on the banks of navigable rivers where one would not be marooned indefinitely. Radio and meteorological facilities are to be had throughout the Congo and French Equatorial Africa.

Flying over "Darkest Africa" we were surprised to find telegraph poles, good hotels, newspapers and a widespread "air-mindedness"—a land where people are still discovering things. At the Globe Hotel, Elizabethville, "mine host," an ex-Belgian cavalry officer, has

spent six years hiking. On one occasion he walked from Leopoldville to Nairobi; and his wife has seen him lynch ten Leopard Men at a time. Now he runs an up-to-date hotel which has electric light and a modern refrigerator. Perhaps the most interesting character there is an Englishman who, stationed in many parts of Africa, has in each place laid out a golf course and has so impressed the populace that it is a social error not to play golf that the whole town joins the Club. Here one can have two caddies for four-pence a round.

While at Leopoldville we received, through the courtesy of the French Authorities in Paris, permission to fly through French Equatorial Africa on the route Fort Lamy-Khartoum, and the Governor at Brazzaville gave us permission to fly Bangui-Fort Lamy. The Commandant at Brazzaville gave us an up-to-date map of

the latter route, and was exceedingly helpful in other ways. On reaching Bangui we found that the one hotel had no vacant rooms. However, the French Army Air Force came to our rescue, insisted on opening up a new block of buildings and furnished it for the night. The Commandant entertained us at dinner and made arrangements for our early start in the morning. Such hospitality is tremendously appreciated.

Next day we flew at 13,000 ft. to escape heat and the bumps, only descending for as short a time as possible at Fort Archambault and Fort Lamy to refuel and arrived at Kano in the evening, where we were immediately subjected to Anti-Amaryl regulations. These constitute sleeping in a "mosquito-proof" building which was inhabited by yellow and blue lizards and a snake, which we killed, although the day may be spent as one likes. This isolation building is over half a mile from its nearest neighbor, also in accordance with regulations. Nigeria is ideally suited for private flying in view of the very good weather, the long distances and the fact that nearly everyone in the country is constantly traveling. There is hardly an aerodrome in the place, though the interest in flying is intense.

Two days in the heat of Kano completely ruined our windscreens, although we covered them every day with fabric, but it was the most interesting place that we visited. Perhaps this was largely due to the fact that the Medical Officer was kind enough to take us 'round and point out items of interest which would otherwise have escaped our notice. One of these was a beautiful Mosque, the largest in Kano, though quite empty. As the story goes, an Englishman had presented it to the native city on his retirement. The Emir of the period allowed the work to be completed and then issued an edict forbidding anyone to use it because the building overlooked the wall of his women's quarters. In the market place here, one can change any silver currency known, though paper money is not popular among the natives, as white ants destroy it when buried.

Every evening after five o'clock we played golf on a perfectly bare and sandy course. We were informed, however, that within a week of the commencement of the rainy season it grows long thick grass. One evening just as we finished playing, we saw from a distance of some miles, a black cloud approaching at what appeared a very slow speed. We dashed up to the aerodrome, hoping to reach it before the sand arrived. Visibility was so bad, however, that we abandoned the car and ran the rest of the way to the aeroplane, which we held down for an hour and a half during the worst sandstorm we had ever seen. Next day we were informed that the wind speed had probably not exceeded forty miles an hour, but one gets an exaggerated idea of a gale when it carries sand.

Captain Taylor, of Imperial Airways, kindly assisted us by going over our maps and marking in one or two conspicuous landmarks on the route to Geneina, where we arrived on the evening of the day we left Kano. Here we found a solitary white man, the Commandant of the local camp of the Western Arab Corps, who

(Continued on page 16)



• KANO NATIVE CITY, Nigeria, Victoria Falls.

ETHYL NEWS PHOTO FILE 9/36 No. 8



• VICTORIA FALLS, Aerodrome in center background.

ETHYL NEWS PHOTO FILE 9/36 No. 9

• CROCODILE-PROOF bathing pool, Zambesi River, Livingston.



ETHYL NEWS PHOTO FILE 9/36 No. 10

HERE and THERE

• An interview with Mr. Paul W. Osborne, Educational Adviser for the CCC Camps in Missouri and Kansas, resulted in the scheduling of a series of meetings. The meetings have been arranged daily until all CCC Camps have been covered in the States of Missouri and Kansas. The entire enrollment of each CCC Camp will be in attendance at these meetings, together with the important officers in charge. These meetings total 74 in number and four will be given a week, starting August 10th and winding up the early part of December. The schedule has been arranged so that the two field men engaged in the demonstrations will only work on them alternate weeks. This activity will be carried on by Messrs. Louie Wilson and Carl Berry.

• The Suderman Ford Agency of Sanger, Cal., recently held some economy tests with Ford V-8's and Lincoln Zephyrs. The route was over a 200-mile stretch from Sanger to Richmond, Cal. In order to insure maximum performance the agency called in Mr. Hume Chenault of our Los Angeles Division to aid them in properly tuning the cars for Ethyl. The results were extremely satisfactory with an average for the entire fleet of 22.2 m.p.g. and two of the Fords did better than 25 m.p.g.

• During the week of June 23rd, Mr. Frey, of the Detroit Laboratory, forsook his regular duties to hold four meetings for the salesmen and managers of the Illinois Farm Supply Company of Chicago. We quote from a letter by the manager of same, regarding these meetings:

"It would be difficult to estimate the actual value of your services to our organization, as no one can predict the information that was carried away from the meetings and will be put in use by the 500 or more managers and salesmen who attended the meetings. Our appreciation of this kind of service cannot be properly expressed, but I do know that you contributed a very important part to the program, for which we wish to thank you."

• A talk and demonstration was recently given in Fitchburg, Mass., by one of our representatives to the trade school teachers of the entire state. At the close of the meeting we were given a list of all those in attendance and also the assurance that most of them were agreeable to having us conduct similar meetings during the coming school year before these classes.

• A Mr. Van Wissman, who got his early training in motor tune-up and the high compressioning of automobiles at the Atlanta branch of the United Motors Service, turned up a few weeks ago in Hollywood, Cal., as tune-up specialist for the Schonlaw Chevrolet Company. Through his efforts, a meeting was arranged with this agency and our men given an opportunity to tell our story. This contact resulted in all the agency's demonstrators being put on Ethyl, customers being approached on the desirability of using Ethyl, and high compression recommended to owners of older models.

• At the suggestion of our Mr. C. E. Smith, of the Chicago Division, the announcer on the White Star radio broadcast, Mr. Ty Tyson, has recently been mentioning Ethyl. Typical of Tyson's remarks are: "Rowe hit that one like he had a tankful of Mobilgas Ethyl," "When you are starting out for your week-end trip fill your car with Mobilgas Ethyl and be assured of a perfect week-end," "Stop this hot weather knocking by filling your car with Mobilgas Ethyl," and "There is only one thing better than Mobilgas and that is Mobilgas Ethyl."

• The Florida Motor Line, which has been using Ethyl Gasoline in their entire fleet for some time, had the effectiveness of high compression and Ethyl brought to their attention through an unfortunate accident.

Some time ago this company purchased ten new streamlined busses, which were equipped with engines having high compression pistons, giving a compression ratio of 5.3 to 1. All

busses were operated for a period of nine months, at which time one had to be withdrawn from service due to an engine block cracking. In order that this bus might be kept up the minimum length of time, a new engine with low compression pistons, which was immediately available, was accepted. The bus was put back in service and has just completed nine months of operation. The type of service after the engine replacement was identical with that which this bus had formerly rendered. Fuel, maintenance and carburetor were the same and engine timing was at factory specifications. The high compression engine originally used in this unit showed a saving of 18.43% over the standard job with the low compression head. This is a saving of 18% on the fuel bill of Florida Motor Lines.

• While the Parade of Progress was showing in the Baltimore territory, it established some new records of which our people there are justly proud. The first of these was an attendance of almost 2,700 the first hour the show opened, and the crowd was an audience of 10,000 for an eight-hour day.

The Caravan provided educational entertainment in ten of the Baltimore Division states and while in Columbia, S.C., chalked up an attendance of 12,436. It appeared in ten South Carolina cities, namely, Charlotte, Raleigh, Durham, Greensboro and Winston-Salem, and was viewed by over 12,000 people. In Virginia stops were made at Roanoke, Lynchburg and Charlottesville, where 28,870 viewed the wonders of the Caravan. During the stay in Lynchburg the tent was blown down by a hurricane which caused a tremendous amount of damage and cut the attendance considerably. In Baltimore, the city in Maryland where the "big top" was set up, the attendance totaled 39,614.

Ethyl's representatives, Messrs. Cronin and Lupton, received able and welcome assistance from all the men in the Baltimore Division as the Caravan passed through their respective territories.

• The following letters were received by the Chicago branch of the United Motors from two of their customers and are reprinted with their permission:

CHARLES DANIEL FREY COMPANY
Chicago, Illinois

Mr. J. W. Thomson,
United Motors Service,
2549 South Wabash Avenue,
Chicago, Illinois.

Dear Mr. Thomson:

The high compression cylinder head that was installed in my Oldsmobile 8 Sedan has most definitely improved the operation of the car. The motor is so much smoother and more powerful that it feels as if eight more cylinders had been added. I am greatly indebted to you for suggesting this job, for I had no idea that such a small investment could result in so much satisfaction.

Very truly yours,
L. R. SCHMIDT

A. R. BOSCOV
Chicago

United Motors Service,
26th and Wabash Avenue,
Chicago, Illinois.

Gentlemen:

I want you to know that I am very much pleased with the improved performance of my Oldsmobile since you installed a high compression cylinder head. The performance at all speeds has been improved and with no sacrifice in economy. It was just like a super-charged job.

Very truly yours,
A. R. BOSCOV

GULF

NEW NO-NOX ETHYL

• ON JUNE 1st, the Gulf Oil Corporation announced their new 80 octane number Gulf Aviation No-Nox Ethyl with one of the most complete campaigns attempted by any oil company. The advertising program covered the northeastern states included in Gulf's Pittsburgh, Philadelphia, New York and Boston Divisions. All mediums for advertising were used:

1. **Radio:** The closing announcement on each Sunday evening program gave the points of superiority.

2. **Posters:** A special attractively colored No-Nox Ethyl Poster, showing the Gulfhawk plane was on display throughout the territory during the month.

3. **Newspapers:** Dominant copy appeared regularly in a long list of papers. In addition, publicity releases were sent to all newspapers. We quote from a typical example: "Fuel demands of the present-day streamlined, high-compression cars have changed greatly from those when father was a boy and the chugging, one-cylinder automobiles operated on any fuel that had the slightest odor of gasoline. The 1936 model needs a gasoline that actually meets the requirements for aircraft operation. . . . Many motorists have discovered that ordinary gasolines cause their motors to 'ping' when they are on steep grades and when they are accelerated too rapidly. Science has proved that this annoying knock can be attributed directly to the use of a low octane gasoline; and as the octane rating of gasoline is raised, the motorist received more speed, power, and economy from each gallon of gasoline. It was to meet these demands of the modern car that the new 80 octane aviation grade gasoline was developed."

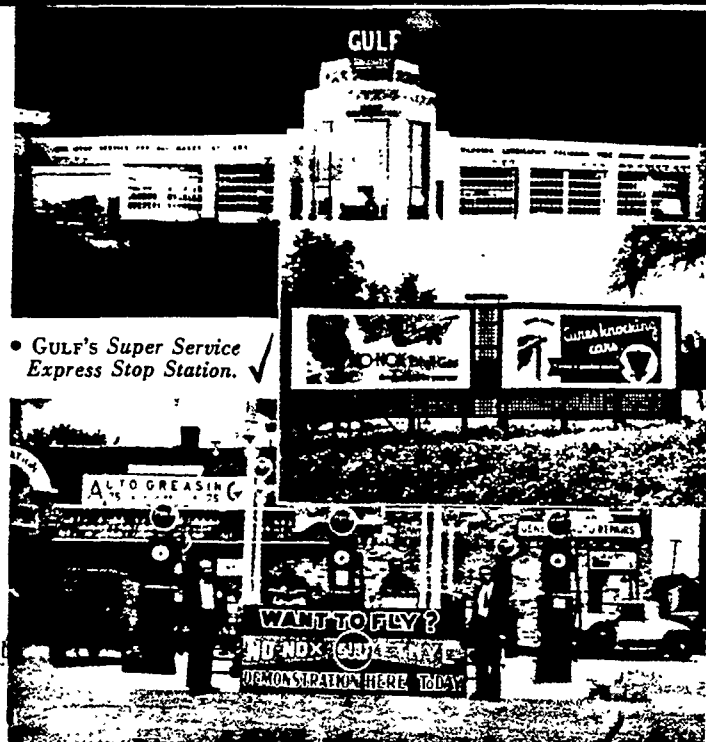
4. **Folders:** For June 1st monthly statements and hand-outs at service stations, a short, effective folder was used.

5. **Banners and Pump Shields:** A 3 x 6 foot banner in blue and orange announced the new No-Nox Ethyl at service stations. As an additional tie-up with the point-of-sale, pump shields of the same copy and colors were fastened around No-Nox Ethyl pumps.

6. **Gulf Dealer News:** The June issue contained a special insert announcing the campaign, improvements in the fuel and a message urging dealers to solicit No-Nox Ethyl sales.

7. **The Gulf Automobile Fleet:** Instructions were issued to use nothing but No-Nox Ethyl in company cars. The psychological appeal at service station purchases is obvious. Gulf representatives also could convince themselves of benefits derived since the majority of their cars are 1935 and 1936 models.

Our New York, Boston, Dayton and Baltimore Divisions worked in close cooperation with the Gulf Oil Corporation to make the campaign a success. As early as April, Gulf division meetings were held for the managing personnel at which were presented our sales portfolio comprising our 1936 advertising campaign



• ABOVE, Frank Stablein of our N. Y. Division, at Gulf Dealer Station Demonstration.

• INSET, two panel head on Route 17 near Portville, N. Y., arranged by M. P. Murdock of our N. Y. Division.

and the profit incentive to customer companies. This was followed by the No-Nox Ethyl campaign announcement.

During May and prior to the introduction of the new fuel, No-Nox Ethyl meetings and demonstrations were held for branch offices and bulk plants which included the entire Gulf organization in the four divisions affected. These were followed during June with a complete series of service station demonstrations and contacts, particularly at key dealer locations who in many instances had never seen the Ethyl demonstration. Most of the effort was devoted to showing Gulf dealers how satisfied and steady customers were made and held by recommending No-Nox Ethyl to them.

The dealer reception and interest made desirable continuing service station demonstrations during July even after the advertising campaign was over. The enthusiasm shown by the Gulf organization and dealers has been outstanding.

Prior to the June poster showing, our plant operators were contacted to change the Ethyl poster locations during that month to tie in with the No-Nox Ethyl showing. In many instances the two posters were side by side making a very effective display. Gallonage reports as received from the Gulf Oil Corporation show substantial increases in No-Nox Ethyl sales. Early August figures indicate similar increases for this month. On the third cover are examples of poster, pump shields and banner displays used which show the consistency employed by Gulf in driving home the idea of the new Aviation Trade No-Nox Ethyl.

(Continued from Page 1)

some 35,000 trained scientists in approximately 1,600 laboratories. The first industrial research laboratory in America was established in 1888; but it was not until the World War, with its pressing problems of raw materials and production, that the true value of research began to be widely recognized. Since that time our progress in this important activity has been astonishing. No less than 200,000 new products have resulted from chemical research alone, and the sum total of benefit to the nation in terms of increased jobs, wages, conveniences and comforts is simply beyond the range of calculation.

A few outstanding examples may serve to show what has been accomplished. In 1913 it took six weeks to apply the 22 coats of old-style paint and varnish to an automobile body. In 1920 it took a week and a half. In 1923, the research chemist perfected the first of the nitrocellulose lacquers, and the time was cut to two days. Today, an automobile body can be painted from the raw metal up in *one day*—in colors that formerly did not exist and in finishes of a durability once undreamed of. Moreover, the cost of producing an automobile is materially reduced, and the public gets a better car for a good deal less money. Similarly, the new quick-drying enamels for home and industrial use have completely revolutionized the problem of painting and made it far easier and less expensive for every one. This scientific development of the paint industry has been a boon to the fisherman and the farmer because of the use of large quantities of fish oil, cellulose and soybeans in the new process of manufacture.

Nor is the paint industry the only one which is creating new markets.

Indeed, the automotive and other industries are creating so many new uses for the farmer's products that they may in the end prove to be the real answer to the agricultural problem.

One of the most remarkable records of technical advancement has been made in the field of communications. The Bell Laboratories spend \$15,000,000 a year on research and the results are apparent to every man, woman or child who ever uses a telephone.

A far cry is the modern phone from the crude and limited apparatus of the early days of telephone communication. No other country in the world can match our telephone service.

The textile industry has been revolutionized by scientific research, with great advantage to the public in the cost, comfort and appearance of its clothing. To cite one example, artificial silk, of a fineness to set standards for real silk, is now worn by everyone. Last year one billion pounds were produced.

Volumes could be written on the advances in metallurgy. Lighter, stronger and more durable metals have been created literally by the thousands. To say nothing of countless alloys that science has given mankind in the past quarter century. The automobile and the airplane have been notable among the products improved by these new metals. Today's low-priced motor cars would cost five times as much if it were not for the development of high-speed steels. Another outstanding

example is rubber. Today it has more than 30,000 uses and these are being multiplied continually. Research has increased tire mileage from 3,000 to 20,000 miles per tire. It has made them so trouble-proof that the tire-repair kit has vanished from the tool chest of the average automobile. It has made possible the reclamation of 200,000 tons of old rubber yearly. And has created an artificial rubber which, even at its present price stands as a definite barrier against any future anti-American rubber monopoly. Or take petroleum. Where at first we got only five barrels of gasoline from 100 barrels of crude, today we actually get 104 barrels! Improved laboratory-perfected refining methods have accomplished this, thereby conserving our oil supplies. Research has even found a way to manufacture gasoline, if necessary, from coal. Tetraethyl lead, developed in research laboratories, made the modern high-compression motor possible, and virtually eliminated "knocking." New lubricating oils have a film-strength triple that of a year or two ago.

Furthermore, the amazing development of refinery by-products into useful commodities has not only created a host of new substances and services such as anti-freeze ingredients, fruit-ripening agents and insecticides, but it has also helped reduce the cost of oil and gasoline.

What then must be the total saving on all the 200,000 and more new products which research has created. And what must the gain have been in terms of comfort and convenience for all of our 127,000,000 people! We have traveled a long way beyond our cave-dwelling ancestors in the art of making life more pleasant, safe and enjoyable. In 6,000 years of recorded human history the last century has seen more progress than all the 59 centuries preceding. And of these 100 years the last 25 have far surpassed the previous 75.

This sudden acceleration in the rate of material progress has been due almost entirely to the influence of science upon the satisfaction of human needs. And nowhere in the world have its benefits been so widely distributed as in America . . . nowhere are the pleasures and conveniences of this new age of science enjoyed so universally, by rich and poor alike.

That is because science has been made an integral part of the industrial system by which our needs are satisfied . . . because it has been actively developed in the public interest but with the "drive" and energy of private enterprise. For this we must thank not only Industry, but our American tradition and American way of life. No such tremendous and far-reaching progress as this could have been accomplished simply through governmental or bureaucratic control. For progress requires not only knowledge, but an activating motive and will. It is this which Industry has provided. Industry has given us both science and the will and ability to adapt it to human use. Truly, for its foresight and vision in research—for the initiative and courage and administrative skill which it has brought to the advancement of science—Industry has earned the loyal support and friendship of every American citizen.

—Reprint from bulletin distributed by
N. W. AYER & SON, INC.

NEW WING FOR MANUFACTURING PLANT

ETHYL NEWS PHOTO FILE 9/36 No. 11



**I used the
fastest petrol
you can buy!**

Serge Eyston

EYSTON WINS NEW LAURELS WITH ETHYL

• TO THE general public the big thing about the performance of the English speed demon, Captain G. E. T. Eyston, on the Utah salt flats this summer, was the fact that he broke practically all endurance records. This achievement culminated in a 48-hour record at an average speed of 136 miles per hour. But behind this is a story that will be of unusual interest to the initiated. According to the London "Morning Post," it was the first time in history that such speeds have been secured over such long distances with the car running on gasoline which is available to the ordinary motorist. No special fuel was used. The BP Ethyl was put in barrels at Fulham and shipped to Utah. The Automobile Association of England and the American Automobile Association have issued certificates declaring that the barrels of BP Ethyl were sealed in England and the seals were unbroken on arrival at Utah and that the fuel used was taken only from these barrels.

A further test made by the A.A. in England consisted of a comparison between the fuel in the barrels and that taken from pumps at public garages in Birmingham, the Eastern Counties, North London, and other places. In every case the garage gasoline was of exactly the same quality as that supplied to Captain Eyston.

The conclusion is that the time when specially prepared fuels are needed for speed record-breaking is over, and that modern technology enables the same fuel to be used for high speeds as that employed for running family cars on the public roads.

• DUE TO DECIDED increase in production of Ethyl and "Q" Fluids during recent months, the Manufacturing Department has made additions to both personnel and plant facilities. A view of the new office is shown here.

Among the newcomers to the Deepwater plant are Arnold Webb, who has been transferred from the accounting department in the New York Office to the Plant Accounting Department; George Elder, recently added to the traffic department; Marguerite Ware and Dorothy Fowser, stenographers; Robert Hitch, laboratory assistant; Everett Clough and John Ebell, blender-assistants. Also Merrit P. Martin and Eleanor M. Dougherty.

By the addition of a new wing the Plant office has recently been enlarged to nearly twice its original size. At the time the addition was built the entire office was subdivided into smaller individual offices for various departments. A newly installed telephone system and air conditioning make the office completely modern.

During the past year the facilities for bulk storage of Ethyl and "Q" Fluids have been doubled, and the storage facilities for raw materials in bulk have been substantially enlarged. At the present time the blender building with its facilities for handling empty drums and for storage of full drums and sundry equipment is being enlarged to take care of production increases.

The company now owns and operates seventy-two tank cars and five tank truck units, in which over seventy percent of the Fluid production is shipped. Demand for Ethyl is so great that these units are kept constantly on the move.

Increased demand has also necessitated an increase in the number of drums used in shipping Fluid to points not supplied by cars or trucks. Private trucking companies maintain a fleet of modern, well kept trucks exclusively for handling full and empty "Ethyl" drums. In line with all other phases, it has been necessary for these companies to increase their equipment recently by the addition of several new units.



NEWS BRIEFS

THE G-ADAO TAKES OFF AGAIN

(Continued from page 11)



• Here is a snapshot of Julian Frey in native garb while delivering addresses last June to the managers of the Illinois Farm Supply Company of Chicago. Further details on these meetings are mentioned elsewhere in this issue.



• We wish to take this opportunity to welcome John W. Wright, who on August 1st joined our New York Division. He attended St. Lawrence College and has had ten years experience in the oil industry as sales representative for several of our customer companies. As an employee of the Webaco Oil Co. he sold the first Ethyl Gasoline to a Rochester dealer. He has also operated his own jobbing business at which time he was one of our jobber licensees. John has been assigned to the Western New York State territory. He, Mrs. Wright, and their three children, live in Rochester, New York.



• Joe St. Germain sends this picture of a couple of big ones he took out of Moosehead Lake in Maine. Their total weight was 7 lbs. 8 ozs., but the "mighty-mite-from-Maine" pulled them in single-handed.

• On June 30th an eight-pound daughter was born to Mr. and Mrs. Oakley Eskridge. The young lady will be named Sylvia. We offer the parents our hearty congratulations. Oakley is chemist in the plant control laboratory at the Manufacturing Plant.

• Mr. and Mrs. Guy Keller announce the arrival of Gwenlyn Ruth Keller on July 26th, 1936. Mr. Keller is a member of our Baton Rouge Laboratory staff. Congratulations, Mr. and Mrs. Keller.

• Mr. Albert Merz, who for twenty-six years has been Office Manager of the National Transit Company, 26 Broadway, New York, has joined our organization and will be attached to the Accounting Department. Mr. Merz is married and lives in Hollis, L. I. We welcome him to the Ethyl family.

was suffering from malaria.

In spite of this illness he entertained us in his quarters, where we greatly appreciated the first hot tub which we had had for some days. Geneina to Khartoum is a particularly uninteresting stretch of country and we were glad to finish with it in a day.

Between Khartoum and Cairo we suffered from the prevailing northerly wind, and the journey which when going south, took just over eight hours, required ten on the return flight. Arriving at Cairo we thought we were nearly home, but when we got to Sollum and learned the experiences of British machines going through Libya, and of a dust storm at Bengazi, we considered going via Athens. However, as this would have meant a return to Cairo to get permits, we risked the flight through Italian territory, and hopped across the barbed wire entanglement to land at Amscat. Here we were thoroughly searched, but treated with great politeness and allowed to proceed on our rather devious route across the desert along the edge of the prohibited area. We stopped at Bengaze, Tripoli, Ben Gardane, Tunis, Algiers, Barcelona, Marseilles and Paris on the way home and landed at Heston on the evening of May 11th. The flying time was just over 200 hours, and the distance covered about 28,000 miles.

No mechanical failure of any kind took place on the machine and the only troubles we experienced were a slight end-play on the magneto bearings, splintered windcreens and periodical slackening of the control and brake cables. We carried puncture proof liquid in our tires and in view of the thorns encountered, consider this precaution most necessary. The trip, apart from the interesting country through which we traveled and the new acquaintances made, has left three outstanding impressions:

The efficiency of the various British police forces, who can be very helpful to itinerant pilots, provided that they are kept aware of that pilot's movements.

The interest in things aeronautical throughout the continent, where even black boys carve model aeroplanes.

An increasing demand for an aircraft, the specifications of which include the following items: Two or more engines, range 750 miles minimum, flaps, VP propellers and sufficient power to take off. Brakes. Wing landing lights, the angle of which must be easily controllable by a pilot having the usual number of hands and feet. Air scoops for the pilot's cockpit. Last, but not least, windcreens which are watertight, and which do not splinter when subjected to strong sunlight.

There are too many German and American aeroplanes in Africa, and we think it would pay some British manufacturers to take a flying holiday to Cape Town and see for themselves what kind of performance is wanted.

NEW
GULF

NO-NOX Ethyl Gas

Aviation fuel for your car



AVIATION FUEL
FOR YOUR CAR!
NEVER KNOCKS ... GREATER POWER
GULF's *new* NO-NOX ETHYL GAS

AVIATION FUEL
NEVER KNOCKS
GREATER POWER
GULF's *new* NO-NOX ETHYL
AVIATION GRADE
GASOLINE

ETC 21258



***"Four dogs... four pops...
and ten of Ethyl for a hungry car"***

Modern automobiles, with their high compression engines, **STARVE** on "low compression" gasoline. Their hunger cry is the **KNOCK** that cuts down power, wastes gas and oil. Read why.



LOOK OUT for a "pinging" sound when you push down the accelerator to pass another car with safety or to make a hill in high! It means that your motor is knocking and failing to give *all* its power at the times you need it most—that you are wasting gas and oil.

DON'T BLAME your car for knock. Blame the fuel! Knock occurs when gasoline breaks down (burns too quickly) under the heat of the modern high compression engine. It's your engine's way of saying: "I'm starving on low compression fuel. Give me more anti-knock!"



THAT'S WHY most oil companies now are improving their gasolines by using anti-knock fluids (containing tetraethyl lead) made by the Ethyl Gasoline Corporation.

These companies recommend as their best year-round fuel—and the richest in anti-knock quality—the special gasoline sold at pumps marked "Ethyl" on the globe or base.



YOU GET at the Ethyl pump:

Enough anti-knock fluid to stand up under the highest engine compression and bring out all the power of your car.

All-round quality that is double-checked—by the oil companies and the Ethyl Gasoline Corporation at the refinery and at the pump.



GET RID of that expensive knock! Stop that waste of gas and oil! Give your car the fuel it needs—the gasoline richest in anti-knock value—and the highest in quality by every count. Next time get Ethyl!

FOR 100% ENGINE PERFORMANCE NEXT TIME GET ETHYL



ETHYL NEWS PHOTO FILE 1436 No. 1

FILE COPY - W. CARY HARRIS



OCTOBER

ETC 21260

THIS MONTH'S COVER

• The etching "Mountain Trail," Elk Creek, Montana, was executed by Mr. Branson Stevenson. The illustration shown on Page 8 of this issue, called "Last Chance Gulch," is also by him. Mr. Stevenson, who makes etching a hobby, was the first one in the state of Montana to practice the art. He designed and built his own etching press, manufactures his own inks and imports hand-made paper direct from Japan and England. He has shown at the International Exhibit in Los Angeles, and some of his work is in the Seattle Art Museum.



ETC 21261

Unless otherwise indicated, all artwork and photographs destroyed May 1957.

THIS MONTH'S CO

✓ • The etching "Mountain Trail," Elk C was executed by Mr. Branson Steve tration shown on Page 8 of this issi Chance Gulch," is also by him. Mr. makes etching a hobby, was the first of Montana to practice the art. He des his own etching press, manufacture and imports hand-made paper direct England. He has shown at the Inter in Los Angeles, and some of his work Art Museum.



ETC 21262



ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

Vol. 3, No. 10

OCTOBER, 1936

Published monthly by the Ethyl Gasoline Corporation for the entertainment and benefit of the members of its organization. Address all news items, correspondence or other material to the Editor, W. Cary Harris, 35th floor, Chrysler Building, New York City.

LARGEST TAXPAYER ✓

W. CARY HARRIS - - - - - Editor

Associate Editors

EDWIN DOWNS

RUSSELL B. WESTON

CORRESPONDENTS

Atlanta Division	GEORGE W. WARREN
Baltimore "	L. W. SHANK
Boston "	DONALD S. FLYNN
Chicago "	H. C. DEES
Dayton "	R. R. FALLER
Kansas City "	C. M. BERRY
Los Angeles "	CARL ABELL
New York "	R. L. GOLTZ
Toronto "	J. N. FITZGERALD
Tulsa "	HARRY KUHE
Engineering Dept.	JULIAN J. FREY
Manufacturing Dept.	ARTHUR P. STOVER
Gasoline Testing Dept.	E. R. ANDERSON
Export Dept.	HUBERT FOSSETT

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH

• The nation's largest taxpayer, the petroleum industry turns over to various governmental bodies each year a sum *seven times greater* than the annual instalments due on the British war debt.

Gasoline taxes alone have brought in \$5,000,000,000 during the past fifteen years, providing most of the funds spent on highways during that period. Petroleum today pays more than 11% of *all* taxes collected by *all* governments—federal, state and local.

Each barrel of crude oil, costing an average of 97 cents at the well, carries a tax load of about \$1.14 before it finally reaches the public. The direct taxes on gasoline alone in 1935 totaled \$795,000,000—*making a sales tax of 38% to 40% on every gallon purchased.*

The fact that the petroleum industry has been able to bear such burdens and still provide high-grade fuels and lubricants at the prices prevailing today, is striking evidence of its efficiency.

The petroleum industry is, in fact, an outstanding example of what can be accomplished, under the American system, in the satisfaction of human needs. This vast service of supply has been built up within one man's lifetime. And it has been built up entirely by the free play of individual energy... individual foresight and resolution... individual enterprise.

Petroleum today holds a place, among the essential commodities of America, comparable with food and clothing and shelter. It has enormously increased the comfort and security of existence... its variety and pleasures. For every one of the 127,000,000 men, women and children in this country it has made life far more happy and worthy of the living.

And it has done this to a degree which has no parallel in any other country in the world. Such is the American epic of oil... a fascinating and inspiring record of human achievement... a living symbol of the vitality, the capacity for growth and progress, of a great people.

PAGE ONE

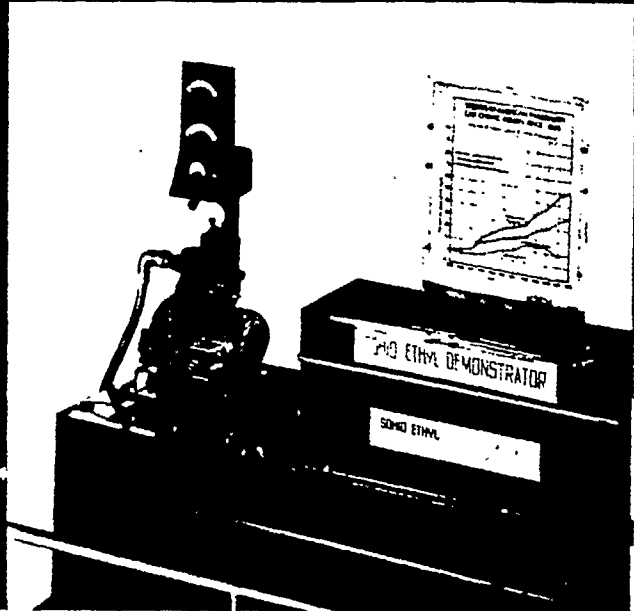
MEET MR. FREY



• JULIAN J. FREY was born at Baltimore, Maryland, March 28, 1905. After attending local preparatory school he entered Lehigh University, graduating in 1927 with a degree of Bachelor of Science.

Mr. Frey came with the Ethyl Gasoline Corporation in the Fall of 1927 as a member of the Engineering Department which was, at that time, located in Yonkers. Shortly after this Department was transferred to Detroit Mr. Frey assumed the duties of contacting the automotive manufacturers. After spending some time in both the Chicago and Tulsa divisions he returned to Detroit in 1930 to take charge of the technical Sales Department which position he still occupies.

Mr. Frey is married and lives with his wife and two sons in Birmingham, Michigan.

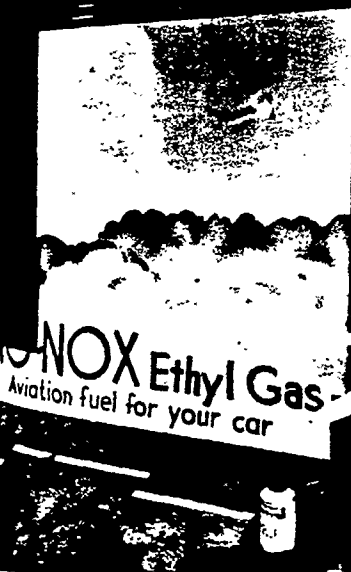


Relief 7/24
 ABOVE, RIGHT: The Sohio Ethyl Demonstration Unit and Display on view in the Standard Oil Company of Ohio Exhibit at the Great Lakes Exposition.

• ABOVE LEFT: A Night View of the Main Entrance of the Great Lakes Exposition at Cleveland, Ohio.

• THIS STATION, operated by Mr. L. R. Whitsett in Sacramento, California, was only opened in January, but has already built up quite a remarkable gallonage. This is the more noteworthy in that most of the time construction work has been in progress on the roadway in front of the station. At present they are doing about 28,000 gallons a month and it is estimated this should reach 40,000. The Ethyl ratio is about 10% with 88% leaded regular.

Returned to owner



• DISPLAY in the Gulf Building, Pittsburgh. The exhibit occupies a room 17 x 23 feet, having a full plate glass front, and is on the main corridor of the building. The Gulf Building is one of the largest in Pittsburgh and is the tallest structure between New York and Chicago. By actual count, 13,000 people pass through these corridors daily.

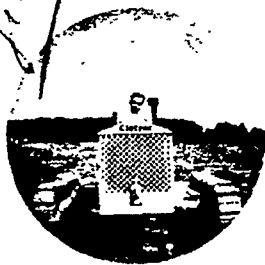


• THE ELKS Magazine Good Will Tour Chevrolet tanks up with Standard Ethyl Gasoline in San Francisco. Ethylman Chenault seems pleased with the procedure. Ethyl Gasoline was used exclusively by the Elks Caravan on their Good Will tour this summer.



✓ • FIVE houses were burned at Ottawa, Kansas, when a gasoline transport truck overturned in the main residential street. Burning gasoline flowed for several blocks and firemen fought the blaze five hours.

ETHYL HOLDS FIRST TRACTOR SCHOOL



• J. E. BOUDREAU



• C. J. MCFARLANE



• H. C. DEES



• D. M. GUY



• PROF. SHAWL
University of Illinois

• Realizing the growing importance of the farm market, the Ethyl Gasoline Corporation determined to train a group of their representatives so they would be better qualified to cope with the particular problems of the agricultural field. To this end a "travelling tractor school" was inaugurated under the direction of Messrs. C. G. Krieger and A. F. Wilt and the men chosen for this particular work were: Messrs. Stablein, New York; Dedo, Dayton; Guy, Tulsa; Nixon, Kansas City, and Hedden of Chicago.

The following from the Chicago Division were also included in the course as their routine field activity includes considerable work with tractors: Messrs. Crane, Harrison, Dollahan, Donohue, Colvin and Trelease.

In addition to the above, Messrs. Kaley and Frey were on hand the first four days of the course and Messrs. Boudreau and Dees were in intermittent attendance. The last 3 days Messrs. Berg, Berry and McCullough of the Kansas City Division were present.

The "school" opened Monday morning, August 3rd, at the Palmer House in Chicago and continued until Saturday evening, August 15th, when the session closed with the meeting in Minneapolis, Minnesota. During this period the "students" put in one day as guests of the International Harvester Company in Chicago. The group inspected the tractor and twine plants and was shown ten reels of moving pictures on farm machinery and its application. After the pictures, Mr. A. P. Yerkes of the Harvester Company gave an interesting discussion on problems of the farm market. At an afternoon session in the Chicago offices of the Oliver Farm Equipment Company the group was addressed on various phases of the business by Mr. Cal Sivright, President; Mr. J. M. Tuck, Sales Manager; Mr. B. C. King, Advertising Manager, and Mr. George Deckard.

The night sessions in Chicago included talks by Dr. R. T. Goodwin, Head of the Fuel Research Department of the Shell Petroleum Corporation, on Diesel fuels; Mr. E. F. Tomlinson, Sales Manager of the Industrial Division of the Goodrich Rubber Company, spoke on the application of rubber tires for farm machinery; Mr. H. G. Davis, Head of the Research Department of the Farm Equipment Institute, on our place in the farm market and Mr. L. R. Marchant, Manager of the Illinois Farm Supply Company, on their organization and the reasons for adopting their high compression program.

At the University of Illinois, where one day was spent, the men had an opportunity of familiarizing themselves with the seventeen different models of tractors. Each man was required to start and operate all of the various models. This in itself was quite a feat since the tractors ranged in size from a large Caterpillar Diesel to a small 3-cylinder farm unit. Moreover the discussion by Professor R. I. Shawl of the Agricultural Engineering Department on the operation and service of the farm tractors was one of the high-lights of the course.

Three days were spent in northern Illinois giving all day meetings to the farmers under the auspices of the Illinois Farm Bureau. The mornings were occupied by overhauling ailing tractors and the afternoons to discussion of the morning's work, talks on high compression and settling of complaints. These meetings were outstanding as they proved to the group the interest and appreciation the farmer has for technical information.

The Oliver factory at Charles City, Iowa, was visited, where the making of a tractor was followed from the foundry to the final paint job. Interesting talks were given by Mr. Roy Melvin, Plant Manager and other officials, on design as well as production problems.

In Minneapolis, Mr. A. W. Lavers, Chief Engineer of the Minneapolis-Moline Company, described the Twin City tractors, following which the group inspected the plant. Here their Advertising Manager gave a talk and presented Moline's motion picture "Power on Parade."

On another occasion, Mr. J. L. Nolan, Manager of the Oil Department of the Farmers



• ETHYLMEN attending the school.

• LEFT: TRACTOR FLEET.

• BELOW: L. R. Marchant, Mgr., Illinois Farm Division, talking to farmers at Plainfield meeting.



Union Central Exchange, conducted the group through their oil blending plant at St. Paul. Following this he provided six new high compression Co-Op tractors for the men to operate. Mr. Nolan then discussed the Farmers Union set-up and method of operation.

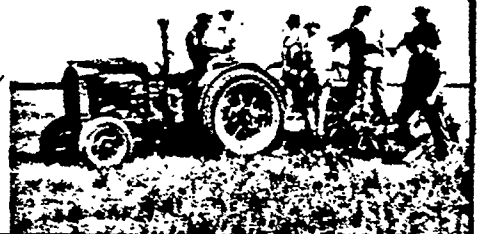
An entire day was devoted to the Donaldson Air Cleaner plant at St. Paul. Mr. Frank Donaldson discussed air cleaners in detail and following this an inspection was made of the plant, where not only the production and testing of air cleaners was observed, but several demonstrations were given with the aid of glass air cleaners. Through the unique construction of these cut-away models, actual operation of the air cleaner could be observed. Following this trip, a movie on road testing of air cleaners was shown and talks were given by several of the engineers and officials of the Company.

(Continued on Page 11)

• RIGHT: Farmers watching Plowing Demonstration.

• LOWER RIGHT: Group of farmers following tractor.

• BELOW: Tuning up a tractor.





• MR. L. R. BURROUGHS, Ethyl's Representative in this research activity.

RESEARCH ON THE ROAD

✓
• ALTHOUGH the buyers of the nearly three million automobiles produced annually in this country may feel that perfection has been reached, the manufacturers are never satisfied, nor do they lessen their constant research to add to the appearance and efficiency of the next year's models. Higher engine speeds, larger quantities of heat liberation per unit time, and other factors accompanying the improvement in the modern car have made it necessary to continue the research for improved materials for practically every part of the automobile

Modern tire-making keeps pace with the constant improvement in motor car design in much the same manner as fuel and engine research. The industry carries on extensive experimental work to improve texture and treads and thus attain longer tire mileage and non-skid characteristics in the interest of greater economy and safety of driving. Even the effect of the tire on radio tone and quality is not overlooked.

The similarity in the testing procedures followed by the various companies is interesting. These tests take two forms, namely laboratory work and field work. The former is usually followed in the earlier stages of development and later or simultaneously supplemented with the indispensable field or road tests. It is upon the latter type of tests that more emphasis is placed. Much could be said in describing laboratory and road test procedures in general but we will confine our comments to the cooperative test work of United States Rubber Products, Inc., and the Ethyl Gasoline Corporation.

Although the two companies were interested in entirely unrelated parts of the test vehicles, it was believed that the Ethyl Gasoline Corporation could do some experimental tire testing and United States Rubber Products, Inc., a similar amount of fuel and engine parts testing without additional expense and with the possi-

bility of substantial mutual benefits. Accordingly this program has been in operation since the first of the year.

United States Rubber Products, Inc., conduct tests in much the same manner as we do in that their preliminary work is run in the laboratory. They use laboratory machines whenever possible because this offers the best means of controlling the test conditions and obtaining data quickly. These tests consist of running tires on test wheels or other machines designed to produce such failures as separations, broken fabric, wire cuts, tread cracking, tread wear, or rupture. Here also they do preliminary work for performance, such as stability, noise, rolling resistance, power consumption and heat development. For other characteristics—riding quality, noise on various types of pavement, type of tread wear, skid resistance, etc.—they must use their test fleet. Furthermore, the question that is asked by makers of parts assembled in the car, is what the car will do while operating on the road in service required by Mr. Average Driver.

In the laboratory procedure of various automobile parts manufacturers there is little opportunity for cooperative research as laboratory machines of each are set up to produce a specific failure in a particular part. This is not the case, however, in road tests. Moreover, both Ethyl and U. S. Rubber have similar road test equipment as to vehicles coupled with certain similarities in instrumentation which makes a happy combination for consolidating the work. Although the equipment is required to do double duty this does not add materially to overall test cost and enables each to cover a wider variety of operating conditions in a given period of time.

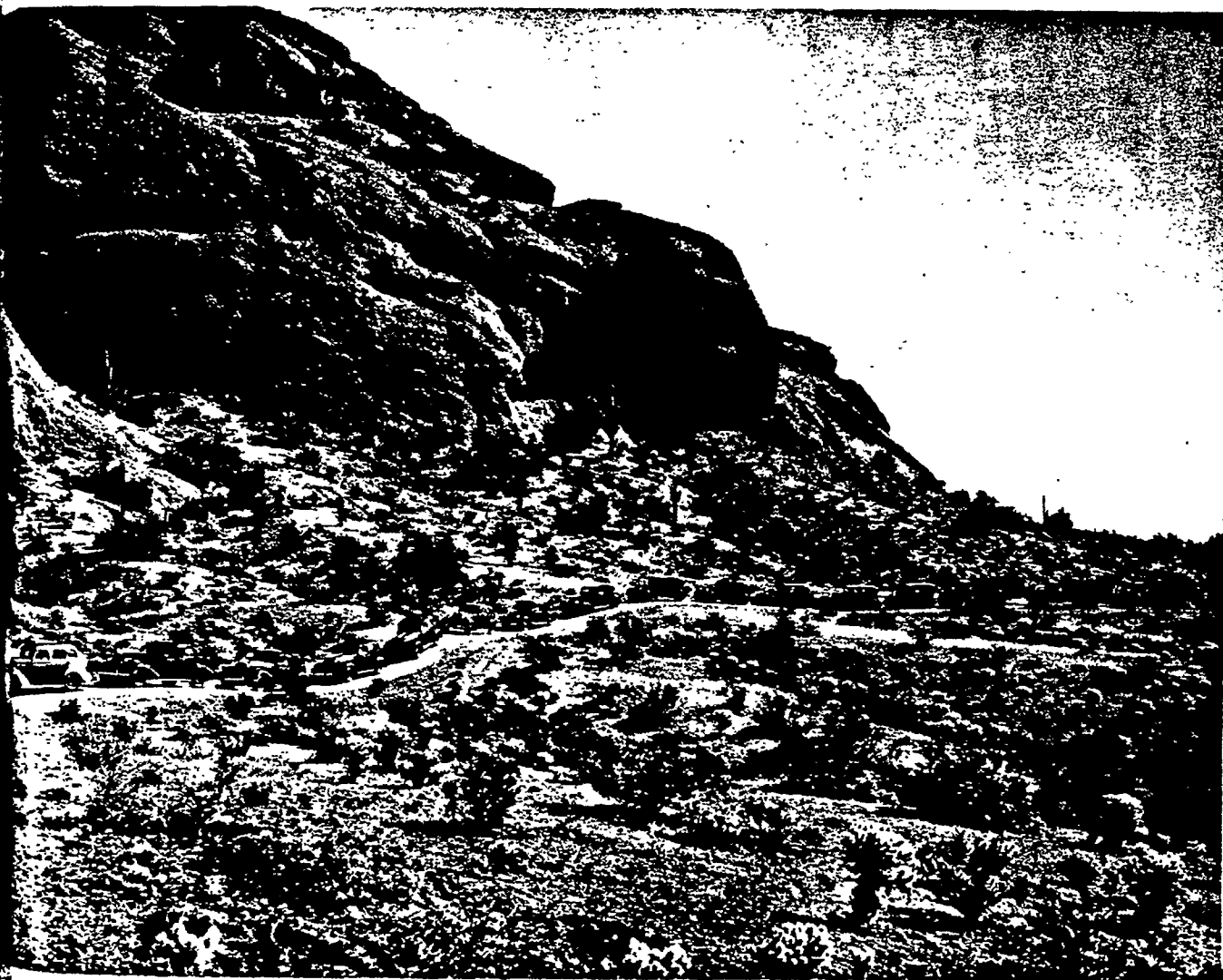
As the work of our test fleet is known to most of our personnel, we will only mention here the test work of U. S. Rubber Products, Inc. They operate continuously,

17 vehicles under carefully controlled conditions running approximately 8,500 car miles per day or a little more than 2,400,000 miles per year. The fleet operates out of Phoenix, Arizona, during the greater part of the time. The location was selected because it provides practically every requirement for test purposes, including relatively high average temperatures, various road surfaces, a wide range in altitude and good driving conditions. The test vehicles, excepting the earlier makes and some trucks, travel normally a loop of 370 miles twice daily—over all kinds of roads and under every possible condition. Most of the fleet is moved to their Detroit Plant for a short stay during the summer months.

The drivers are constantly observing the characteristics of the tires and tubes which they are testing. The performance of the product in regard to noise, stabil-

ity, type of wear, etc., is continuously being checked throughout the endurance tests. Here their product is compared with competitive products and their standard product compared with proposed new developments. Each tire is inspected and gauged daily and a continuous record maintained.

Up to the first of August, we have been able to take advantage of about 550,000 car miles in our tests. Tests have been running almost continuously in eleven cars and trucks. Due to the fact that more than one test was conducted in some of the cars at the same time, we have accumulated about 750,000 test miles. United States Rubber Products, Inc., personnel have been very co-operative and since the quality of fuel and other features of the tests not pertaining to tire testing are well standardized, we have been able to get some splendid results.



• TEST FLEET in the field.



HELENA OF YESTERDAY

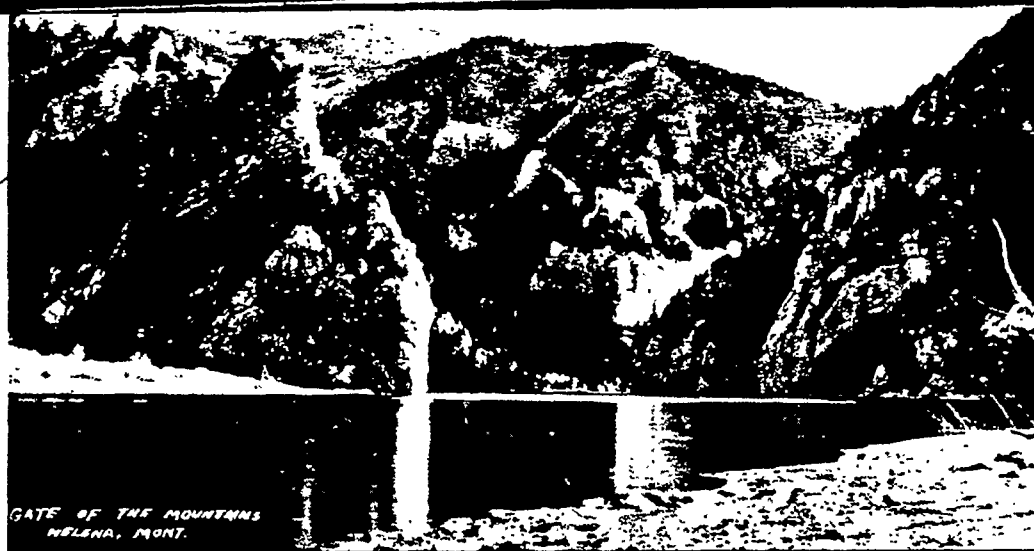
• PICTURE a mountain gulch—its surface scarred and gouged from crest to crest; fresh heaps of earth giving the effect of battle trenches; tents, shacks and rough shelters thrown together hap-hazard; feverish activity seething among rough clad miners—excitement mounting constantly with the word of each new gold strike; saloons and dance halls the scene of revelry—feuds and fights—if you can picture these things you have some idea of Helena, Montana, soon after four prospectors struck pay-dirt in Last Chance Gulch the summer of 1864. The names of the quartet were Cowan, Miller, Crab and Stanley and their discovery started a first-class gold rush.

In the autumn following, residents of the mining camp decided that the place should have a name and chose Helena. During this period law and order was preserved by vigilantes—a band similar to others that sprang up throughout the west, composed of fearless men determined to battle the unruly hordes of crime.

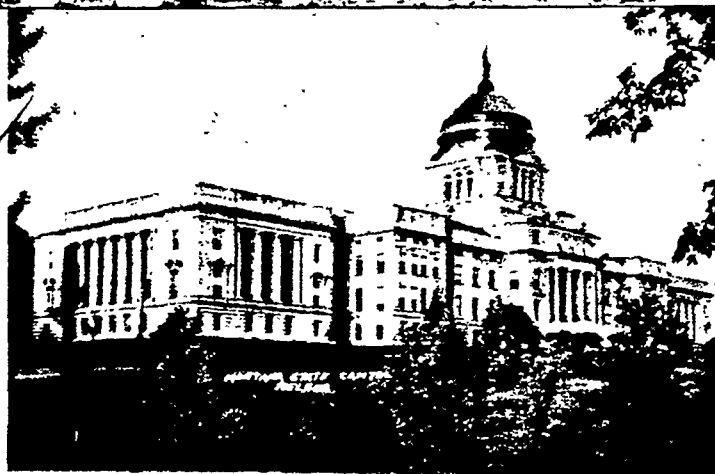
The new town grew rapidly. Beside being the center of a rich gold country, it was conveniently located in relation to Fort Benton, the head of navigation on the Missouri River. It was the logical center of trade for a number of mining camps, now mostly ghost cities, which it served as a distribution point. Many important

mercantile establishments in Helena can trace their origin back to the Bonanza days. In 1883 we find it a city of 8,000 population, already enjoying some electric lighting, a complete educational system, fire department, opera house and an efficient municipal government, and forward looking citizens were anxiously awaiting the arrival of the Northern Pacific. The city had already been named the capital of Montana Territory. When the territory was admitted to the Union in 1894, other cities contested for the right to become state capital but through the staunch support of William A. Clark, Helena won the honor by a narrow margin and few state capitals have served in their queenly capacity more graciously. The Capitol Building was begun in 1899, the central portion being completed first and the wings added in 1909. A view of this imposing structure is shown.

Montana's capital is located in the center of one of the world's great mineral regions. From the time of the first gold discovery until 1893 the region was intensively exploited but shortly after this, mining went into a slump. However, in recent years the application of new methods of treating complex and low-grade ores has brought about a revival of the industry. Old producers are being worked again, and mining throughout



*Photos +
ETC things Steelman
10/5/26*



YND TODAY

heir
it a
tric
art-
era-
ualy
city
erri-
n in
state
n A.
and
acity
n in
l the
ture
re of
f the
nten-
into
n of
ores
pro-
bout

the region shows gratifying promise of coming back stronger than ever. Prospectors still continue their methodical search for new wealth, and great optimism is observed in all quarters.

Of interest to members of the Ethyl Corporation is the fact that the American Smelting & Refining Company's plan at East Helena, handles much lead bullion and in 1926 produced more of the metal than any other plant in the world.

As to the surrounding country, it abounds in beautiful scenery and is a veritable paradise for the lover of nature and the sportsman. Here may be seen the famous "Gate of the Mountains," through which flow the waters of the Missouri and was first visited by Lewis and Clark. The earthquakes of last October did considerable damage to certain sections of Helena, the high school perhaps suffering the most. Some idea of the destruction to the edifice may be had from the accompanying illustration. However, through the cooperation of the Northern Pacific and Great Northern Railroads, coaches were furnished to create a "School on Wheels" and classes were able to continue the remainder of the year. But in keeping with the national fortitude and courage of her people, extensive reconstruction work has been in progress for some months and shortly, both public and private properties will be in excellent condition.

A. J. STEELMAN





A NEW UNDER- TAKING BY ASSOCIATED OIL COMPANY

• AS A PART of its program to give better service to its customers and to increase sales of its new Associated Aviation Ethyl Gasoline, Associated Oil Company now is operating the first portable motor check station on the Pacific Coast.

The new unit is complete in every detail, being equipped with the latest scientific precision motor checking instruments, including a syncograph for the synchronization of distributors. It is contained in a specially designed truck, which is set right up in the service station. Already on the road, the "station" has an itinerary covering more than a score of California communities.

According to W. A. Reanier, manager of gasoline sales for Associated, the tune-up at the motor check affords maximum efficiency for the use of the new Ethyl. But the motor check service is even more than a mere adjustment for Ethyl. When a customer brings his car to the service station it is completely tuned-up, and its deficiencies, if any, carefully noted. Of course the service remains only a check-up operation in that it does not include any mechanical changes other than



those usually considered and provided for by the car manufacturer as adjustments.

Mr. Reanier pointed out that already, as a result of the establishment of permanent motor check stations in the largest cities on the Pacific Coast, thousands of motorists are finding new thrills and economy in driving with properly tuned motors.

WHAT PRICE CLINICS?

• IN A recent issue of the "News" there appeared an article written by Tom Gluck, Service Manager of Paulsen & Gibson, Buick Agency in Glendale, California. After the management saw the article of the Service Manager, Mr. Gluck, they asked for 500 reprints of the article and enclosed them with the monthly statements to all customers and in addition if a customer of theirs had not been in recently they wrote him a letter asking him to come in and enclosed the article which appeared in the "Ethyl News." Since that time we have held a meeting of all their personnel at our Glendale Exhibit and they have had their salesmen attend under orders from the management. Mr. Gluck now informs us that some of the trouble he had in convincing customers to use Ethyl Gasoline as outlined in his article, has disappeared, due to the meeting held at the clinic where the salesmen were effectively educated so that they can now intelligently and convincingly talk high compression and Ethyl Gasoline.

DEMAND FOR SPACE REQUIRES ADDITIONAL FLOOR AT GRAND CENTRAL PALACE

• WITH all the available space for cars and trucks taken at the drawing a few weeks ago announcement is now made that the exhibition will require another floor of the Grand Central Palace when the National Automobile Show opens in November.

Increasing interest in trailers has necessitated a special section of the fourth floor with all the surroundings that go with trailer camps. This floor will be appropriately decorated and converted into an outdoor setting for the trailer exhibit, providing a National Park atmosphere. Among companies already listed to show trailers are: Pierce Arrow Motor Corp., Buffalo; Federal Motor Truck Co., Detroit; Split Coach Motor Corp.,

York, Pa.; Schult Trailers, Inc., Elkhart, Ind.; Covered Wagon Co., Mt. Clemens, Mich.; Hayes Body Corp., Grand Rapids, Mich.; Mullins Mfg. Co., Salem, Ohio; Kozy Coach Co., Kalamazoo, Mich., and Palace Travel Coach Co., Flint, Mich.

The Show for the first exhibit of 1937 cars and trucks will open on Armistice Day, November 11th, closing Wednesday, the 18th.

• MARTIN & MARTIN (Jack & Dude) of the Los Angeles Division, suggest "cashing in" on the "knock-knock" craze which seems to be sweeping the country and just to start things off they have sent two contributions. Some weeks ago when the fad first got under way we began to be deluged with suggested Knock-knocks. They came from all parts of the country by mail, wire and telephone and are still pouring in. Some were very good, others just so-so but they all indicated a nationwide acquaintance with our product which is at least gratifying. Each one of these contributors has received a courteous letter of acknowledgment, together with an explanation that there seemed no practical way for us to utilize their contribution either in our advertising or publicity. We therefore do not feel that it is fitting that we reprint any, regardless of how clever they may be.

ETHYL HOLDS FIRST TRACTOR SCHOOL

(Continued from Page 5)

The St. Paul meeting was closed with a timely talk on salesmanship and the farm market by Mr. Lavers of Minneapolis-Moline.

At one of the evening meetings in Minneapolis, Mr. J. B. Taylor, of our Detroit Laboratory, gave an interesting and educational address on carburetors and the correction of problems usually encountered in the field.

It was the consensus of opinion of those attending the school that the two weeks had provided the men with a good working knowledge of the problems involved in the tractor field and the success of the undertaking can be attributed, in a large measure, to the excellent cooperation given by all the tractor companies and their officials.

PAGE ELEVEN

ETC 21273

HERE and THERE

• That educational meetings for colleges and schools bring results, even at a considerable distance from their origin, is shown in a contact made in eastern New York by Mr. Ball of our Boston Division. A service station manager in Rensselaer, N. Y., reports he attended an Ethyl meeting two years ago while at college in Texas. The Ethyl volume has nearly doubled at this outlet since he started and this, in competition with a benzol blend, which had been the favorite of this concern for fifteen years. Again at Binghamton, N. Y., in a series of meetings held for automobile agencies, it was noted three of the mechanics had attended a meeting held the previous year for the vocational classes of the local high school. Still another instance is of a service manager at Horseheads, N. Y., who says he sold himself completely on Ethyl when allowed to run the demonstrator while in Florida. Before that he had been suspicious that ways had been devised to make the machine go as we wished.

• The state of North Carolina is taking steps to protect her motorists from unscrupulous dispensers of gasoline and oil. A laboratory has been set up at Raleigh, the state capital, and approximately 2200 samples a month are picked up and sent there for analysis. While not yet complete in all details, it is estimated that the laboratory can be made one of the best in the country for an expenditure of about \$80,000 and there seems to be every indication that the next legislature will appropriate this amount. A C.F.R. engine will be installed and a state required octane number is proposed for third grade gasolines. The gasoline and oil laws of North Carolina have had "teeth" in them for several years but this is the first real move toward rigid enforcement and is being watched with interest by neighboring states.

• Taking advantage of better times in south Georgia, as a result of the excellent returns on the tobacco crop, the Standard Oil Company of Kentucky has put on a demonstrating campaign to increase the sale of their Crown Ethyl Gasoline. Our Mr. Sidney T. Pruitt has been in charge and reports very good results. In many cases definite commitments were made to install Ethyl pumps—some where Ethyl had been discontinued—others where it was installed for the first time.

• Messrs. Hogan and McCooley of our Baltimore office report as follows from Virginia: "The meetings which we held at the three CCC camps this week were very well attended (approximately 100 at each), both by the enrollment and the officers in charge. We have had such good attendance and so much interest shown at the CCC camp meetings which have been held that we will try to hold as many of these as possible during the remainder of the year."

• Business conditions in New England during the past summer showed considerable improvement, due to the largest influx of vacation travelers in several years. The oil business benefited to a great extent as most of this traffic came over the road by automobile. The shore resorts, White Mountains and other tourist centers reported greater business activity in all lines. Gasoline dealers on Cape Cod told our representative they had the best season since 1930. The improvement in business conditions was reflected by increased Ethyl sales everywhere and one of the largest oil companies operating on the cape maintained an Ethyl ratio of 20%.

• A new 100% customer of Ethyl Gasoline in the Atlanta Division is the County of Fulton, State of Georgia. This County has purchased 40,000 gallons of Ethyl Gasoline monthly for the past four months.

• About a year ago Mr. M. Friis-Hansen, who operates a fleet of some 20 trucks, mostly tankers of 6,000 to 6,500 gallons, throughout Central and Northern California, decided, at the suggestion of our Mr. Hume Chenault, to give Ethyl a test. He accordingly high compressioned a Pierce Arrow truck which he

operates on a regular run of about 500 miles between Martinez and Mt. Shasta. After 12 months operation Mr. Friis-Hansen got some interesting figures. He found that the running time was reduced three hours and the test unit averaged slightly better than 4 miles per gallon whereas he formerly got but 3.25. Thoroughly satisfied he has requested Mr. Chenault's assistance in undertaking a high compression program for his entire fleet.

• Two items received from the south give further evidence of the large increases in gallonage which are being reported from almost all sections of the country. Our South Carolina representative, Mr. D. F. Andrews, reports that tax receipts for gasoline in his territory for August reached a new all time high, being in excess of \$800,000. This is an increase over last year of more than 25%. And in the state of Virginia we learn from our Mr. McCooley that the Bureau of Motor Vehicles has announced unofficial gasoline tax collection for July as \$1,537,250. The tax represents collection on 30,745,013 gallons which is 3 million gallons ahead of July 1935. The total for the calendar year is 171,972,459, an increase of 15,119,674 over the 1935 period.

• Along with others who attended the tractor school, Mr. H. F. Dedo of the Dayton Division has been putting to good use the knowledge he acquired there. On a recent call on a Socomey vacuum jobber in his territory he discussed the latest tractor developments, tractor fuels, high compression conversion and advantage of leaded gasolines over non-leaded or kerosene. The jobber in question is very active in rural communities and at once saw the possibilities in the field. Perhaps the result of Mr. Dedo's contact can be illustrated best by quoting this jobber's remarks: "I'll start my tank wagon salesmen out Monday morning selling Mobilgas for tractors and I'll convert 25 cars of low grade fuel to regular gasoline this coming plowing season."

• Last year, when the Los Angeles Division was getting material on the cost of demonstrating cars, Mr. Carl Abell, who was most enthusiastic about the idea, was trying it out in the field. One day he told his story to a Ford dealer in San Diego, in the presence of Mr. Ed Flood, Associated salesman, who was then serving the account. Later he gave the facts to the sales departments of the other five licensees who serve the same Ford agency in rotation. Subsequent calls on these licensees brought forth the claim from each one that it had converted the Ford agency to Ethyl. In the meantime, Mr. Flood told the story to the local Studebaker dealer, who was at that time tied up in a reciprocal arrangement with a competitive company. The dealer explained the situation and that he could not change brands then. "Perfectly all right," said Mr. Flood, "but you should immediately change to your present supplier's Ethyl and I will wait for my turn to supply my Ethyl." The change to the competitor's Ethyl was made and a few months later Mr. Flood was rewarded by an order from the Studebaker agency. The same facts were supplied Mr. "Hi" Smith, Standard Oil Company's Special Agent at Fullerton, Cal., who has made an outstanding record due to his ability to generate sales horsepower through enthusiasm. In the course of a year every car dealer served from his depot was using Ethyl Gasoline in demonstration cars.

• Reports came from Mr. W. B. Heck (Chicago Division) that in service stations along tourist routes in Northern Wisconsin summer Ethyl sales are doubled and often tripled by the greatest flow of tourist traffic since 1929. New cars, many pulling elaborate trailers, have been more prevalent than for a number of seasons past and their occupants spend very appreciable sums for accommodations, food and entertainment.

• Mr. A. D. Martin of the Los Angeles Division writes that most of the dealers' personnel in Glendale and vicinity have at one time or another attended meetings since the experimental clinic was opened and over 70% of the Ford Salesmen from the six dealers in the area are now using Ethyl Gasoline in their

(Continued from page 12)

demonstrators. The demonstrators were brought to the clinic by the respective salesmen, in the cases where they owned their own demonstrator, or by the Service Manager of the Agency, voluntarily, after attending a meeting and these were tuned on the dynamometer while the salesmen watched and all adjustments were carefully explained to them.

The Service Departments of the various agencies have become enthusiastic towards Ethyl Gasoline, after attending a meeting and have been quite successful in changing their customers to Ethyl, although charging for the necessary motor tune-up and carburetor changes.

- The following comment comes from our Boston Division in connection with the new pamphlet "A Review of the Ethyl Gasoline Motor Demonstration." "The first time these pamphlets were handed out, the majority of the men immediately jammed them in their pockets. The 'score card' on the back had previously been explained to the service manager and as the meter readings were repeated he marked them on the back of his card. About half of the group followed suit. At the second reading of the instruments, however, nearly the entire audience was marking them down." In general it has been found advisable to have the man in charge of the meeting stand off to one side and mark the readings so as to set an example for the others to follow. In almost every case this has brought excellent results.

- Due to the alarming increase in the number of motor vehicle accidents and deaths in Virginia, that state recently passed a new law on motor vehicle violations which is being rigidly enforced. Any driver twice convicted in court on charges of careless or reckless driving, will be deprived of his operator's card and forbidden to drive on the highways of the state for one year.

- Ethyl Gasoline scored a new high with the Hall Scott Motor Car Co., Berkeley, Cal., makers of Hall Scott engines for busses, trucks, marine and industrial applications, during July. During the month they delivered about 150 engines, mostly large jobs for trucks and busses. 50 of these engines were equipped with high compression pistons, as ordered by the purchasers. Included among the orders were fleet purchases for the Florida Motor Coach Lines, The Arrow Transportation Co., Portland, Ore., and the Washington Motor Coach Co., of Seattle, all of whom have been using Ethyl Gasoline extensively for a considerable period.

ETHYL—NOT ETHEL

• MRS. CHARLES F. WHITE wasn't quite sure whether to be insulted or pleased at being recognized by the gas station attendant the other day. On her way downtown she noticed that the gauge showed near the empty mark and proceeded hurriedly to the nearest pump. As she could not recollect having been in that particular station before, she was startled when the attendant walked over to the car and remarked conversationally, "Ethel?" Mrs. White isn't used to strange young men walking up to her and greeting her by her given name and she threw

• THE following Service Awards have been made as of October 1st:

TEN YEARS

ROBERT O. BROWN - - Administration Dept.

FIVE YEARS

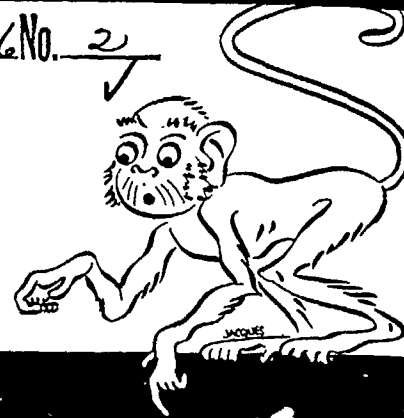
ROSLYN B. ARBOUR - - - Baton Rouge Lab.

MR. COBB EXPLAINS CUSTOMER RESEARCH

• AMONG the many attractions to be found in the General Motors Building at the Texas Centennial Exposition is a booth which, although it may lack in public appeal, the novelty and romance found at other displays, is perhaps in line of importance second to none both to General Motors and the public generally. We refer to the Customer Research Booth in the main foyer. Here attendants discuss informally with visitors their reactions and likes and dislikes to modern automotive products. In discussing the matter with Mr. Gardner M. Cobb, who is managing director of the General Motors exhibit, he had some very pertinent remarks to make on this division, which were well worth consideration. When one recognizes that the future of big or small business alike is dependent on public approval of the product offered for sale, intelligent study of the peoples wants is of paramount importance. It is little wonder, then, that this important activity which has been developed to such a high degree by General Motors, is being adopted more and more in the business world. As Mr. Cobb expresses it, Customer Research is not merely a matter of mailing questionnaires or calling on car owners for the purpose of compiling a lot of dull statistics. These are merely incidentals. The true purpose is recognizing the fact that the retail buyer is the hub around which a company's activities revolve. Therefore, research is only a tool for developing, to a greater degree, the service the manufacturer can offer. Twenty-five years ago when the automobile was only another piece of machinery, the manufacturer had his hands full in improving its mechanical structure. The public knew little about such things as carburetors, spark plugs and differential gears. But today when a person travels more in a year than his forefathers traveled in a lifetime, the automobile has been transformed into an economic utility of wide spread public acceptance and this has come about only as the result of scientific research, inventive genius and development in production technique. In the future, progress and improvement will come not alone from the laboratory but through a fuller understanding of human needs. It is with this thought in mind that motorists are invited to give their ideas and pool their practical driving experience with the engineering and manufacturing skill of the laboratory and factory. Thus General Motors adopted the slogan of "keeping our ears to the ground and our eyes to the future."

a quick glance at the youth, trying to remember where she had met him before. As he noted her quizzical expression a broad grin spread over his face. Only then did Mrs. White realize that he had asked her "Ethel?" and not "Ethel?"—From Detroit Free Press.

FT. WORTH REPRESENTATIVE TAKES A HOLIDAY TO HOBNOB WITH NOTABLES



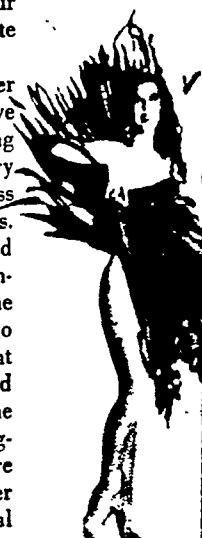
*Filed
H. Cottrell
10/36 No. 2*

*3 copies sent
10/5/36
H. Cottrell
Wm. Adams*



• AN APPROPRIATE title for this story might also be "God's Creatures All" or "Famous Artists I have met," by Harry Cottrell. In any event, the picture gives evidence of our Ft. Worth representative's popularity with the gentler sex, no matter where they rate on the anthropoid scale.

And it is reported that he also stands high with zoo keepers in general, and Keeper Hittson in particular. Be that as it may, here are the principals in the group shown above and the rest of you fieldmen get wise to yourselves and see if it isn't worth while being a zoo fancier—which is Harry's particular hobby. You need no introduction to Harry Cottrell (he's not the guy on the bench), but listen to who's gathered around him—Miss Sally Rand, Miss Ann Pennington and Keeper Hittson, with his eye on his two charges. The occasion was the wedding anniversary of Patsy and Jerry, which is celebrated with much pomp each year on August 12. Patsy who is now eight, is a trained chimpanzee and due to her affectionate disposition, is a favorite with the children and the idol of the Forest Park Zoo. She was purchased by popular subscription six years ago and her young husband, Jerry, was acquired later. This annual party is quite an event and is advertised not only in local papers but in Houston and Dallas. Reporters and photographers attended, as well as newsreel cameramen. This year, in addition to the charmingly lovely Sally Rand, who was master of ceremonies, and little Ann Pennington, whose dimpled knees were the toast of Broadway in the days when limbs were more appreciated than they are at present, many other notables attended, the total number of visitors exceeding 25,000. Contributions included a 500 pound cake from a local flour company and Cottrell from Ethyl Gasoline Corp.



• The car is held, feet, strati units with I recom these The conce The E questi driver tion o meter The power climir restor even v could on this ment i which meter, tion o gallon on Ext exact Still follow



STUTZ PAK-AGE-CAR

✓
10/5/36
✓

• FLEET OF STUTZ PAK-AGE-CARS, Arden Creamery Division of Western Dairy Co.

✓ THE Los Angeles office reports that the Stutz Pak-age-car is getting off to a very good start in the local delivery field, with installations already made in twenty-four fleets, dairies and bakeries predominating.

The local distributor, J. Bedford Finney, is demonstrating them on Ethyl Gasoline exclusively. The new units are delivered to the purchaser with the tanks filled with Ethyl Gasoline and Mr. Finney is outspoken in his recommendation that nothing else should be used in these jobs.

This is the outgrowth of a complaint of an operator concerning lack of power in the trucks of a certain fleet. The Ethylmen in Los Angeles put the Pak-age-car in question on a chassis dynamometer for a test. While the driver had not been aware of more than slight detonation on the road, it became very obvious on the dynamometer with the engine cover panels removed.

This test showed that detonation was reducing the power more than 50% and that retarding the ignition to eliminate detonation on 70 octane gasoline still failed to restore much more than 60% of the potential power even with Ethyl Gasoline, which was the only fuel that could be used satisfactorily with factory timing. Acting on this information, Mr. Loer, Superintendent of Equipment for the Western Dairies, conducted a service test, which corroborated the power readings of the dynamometer, and he reported further that the fuel consumption on several of these vehicles averaged 10.9 miles per gallon on leaded regular gasoline, while the same jobs on Ethyl Gasoline averaged 15.1 miles per gallon under exactly the same conditions.

Still more recent dynamometer tests have given the following results:

Set for Ethyl Gasoline and Using Ethyl
21 M.P.H.—the governed speed of vehicle
21 H.P.
15.1 M.P.G.



• THE STUTZ PAK-AGE-CAR ON DYNAMOMETER
DURING TEST.

Set for Ethyl Gasoline and Using 70 Octane
14 M.P.H.
4 H.P.
10.9 M.P.G.

Set for Leaded Regular and Using 70 Octane
19 M.P.H.
9 H.P.
10.9 M.P.G.

NEWS BRIEFS

✓ • From the Toronto office comes word of the arrival of a son in the Olver household. The happy event took place on Sunday, August 30th, at Hamilton, Ontario where Bert makes his headquarters. The weight is reported at 7 pounds 2 ounces and the new heir will be christened Edward Albert. Our hearty congratulations to the happy parents.



✓ • Melvin L. Olson, who has just joined our organization, and is attached to the Chicago Division, was graduated from the University of Minnesota in 1931 with a degree in Mechanical Engineering. He is a member of Omicron Sigma. After leaving college he did research work for the Straw Products Chemical Co. of St. Paul and later was connected with the Standard Oil Company of Indiana. Before coming to Ethyl, Melvin was occupied as engineer for Minneapolis-Moline, engaged in the design and testing of high compression engines. We take this opportunity to welcome him to the Ethyl family.

✓ • Harold Berg, Kansas City Division Manager, recently returned from a short vacation in Maine. Helen and Roger, Junior, who were at Portsmouth, N. H., most of the summer enjoying the surf of the Atlantic, returned with him to the 100° temperatures of Kansas City. Other unfortunates in the Division who have returned to the "daily grind" for another year, include Harold's secretary, Blanche Ash, who has been vacationing at Estes Park in Colorado and Virginia Gillum who visited Yellowstone and Salt Lake City.

✓ • The Chicago Division announces an addition to its force of field representatives in the person of B. D. Harrison who graduated from the University of Kentucky in 1931 with a degree in Mechanical Engineering. He was formerly a member of the Research Department of the University of Kentucky, engaged in design and experimental work on internal combustion motors. Good luck Ben—glad to have you aboard.

✓ • Jack Cole, the bounding boatman and regatta hound of the Baltimore Division, has suffered a terrible calamity. The very thoughtless and inconsiderate officials of the American Power Boat Association, scheduled a regatta during his vacation and he had to pay his own expenses to it. Recovery is looked for but the patient's condition is still serious.

✓ • We regret to learn that Charles Rankin of the Tulsa Laboratory, while on vacation was in an automobile accident and suffered a broken knee cap and other injuries which will prevent him from returning to work for at least a month. Herbert Green of the Yonkers Lab has been transferred to the Tulsa Lab and George Gier of the Tulsa Lab has been transferred to the Yonkers Lab.

✓ • Blanche Noyes (Mrs. Dewey Noyes), of Irvington, N. J., one of the first ten women to receive a transport pilot's license, has been appointed an air marking pilot for the bureau of air commerce. Mrs. Noyes, who has been flying since 1929, will be assigned to the Washington office of the airport section and will be associated with Helen Richey, Louise Thaden and Helen MacCloskey, who have been with the bureau for some time. This activity consists of assisting cities and towns in arranging for the marking of roof tops to guide airmen.

✓ • The good old Chesapeake Bay is still an anglers paradise. Recently Louie Shank, Joe Costello, Jack Cole and John Keyes, accompanied by their better halves, did some trolling down the Bay. In two hours they landed 30 striped bass, one trout and one bluefish. Amid the howls of the men, Mrs. Shank pocketed the 25c per person pool for landing the largest fish. (Note: She will be left at home next time as this is her second offense. Was the first on June 26th?)

✓ • During the campaign held recently for the Gulf Oil Corporation, Bob Richardson (Boston Division) who covers Connecticut, had occasion to work with a Gulf salesman who was very much on the job. Hearing of a nudist colony near Greenwich, Conn., he figured it a very likely place to sell one of his specialties, Gulfspray. How he made the contact we don't know, but he got an order for 25 gallons.

✓ • Word has recently come to us that our North Carolina representative, Lowell Mason, is the proud father of a future southern belle. The little lady arrived on July 14th, tipping the scales at 7 lbs. 14 ozs. and has continued to thrive in true North Carolina style. Both Lowell and May Gray admit that they are mighty proud of Ann.

✓ • One cannot always tell what reaction he is getting to his demonstrations and talks. The fact was forcibly brought to Sidney Pruitt's attention last week when he was conducting a series of demonstrations in Georgia. In the crowd gathered around him, Sid noticed a very tall, lean individual who seemed much more observant than the rest. Our speaker was greatly flattered by this unusual interest so was not surprised when, at the end of the talk, the man beckoned to him and drew him a short distance from the crowd where there was some privacy. Imagine Sid's surprise then, when the stranger, shutting one eye, whispered confidentially: "Young fellow, that's a pretty good little contraption you have there. Now for a very, very little commission I can tell you where you can sell two of these machines as quick as a wink!"

✓ • Joey, that "Mighty-mite from Maine," is all Yankee and it seems is the most "borrowed" or "loaned" individual in the company. Last year he worked in the Kansas City Division on some meetings and is now working on a series from the Atlanta Division. Joe says it is all right to say it is a compliment to be sent on jobs like this but compliments buy no port cheap and he firmly believes that any Division getting any more "loans" should pay interest. The rest of us are quite willing to agree with him provided he splits with us.

✓ • Recently Jack Taylor of our Detroit laboratories, and our Minneapolis representative, Fred Naylor, attended the annual picnic for all employees of the Minneapolis-Moline plants held at Birch Bluff on Lake Minnetonka. Reports are that Jack entered into the egg throwing contest, was not a winner, but had a "crackling" good time anyway. In case you are not familiar with such a contest, the contestants in teams of two, throw an egg back and forth to each other, moving farther apart with each throw until the distance is too great for someone to catch the egg without breaking it.

✓ • The Atlanta Division took advantage of the long weekend and spent the Labor Day holiday at Cherokee Lodge on Lake Burton in the mountains of Northern Georgia. Most strenuous and unaccustomed athletic activities were indulged in during the several days of their stay at the Lake and it was a tiring but sunburned and happy-minded bunch that reported for duty when the holiday was over.

BRITISH REVIVE ETHYL ZOOLOGICAL ADVERTISING

Remember back in 1930 and 1931 when we were publishing those beautiful animal and bird subjects in our advertising—well, several days ago we received some advance proofs of the advertising being done by our British cousins, for the Anglo-American Oil Co., Ltd., which made us sit back and rub our eyes.

Unfolded before us was a campaign almost identical to that which we released five or six years ago. Do you recall our caption for the wild geese—Smoothly—Swiftly—Surely? This is the one which carries the ear-marks of the advertisement bearing the headline Esso Ethyl For Effortless Performance. And then there was our Eagle which was labeled—Power Under Control—now take a look at the illustration, Soar the Heights on Esso Ethyl. Then, too, our panther with Plenty of Power Under Perfect Control, which caused little children to have terrible nightmares; doesn't this look like Anglo-American's Smooth, Silent Power on Esso Ethyl?

ESSO ETHYL FOR EFFORTLESS PERFORMANCE

Smoothly—Swiftly—Surely? This is the one which carries the ear-marks of the advertisement bearing the headline Esso Ethyl For Effortless Performance. And then there was our Eagle which was labeled—Power Under Control—now take a look at the illustration, Soar the Heights on Esso Ethyl. Then, too, our panther with Plenty of Power Under Perfect Control, which caused little children to have terrible nightmares; doesn't this look like Anglo-American's Smooth, Silent Power on Esso Ethyl?

Esso ETHYL

For lubrication use Essolube motor

SOAR THE HEIGHTS ON ESSO ETHYL

Try Esso Ethyl power on hills. Hear the complete absence of engine knock, the easy pulling, and the reduced gear changing which saves power and therefore saves you money. Nothing will so quickly prove to you that Esso Ethyl is superior to any other charged power procurable. The original label—FASTEST ON HILLS!

Esso ETHYL

For lubrication use Essolube oil

SMOOTH, SILENT POWER ON ESSO ETHYL

Do you differ? Esso is the answer. It gives you a new experience in smoothness, silent power, delightful acceleration, effortless performance, and a smooth riding in your power hills. Esso Ethyl is the only power in which the super-charging Ethyl fluid is blended with the world's most advanced power.

Esso ETHYL

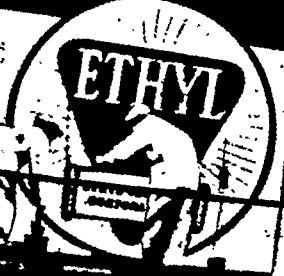
For lubrication use Essolube motor oil

ETC 21279

ETHYL FLUID

Knock wastes gas AND oil ETHYL STOPS KNOCK

That's why Ethyl means the most economical motor fuel



"LOOK, GEORGE. HERE'S A WAY TO SAVE!"

WHEN YOU step on the gas to pass another car safely, or to make a hill in high—and your engine makes a "pinging" sound—look out!

That "ping" is the sound of knock. And knock is expensive. It means that you are tossing away good money in gasoline and oil—and that you are getting less than the power return your car was built to deliver. For knock wastes all three—gasoline, oil and power. And it occurs when the gasoline you are using burns too quickly under the high heat of a modern high compression engine.



TO FIGHT THE KNOCK EVIL, with its waste and expense, most oil companies now use anti-knock fluids (containing tetraethyl lead) made by the Ethyl Gasoline Corporation.

And for cars built in recent years, with their high compression engines, these oil companies offer a special high compression fuel at pumps marked "Ethyl" on the globe or on the base.

HIGHEST ANTI-KNOCK! At the Ethyl pump you get a special motor fuel in



+ =



which enough anti-knock fluid to stand the highest compression has been blended with gasoline of highest quality on every count, from quick-starting to purity.

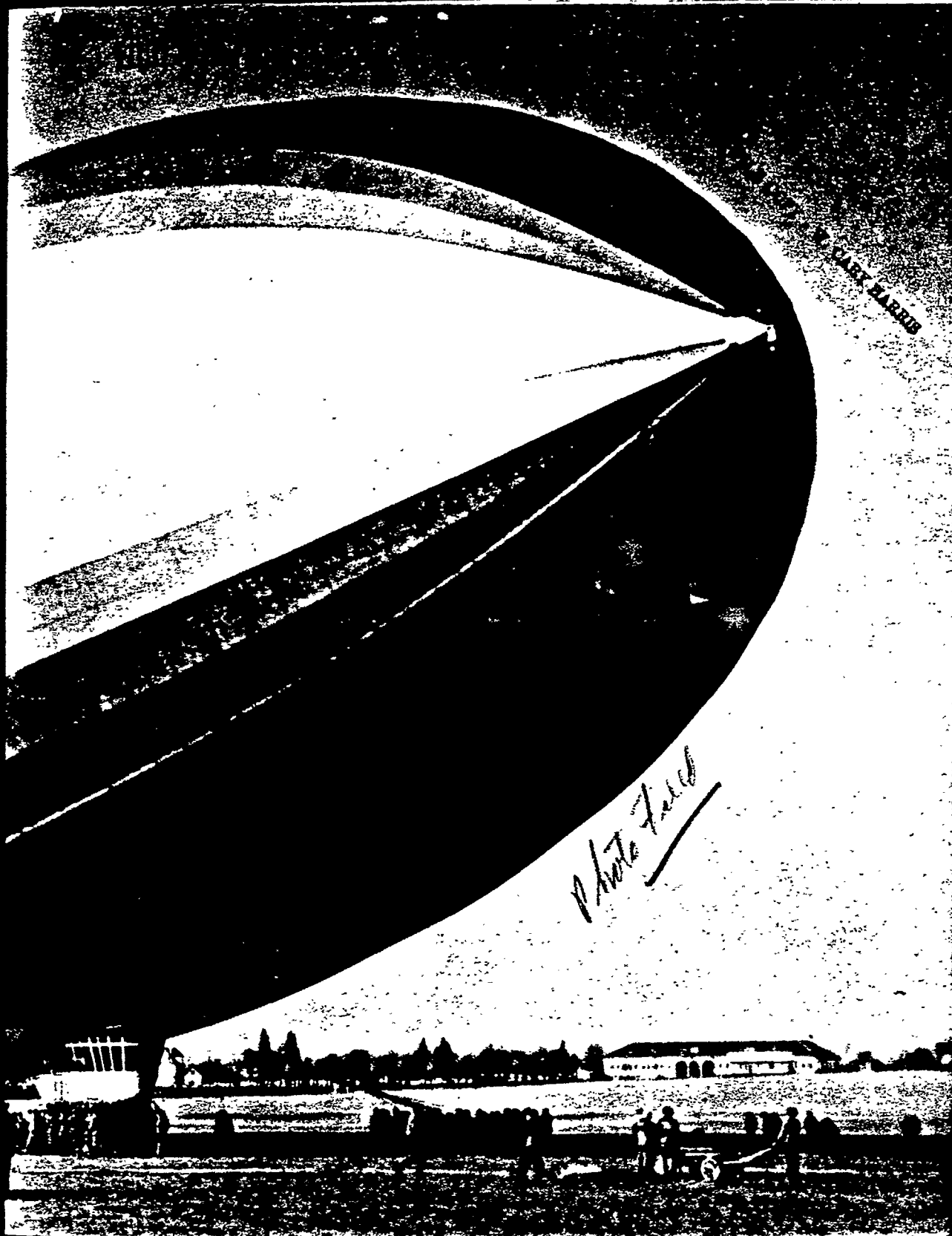
And both the anti-knock and all-round value are double-checked—by the oil companies and the Ethyl Gasoline Corporation—at the refinery and at the pump.

START A REAL SAVING in your car's operating costs. Stop that waste of gas and oil. Fill up today with the most economical fuel you can buy. And see how much better your car will run!



NEXT TIME GET ETHYL!





W. HART HARRIS

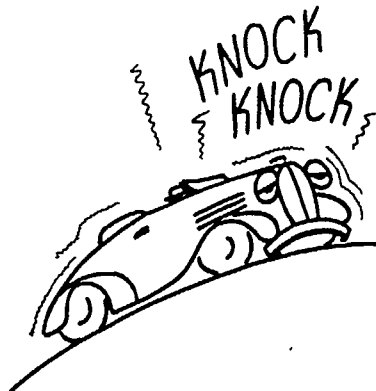
Photo Faded



NOVEMBER
1936

ETC 21281

AN AVERAGE TALE

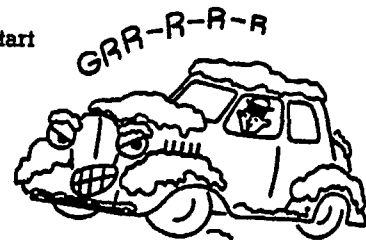


The man of whom this tale is told
Is not quite young, and yet not old.
He's never timid; no, nor bold;
An average man, you see, Sir.

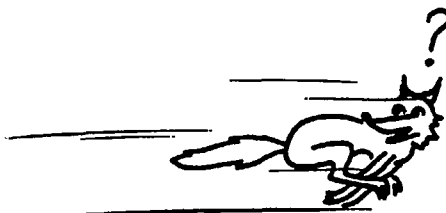
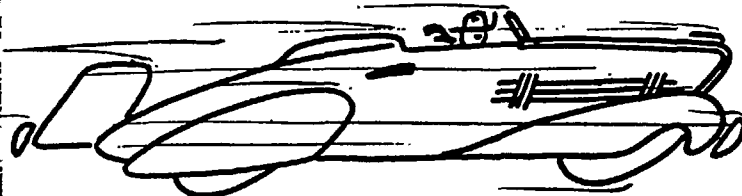
The average man is just a myth
With non-existent kin and kith.
He's not a Brown or Jones or Smith
And has no family tree, Sir.
The average man drives wide and far
He always drives an average car,
And always gets results which are
As average as can be, Sir.

The average car will knock on hills
And has a lot of other ills.
The average driver fumes and fills
The air with savage curses.
On winter mornings, dark and cold
The average motor won't take hold;
And average tow cars, so I'm told,
Are hard on average purses.
Now, Gentle Reader, don't lose heart
And think your good old car won't start
It need not knock and fall apart
As in these gloomy verses.

For shrewder far, are you and I,
And cast above the average die.
I feel quite sure you'll not deny
That we are surely smarter.
We know that Ethyl knocks out knocks
And that it never vapor locks;
Our motor goes like a frightened fox
At a touch upon the starter.
Remember, then, the moral sane
For winter, summer, hill or plain,
Use Ethyl and you'll not remain
To averages, a martyr.

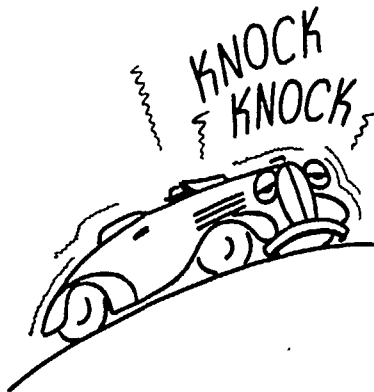


Ellis O. Jones, Jr.



AN AVERAGE

Unless otherwise indicated, all artwork and photographs destroyed May 1957.

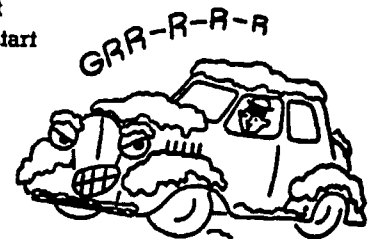


The man of whom this tale
Is not quite young, and yet
He's never timid; no, nor b
An average man, you

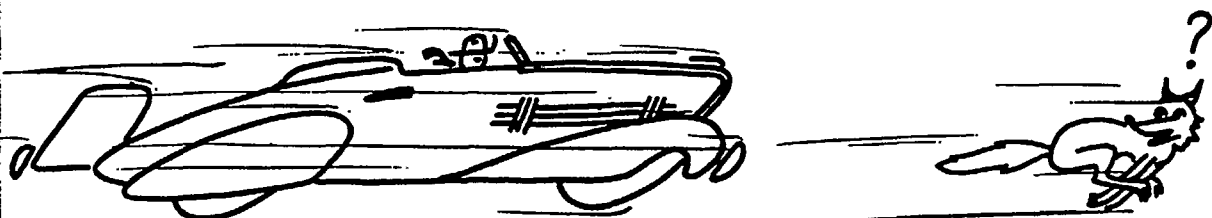
The average man is just a
With non-existent kin and
He's not a Brown or Jones
And has no family tree
The average man drives with
He always drives an average
And always gets results with
As average as can be, :

The average car will knock
And has a lot of other ills.
The average driver fumes at
The air with savage curse
On winter mornings, dark as
The average motor won't take
And average tow cars, so I'll
Are hard on average pun
Now, Gentle Reader, don't lose heart
And think your good old car won't start
It need not knock and fall apart
As in these gloomy verses.

For shrewder far, are you and I,
And cast above the average die.
I feel quite sure you'll not deny
That we are surely smarter.
We know that Ethyl knocks out knocks
And that it never vapor locks;
Our motor goes like a frightened fox
At a touch upon the starter.
Remember, then, the moral sane
For winter, summer, hill or plain,
Use Ethyl and you'll not remain
To averages, a martyr.



Ellis O. Jones, Jr.





ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

Published monthly for the enter-
tainment and benefit of members
of the organization.

W. CARY HARRIS
Editor

EDWIN DOWNS
RUSSELL B. WESTON
Associate Editors

Correspondents

GEORGE W. WARREN
Atlanta

L. W. SHANK
Baltimore

DONALD S. FLYNN
Boston

H. C. DEES
Chicago

R. R. FALLER
Dayton

C. M. BERRY
Kansas City

CARL ABELL
Los Angeles

R. L. GOLTZ
New York

J. N. FITZGERALD
Toronto

HARRY KURIE
Tulsa

JULIAN J. FREY
Engineering Dept.

ARTHUR P. STOVER
Manufacturing Dept.

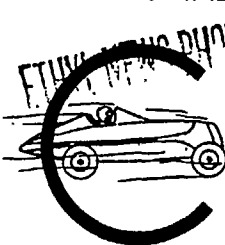
E. R. ANDERSON
Gasoline Testing Dept.

HUBERT FOSSETT
Export Dept.

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH.

VOL. 3, No. 11

COMPRESSION RATIOS ARE COMING DOWN



COMPRESSION ratios will be lower in 1937! "But surely," you will say, "the automobile manufacturers will continue to meet customer demand for improved performance and greater economy." Undoubtedly, but ratios will be lower on Memorial Day at the Indianapolis Speedway—the heart of automobile racing, the world's greatest automotive "research laboratory."

For explanation of this seeming paradox we turn to Mr. B. R. (Casey) Jones, our automotive expert who helps the boys tune up their cars each year at the Indianapolis classic. This is what he tells us:

"During the past three years the quantity of fuel consumed by each car has been limited but there has been no regulation as to the type or quality of gasoline used. For example, in the 1934 race the allowable fuel was 45 gallons, in 1935 it was 42½ gallons and in the 1936 race it was only 37½ gallons. To meet this exacting demand for economy, compression ratios were sharply increased until the average ratio was approximately 12 to 1 and fuels containing the maximum effective amount of Ethyl fluid, the anti-knock rating being around the 100 octane number, were used. The success of this battle for economy is attested to by the fact that Louis Meyer won the race this year with a compression ratio of 13 to 1, averaging almost 15 miles per gallon at a speed of approximately 109 miles per hour.

"Now, for 1937, the rules committee of the Contest Board of the American Automobile Association has seen fit to remove the limit as to the amount of fuel used by the cars competing in the 500 miles race but has specified that the fuel must come from 'the same pumps that serve the motoring public.' As yet rules have not been drawn up for the purpose of defining this new fuel regulation, however, it can be assumed that fuels of not over 80 octane rating will be used.

"The reason for this qualitative limitation on fuel is said to be for the purpose of making the test results obtained at Indianapolis more directly applicable to the standard stock automobile. Incidentally, any new rule of this type stimulates the sometimes lagging interest in automobile racing and we can safely say that there will be no objection on the management's part should it tend to turn the turnstiles faster at Speedway City next Memorial Day.

"To date, to our knowledge, no tests have been made to determine what compression ratio may be feasible for these racing motors to operate satisfactorily on an 80 octane fuel. Some members of the racing fraternity have expressed the thought that the Miller '255,' one of racing's most popular power plants, will have to be lowered to about an 8 to 1 compression ratio in order to operate satisfactorily on the specified fuel. This means a drop of about three full ratios and will of course result in a tremendous loss of power.

"The entry list for the 1937 race will, no doubt, be made up largely of the same cars that participated in the 1936 event, the engines, of course, having been revamped to operate on fuels of approximately 80 octane rating. Should this rule limiting the quality of fuel be continued it seems safe to predict that the racing engine of tomorrow will be considerably larger and much less efficient. During the past three years racing car owners and drivers have strenuously objected to the rule limiting the quantity of fuel. This qualitative rule is more complex and, of course, not as readily understood by them. Consequently, many have gladly accepted it in preference to the old one limiting quantity. It is possible that when they have had time to make tests and come to a realization of the full import of this new limitation they will find that they have leaped from the frying pan into the fire.

"Yes, compression ratios are coming down—but only at the Indianapolis Speedway. The public continues to demand greater efficiency and performance in their stock automobiles. Consequently, higher-compression engines and higher anti-knock fuels remain the vogue for the motoring public."

PAGE ONE

ETC 21284



MEET MR. FITZGERALD

✓ • J. N. FITZGERALD was born at Winnipeg, Manitoba, on September 16th, 1892. He received his education in the local schools and after graduation entered the employ of the Dominion Bank. Two years later he became associated with the McLaughlin Motor Car Co. (General Motors Corporation of Canada) and had experience in all departments of the retail division of the business. In 1918, Mr. Fitzgerald was transferred to Hamilton, Ontario, where he was appointed service manager of the Hamilton retail branch of the company. In 1925 he became associated with the Imperial Oil Ltd. as technical representative where he remained until 1927 when he joined the Ethyl Gasoline Corporation as our Canadian representative. During the following three years he devoted much time to educational and sales promotion work with Imperial throughout the whole of Canada. In 1930, when we opened our Toronto office, Mr. Fitzgerald was appointed manager, which position he still occupies.



✓
 • MR. A. H. BINGHAM of the Dayton Division, writes us that one of the outstanding exhibits of the Great Lakes Exposition is the White "Dream Bus of 1950," which is as practical and beautiful as it is comfortable. This land yacht is to be used for rapid inter-city travel introducing a new note in luxury and convenience. The unit has been designed by Count Alexis de Sakhnoffsky, international authority, and is ultra streamlined in addition to being completely air conditioned. The bus, which accommodates 40 passengers is powered with a White Pancake Engine in keeping with the other improvements making for fast and powerful locomotion. Some idea as to the construction and furnishings of the Dream Bus may be gained from the accompanying photographs.

✓
 • BELOW: Ethyl exhibit at the Eastern States Exposition at Springfield, Mass., which is New England's largest annual Fair. This year the attendance totaled 350,000 during the seven-day period. Our Exhibit was sponsored by Gulf Oil Corporation. Mr. Blatchford of our Boston Division conducted the demonstrations which were broadcast through a loud speaker system. Over 16,000 witnessed our display and heard our representative speak.



Cures knocking cars

S-sp-8x 50



fold

• ABOVE: Mr. C. J. McFarlane, our field man in western Canada, attended the various fall fairs in the principal towns throughout Manitoba, Saskatchewan and Alberta. He reports good attendance and great interest in the demonstrations. Note his adaption of our billboard.

• BELOW: Mr. Petty, our Alabama representative, sends us this picture of a new fleet of buses for the Birmingham Electric Company. Birmingham, which is the largest city in Alabama, is gradually replacing the trolley system with buses. Leaded gasoline was replaced benzol as fuel.



ETC 21286





NEW HONORS FOR THOMAS MIDGLEY, JR.

✓ • THE Society of Chemical Industry has recently announced the award of the William H. Perkin Medal for 1937 to Ethyl's Vice President, Thomas Midgley, Jr., "for distinguished work in applied chemistry, including the development of anti-knock motor fuels and safe refrigerants." In making this announcement the Award Committee comments: "Tetraethyl lead in motor fuels adds forty times as much horsepower annually to American civilization as that which will be applied by Boulder Dam and Mr. Midgley's more recent discovery of non-toxic refrigerants promises to be equally fundamental in refrigeration and air conditioning."

Mr. Midgley, who in 1923 won the William H. Nichols Medal of the New York section of the Society, will be presented with the Perkin Medal on January 8th, 1937. In connection with his work in refrigerants it is stated that the application of certain non-toxic organic fluorides to refrigeration forms the basis of a great portion of the air conditioning industry. This refrigerating agent is a compound of carbon, chlorine and fluorine, is non-inflammable and was found to have very desirable engineering characteristics. Mr. Midgley developed it with Dr. A. L. Henne in the Dayton, O., laboratory of the Frigidaire Corporation.

The Perkin Medal was founded in 1906 in commemoration of the fiftieth anniversary of the coal tar color industry, the first medal being awarded to Sir William H. Perkin, discoverer of aniline dyes. The medalist is chosen by a committee representing the American Section of the Society of Chemical Industry, the American Chemical Society, the Electrochemical Society, the American Institute of Chemical Engineers and the Societe de Chimie Industrielle.

Former Perkin Medalists besides Sir William Perkin were: J. B. F. Heneshoff, Arno Behr, E. G. Acheson, Charles M. Hall, Herman Frasch, James Gailey, John W. Hyatt, Edward Weston, L. H. Baekeland, Ernest Twitchell, A. J. Rossi, F. G. Cottrell, Charles F. Chandler, Willis R. Whitney, William M. Burton, Milton C. Whitaker, Frederick M. Becket, Hugh K. Moore, R. B. Moore, John E. Teeple, Irving Langmuir, E. C. Sullivan, Herbert H. Dow, Arthur D. Little, C. F. Burgess,

PAGE FOUR

George Oenslager, G. O. Curme, Jr., Colin G. Fink, Warren K. Lewis.
From Oct. 7 issue Tägliche Berichte über die Petroleum-industrie.

Die amerikanische Abteilung der „Society of Chemical Industry“ verlieh ihre William-H.-Perkins-Medaille für 1937 an Thomas Midgley jr., Vize-präsident der Ethyl Gasoline Corporation, für „ausgezeichnete Leistungen auf dem Gebiete der angewandten Chemie“.

OLIVER "70" SHOWS TO RECORD-BREAKING CROWDS— NEW MODELS ANNOUNCED

✓ AMERICA's first high compression tractor, the Oliver "70," designed to operate exclusively on 70 octane gasoline, was demonstrated and exhibited to record-breaking crowds at the Minnesota State Fair in Minneapolis, Minn., September 5th to 12th. Although other leading farm implement and tractor manufacturers had exhibits at the fair, outstanding interest was shown in the Oliver line because of the new features, such as the self-starter, electric lights, and radio, together with the outstanding fuel economy and power performance.

Through the cooperation of the Oliver company our gasoline demonstration was given a center place at the exhibit, backed up by a public address system, over which the features of the Oliver line were explained and the use of 70 octane Gasoline in the Oliver "70" particularly stressed. The accompanying photograph shows our Mr. Bond Hedden demonstrating to the usual large and attentive audience of present and future Oliver tractor owners. Over 5,000 saw our exhibit and heard our story of high compression and 70 octane fuels.

Since the introduction to the tractor industry of this new Oliver "70," the manufacturing facilities of the Oliver plant at Charles City, Iowa, have been working at full capacity with the demand far exceeding possible deliveries. So outstanding has been the sale of this model that two new 1937 model high compression Oliver "70's" have just been announced, together with a larger model recently converted to high compression known as the Oliver Special.

The Minnesota State Fair is the largest state fair in the United States and with its location in the heart of the farm belt of the northwest, makes an exhibit here most valuable. Farmers from at least five farm producing states are daily visitors.



Fink,
leum-
ty of
rkins-
präsi-
zeich-
ndten

TO
OS-
CED

Oliver
e gaso-
eaking
apolis,
eading
ad ex-
in the
as the
ith the
nce.
ny our
at the
over
ed and
par-
shows
large
Oliver
heard
is.
of this
of the
orking
ossible
model
Oliver
larger
own as
fair in
eart of
it here
produc-

NEW FLUID PLANT TO BE BUILT NEAR BATON ROUGE

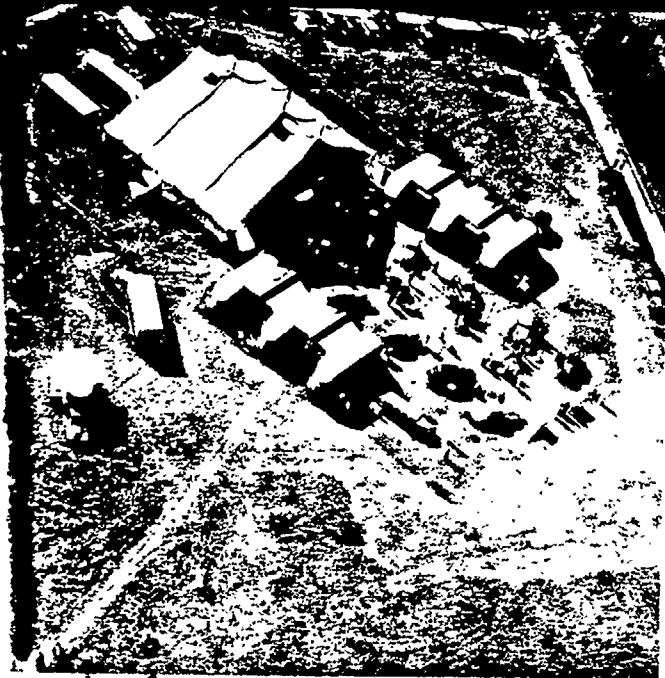
• PRESIDENT EARLE W. WEBB made the announcement in September of a new plant for the manufacture of tetraethyl lead and Ethyl and "Q" fluids which is to be built by the E. I. DuPont de Nemours Co. Actual construction got under way about October 1st and the work is progressing according to schedule. It is estimated that it will be completed in about eight months. The buildings will be spread over an area of approximately 50 acres and will include in addition to the tetraethyl lead manufacturing plant, a blending unit, alloy and ethyl chloride plants, and adequate machine shops, chemical laboratory and office building. The entire layout is designed for additional units to be added as the demands of the business may require. The site of the property is in the Parish of Baton Rouge immediately north of the City of Baton Rouge and is bounded on the west by the Yazoo and Mississippi Valley railroad, to the north by Monte Sano bayou, on the east by the L. & A. railroad and on the south is the property of the Louisiana Steam Generating Corporation which will furnish the power for the enterprise.

IMPERIAL'S OUTSTAND- ING EXHIBIT AT CANA- DIAN NATIONAL EXPOSITION

• SOME idea of the attractiveness of Imperial Oil Ltd.'s exhibit at the Canadian National Exposition is evident by the accompanying pictures. It was conceded not only the best ever put on by Imperial, but the most popular at the show. The most tangible proof of the tremendous interest it aroused is that approximately 22,000 persons daily, or about 300,000 for the entire 14 days, entered the exhibit and followed through the cycle of the petroleum demonstration from gasoline to grease. This was almost 19% of the total attendance at the Exposition. The Ethyl demonstrating engine was, as will be noted, in a very prominent place and the Imperial officials were highly pleased with the attention it attracted. We supplied them with the engine and trained their men who conducted the demonstration under our supervision. One of the illustrations show the entrance to the Im-

perial display. Another a general view of the interior with a safety demonstrator in the foreground and our own exhibit indicated by the arrow. Still another gives some idea of the intense interest of the crowd in the demonstration itself.





GM CARAVAN GETS SPLENDID COOPERATION FROM SOHIO

• DURING the Caravan's showing in the state of Ohio the Standard Oil Company took a quarter page space in the local papers of each city where the Parade of Progress showed. This advertisement carried a general view of the Caravan set-up as shown here together with the following copy:

"As one of Ohio's oldest corporate citizens and a local institution in this city, Standard Oil of Ohio welcomes the representatives of another great institution which is part and parcel of the industrial life of this state and city. To the General Motors representatives travelling with the Caravan—to the General Motors car dealers in this community—Sohio extends its congratulations upon this splendid exhibit. It is a tribute to General Motors' great contributions to the automotive world and a reflection of the efforts of General Motors to make everyday life more comfortable and pleasant. And, we at Standard Oil take a great deal of satisfaction in knowing that we play a small part in bringing this exhibit to you—because in Ohio General Motors Caravan travels on Sohio Ethyl Gasoline exclusively—Ohio's leading premium motor fuel. We urge every resident of this community to visit the Caravan . . . to see the Parade of Progress . . . to enjoy its many interesting features. You will find it one of the most entertaining exhibits you have ever seen."

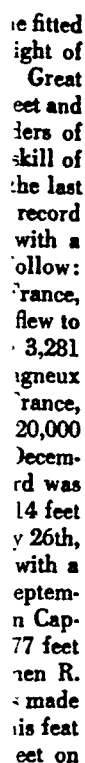
PAGE SIX

A NEW WORLD RECORD

• ON September 28th, 1936, a "Bristol" aeroplane fitted with a "Bristol" Pegasus engine, reached a height of 49,967 feet, a new world altitude record for Great Britain. This beats the previous record by 1,269 feet and is a striking tribute to the designers and builders of both aeroplane and engine but no less so to the skill of the pilot, F. R. D. Swain. Only once before in the last quarter of a century has Britain held the altitude record for heavier-than-air craft, this being in 1912 with a height of 43,977 feet. Previous altitude records follow:

Hubert Latham, England, 509 feet at Rheims, France, August 29, 1909. In December the same year he flew to 1,486 feet and again in January 1910 he made 1,388 feet. The first pilot to reach 10,000 feet was Lepaute with 10,171 in a Blerio, Gnome engine at Pau, France, on December 8, 1910. Likewise he was first to rise 20,000 feet again with a Gnome, he reached 20,079 on December 28th, 1913. Following this no official record was set up until Major Schroeder in 1920 made 22,114 feet with a Liberty at Dayton, O. This stood until May 20th, 1929, when Neuenhoffer soared to 41,795 feet with a Bristol Jupiter engine at Dusseldorf, Germany. In September 1932 Great Britain captured the honor when Captain C. F. Uwins flew a Bristol Pegasus to 42,577 feet altitude. This record held until April 1934 when R. Donati made 47,353 at Rome. The last record was made only a month before Pilot Swain accomplished his feat when a Frenchman, G. Detre, rose to 48,000 feet on August 14th of this year.

And now a word as to fuels. Owing to the peculiar atmospheric and engine conditions met with at extremely high altitudes, a gasoline of high anti-knock value is one of the chief requirements. Also the fuel must have a high calorific value. With the experience gained from previous record flights and after a considerable amount of experimental work in the laboratory and on the test bed, a fuel known as S.H. 7 was finally chosen for the present attempt. It was derived from the standard grade of Shell Ethyl Aviation gasoline of 100 octane and is chiefly remarkable for its anti-knock value which exceeds that of pure aviation gasoline by a considerable margin.

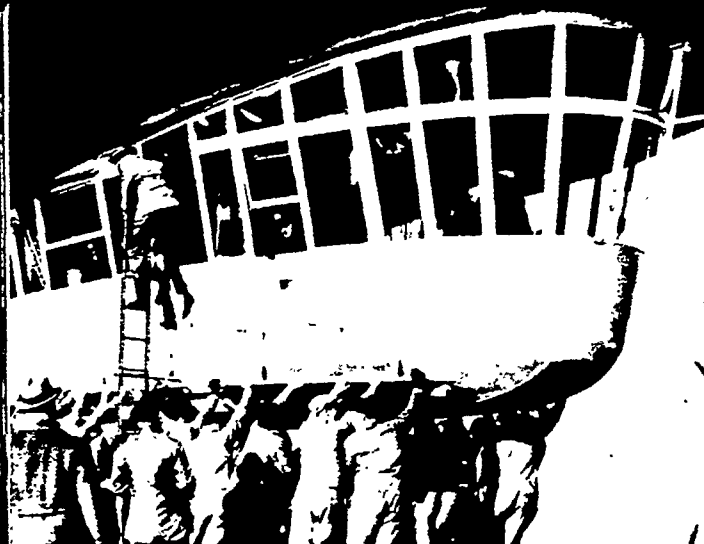


• A REPORT comes to us from our Chicago Division of two instances which occurred recently that very definitely demonstrate how our tractor program of the past season is bearing fruit. Early in September Mr. Wilt attended a high compression tractor demonstration which was put on by the Newark Hardware & Implement Co. at Newark, Ill. Officials of the company, who had attended a meeting of our tractor school at Plainfield, Ill., in August, had become so enthusiastic over the possibilities of high compression that they arranged the demonstration featuring high compression motors.

ticular
 at ex-
 -knock
 ie fuel
 -rience
 a con-
 abora-
 .4 was
 eloped
 Gaso-
 s anti-
 e by a

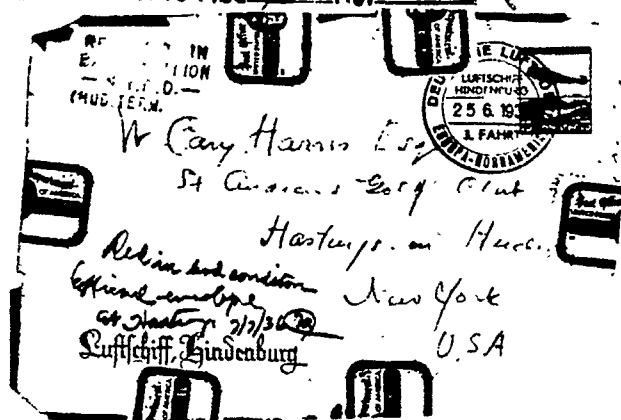


PAGE SEVEN



• CONTROL CAR slung beneath the giant hull of the airship Hindenburg is the "bridge" of this flying leviathan.

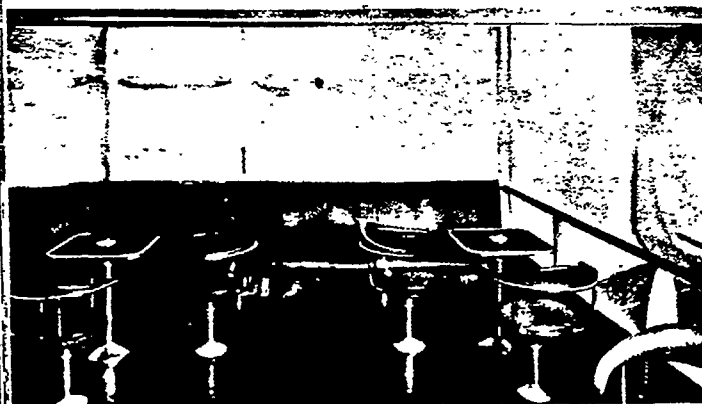
ETHYL NEWS PHOTO FILE 11/36 No. 5



• A LETTER from Germany carried by the Hindenburg on the second eastward trip over the Atlantic. Note that the letter was opened and censored as shown by the Post Office official seal.

ETHYL NEWS PHOTO FILE 11/36 No. 6

• CORNER OF the smoking room and bar.



ETHYL NEWS PHOTO FILE 11/36 No. 4 THE LAKEWOOD TO FRANKFORT SKYWAY

SEVERAL TIMES each month an event takes place which as recently as last May was the talk of two continents—a decade ago such a feat would have been considered fantastic. And yet today, so blazé have we grown that it hardly finds mention in the press. We refer to the regular scheduled crossings of the airship Hindenburg. Through the courtesy of a friend of the "News" who had the privilege of making the trip in August, we print his "log" of the voyage.

On Sunday August 9th, the day of departure, we drove down to Lakehurst, arriving about 9:15 P.M. and parked immediately outside the hangar. There our tickets and passports were verified, we were assigned a cabin and our bags were taken aboard. After waiting to see the Newark plane in with the last of the Hindenburg passengers, we bade our friends goodbye and were driven out to the Zeppelin, which was looming up on the field a half mile away, climbed aboard and found our cabin. The general plan of the ship is interesting. The lower deck is very small with the shower bath and crews quarters on the starboard side and the bar and smoking room to port. On the upper deck in the middle are the 25 double staterooms flanked on the port side by the dining saloon, with the lounge and reading room on the starboard. Each of these main deck rooms is subdivided by a railing about six feet from the windows forming promenades. The windows, seemingly of transparent celluloid, have wide sills about waist high so that one can rest his elbows and look down while several sections open enabling you to lean out. But to return to the departure. We suddenly realized we were under way—no commotion, whistles or noise—we simply ghosted up into the

ETHYL NEWS PHOTO FILE 11/36 No. 7

• THIS FLYING GALLEY is equipped with electrical range, electrical refrigeration and lightweight duralumin ware.



OD
RT

place
wo con-
een con-
e grown
er to the
enburg.
who had
print his

ure, we
.M. and
ur tick-
a cabin
see the
urg pas-
driven
he field
r cabin.
e lower
s quart-
g room
the 25
dining
he star-
ided by
g prom-
luloid,
rest his
pen en-
arture.
ommo-
nto the

l range,
n ware.

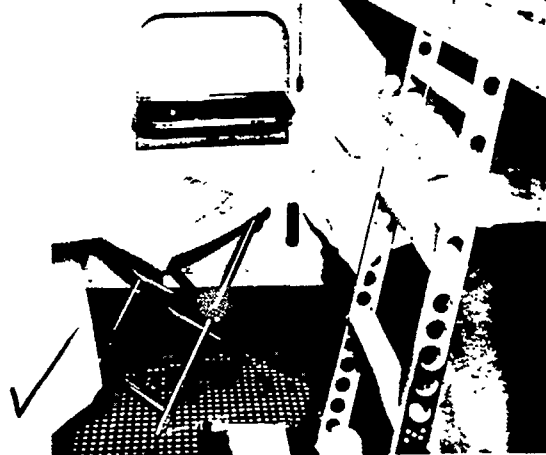
sky. It was ten-thirty, a beautiful clear night and the lights of Asbury Park and other coast resorts stood out clearly. Nearing New York we passed over Staten Island, up the Hudson to 72nd Street and crossed the city in a northeasterly direction, reaching the sound at Hunter's Island and continued along the Connecticut coast. Our route took us over New Haven and New London, Providence and Boston and then out to sea, headed for Nova Scotia. One incident which may be worthy of mention, shortly after leaving, a steward passed a basket around requesting the surrender of all matches and lighters.

Now for a word about the cabins. They are small and have an upper and lower berth. No upper sheet or blanket is used but instead a large feather comforter. In the place of windows there is an adjustable air blower in the ceiling. Room for luggage is found under the berth and there is a small clothes closet. A folding washstand with running hot and cold water complete the accommodations. On the wall over each berth is a picture of a burning cigarette with a red cross over it—a gentle reminder of the strict regulations against smoking. As to the compartments: The bar is decorated with nine panels showing various airships from the original Zeppelin of 1900 down to the Hindenburg. These are done in black on an old gold background. The windows in the bar are in the floor, guarded by a railing, and allow one to look straight down. Over these on the wall is shown the northern and southern hemispheres. To enter the smoking room you pass through a revolving door into a minute bar and then through a second door which is kept closed as much as possible. No where else is smoking allowed. The decorations in the lounge consist of a huge map of the world showing the great cruises of history from Lief Ericson and Magellan to finally the Graf Zeppelin and the Hindenburg. In the reading and dining rooms were panels depicting various places visited by the ship—Rio de Janeiro, etc. On the window sills are strip maps so that one can pick out his approximate location. The dining saloon is equipped with two long tables each seating about twenty and several small ones for two or four persons. The meals are simple though excellent and well served.

Monday morning by six o'clock we were over Nova Scotia, Newfoundland and then the Straits of Belle Isle. Passing over the farms it was amusing to see the panic caused among chickens and cows by the noise of the motors. The sensation experienced on the Zeppelin is quite different from the sudden dips encountered in aeroplane travel. One has a feeling of complete security and the occasional slight roll is hardly noticeable. It was a beautiful morning and at 800 or 1,000 feet with a 40 mile tailwind we were tooling along at about 112 m.p.h. Several icebergs were sighted but it was not until after luncheon that Labrador was left behind and we headed out over the open Atlantic. The rest of the day was uneventful and the passengers spent the time writing postcards and letters to be mailed on the Hindenburg with special stamps and cancellations. At 43 cents per postcard this soon ran into money. Late in the afternoon the chief steward took us in groups of four or five through the interior of the ship to the control car. We walked along a narrow catwalk through a maze of aluminum girders and wires, up to the bow and then down a vertical ladder, six feet or so, into the control gondola. Here we found two helmsmen, one for lateral and one for vertical steering. There was a maze of instruments: altimeter, R.P.M. gauge, drift indicator, compasses, barometer, etc., and also a small plan of the ship, showing all the ballast compartments, with a handle under each one, which if pulled, emptied that particular compartment immediately—no valves to fuss with.

Tuesday about ten o'clock we approached the Scille Islands and a steward came around and collected all cameras. Soon England and Land's End came into view and although we did not fly over England it was not difficult to pick out landmarks such as the Lizard, Eddystone Light, and Falmouth, but to our disgust we soon ran into fog and only got an occasional glimpse of the coast. The fog continued and we finally passed the Dutch coast before we knew it. Once over land, however, it cleared some-

(Continued on Page 11)



ABOVE: Passenger cabin made up for double occupancy.

ETHYL NEWS FILE TO FILE 11/36 No. 8

ETC 21292

BELOW: Dining room of the skies.



ETHYL NEWS FILE TO FILE 11/36 No. 9

LOWELL DOLLAHAN ANNOUNCES HIS BID FOR THE CHAMPIONSHIP IN FRESH WATER FISHING—50 WALL-EYED PIKE IN ONE DAY.



• HE CLAIMS that his thorough knowledge of the art of fishing is solely responsible for his phenomenal success. With his boat anchored on the international boundary line between the United States and Canada only Lowell would have the keen insight to sense that Canadian fish will not bite on

American minnows and American fish will not bite on Canadian minnows. Neither will Canadian fish cross the boundary line into American waters nor American fish cross into Canadian waters. Therefore, with a bucket of American minnows and a bucket of Canadian minnows, using great care to fish on the right side, he was able to land 49 wall-eyed Pike. The 50th fish was quite a problem and was solved by using an American Pike for bait and throwing it into Canadian waters. This violation of international law so enraged the Canadian fish that they promptly launched a vicious attack on the interloper. The bait was brought in with a Canadian monster tugging at its tail.

But below is another Chicago Division "Isaac Walton," one Bill Heck who has gained a reputation for himself.



"THE HONEST FISHERMAN"

PAGE TEN

ALKY-GAS TROUBLES

Germany turns to synthetic "wood" alcohol and Kansas changes raw material

• IN SPITE OF Germany's new campaign to develop synthetic raw materials which can be produced at home, the Germans are abandoning ethyl alcohol of agricultural origin as a motor fuel. Methanol (popularly known as "wood" alcohol) is taking its place, as it is doing in the United States. But the new methanol is largely synthetic, instead of being distilled from wood. The trend in Germany is stated in a flash to Washington by U. S. Consul Redecker:

"The prospects clearly are that ethyl alcohol of agricultural origin will steadily diminish in importance as motor fuel in Germany and the time may not be distant when its compulsory consumption will be abolished altogether. Alcohol motor fuel has never been popular in Germany, because of its high cost, inferior efficiency and the inherently uneconomic factors surrounding it. Its abolishment will be welcomed by the motoring public and all commercial and industrial branches concerned with automotive transportation."

American advocates of alky-gas will, to say the least, be embarrassed. Their principal argument in the past has been that Germany has had great success in its use of alcohol-blended motor fuel.

The fact that other synthetic products are driving this agricultural alcohol out of the picture is not surprising. In America there is the same trouble, and it extends to other fields.

High-priced corn in Kansas nearly two months ago compelled a change in the experimental plan for alcohol making. That "chemurgic experiment" found it necessary to change raw material. Then it found no available, reasonably-priced molasses. Recently it announced that Louisiana molasses, Jerusalem artichokes and other low-cost agricultural carbohydrate materials would all be used. Technical plant changes were needed as well as commercial negotiations for raw materials. Critics, of course, say that no conclusive result can be expected from this commercial-scale trial with all the need for changes which have been forced by the drought.

American synthetic methanol is far outdistancing the product made from wood distillation; and it is making similar inroads on the alcohol markets of America. Most significant is the use of methanol as an anti-freeze. Old-school American alcohol makers, however, are even more logically worrying about its invasion of solvents markets also.

From "Business Week"

HOW ABOUT THE LONG PULL?

THE LAKEWOOD TO FRANKFORT SKYWAY

(Continued from Page 9)

• THE MOST important problem confronting the man who finds it necessary to work for a living is the question of job security, or permanence of employment. Whether he realizes it or not, all other considerations are of secondary importance. If a man has a job he can depend on day after day, he at least has the assurance that neither himself nor his family will ever want for the necessities of life nor will they ever have to depend on public relief to supply them. If you have any doubt as to the primary importance of a permanent job, perhaps you ought to single out a few of the millions of Americans who don't have one and talk the matter over with them. Their comments would probably prove enlightening. When we speak of a permanent job we are not thinking of one that might last a year—or even five or ten years. We're talking about the kind of job a man can tie to over the long pull; a connection in which he can feel secure over a working lifetime. No matter how pleasant our employment might be, if it isn't secure, it's of little value to us; no matter how much money the job might pay, we'll be left squarely behind the eight ball if the job doesn't last. We've got a lifetime stretching out ahead and our most important economic consideration is to know that there'll be a pay check coming in a couple of times a month—every month. Figure it out any way you want to, you'll always come back to the same answer.

Courtesy "Humble Bee"

what and we could see immaculate Holland below with its canals, dykes and windmills. We crossed the German frontier at the Maas and soon reached the Rhine which we followed over Cologne, Coblenz and so to Frankfort. The great ship circled the city and then came softly down on the landing field where several hundred men man-handled us over to the mooring mast which in turn towed us into the immense and brightly lighted hangar. We had made the four thousand mile crossing in 42 hours 53 minutes—a new record."

THIS MONTH'S COVER SHOWS:

The world's largest and newest dirigible, the Hindenburg, landing after a trip across the Atlantic.

Filed

ETHYL NEWS PHOTO FILE 11/36 No. 10

BY DIRECT WIRE FROM		1223-S
WESTERN UNION		
CLASS OF SERVICE This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.	SYMBOLS DL = Day Letter NLT = Night Letter NL = Night Letter LC = Deferred Cable NLT = Cable Night Letter Ship Radiogram	1223-S DL = Day Letter NLT = Night Letter NL = Night Letter LC = Deferred Cable NLT = Cable Night Letter Ship Radiogram
The time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination.		
MR P F JOHNSON ETHYL GASOLINE CORPORATION CHAMBER OF COMMERCE BUILDING DENVER COLORADO		
THANKS TO YOUR COOPERATION AND ETHYL FLUID WON SECOND CONSECUTIVE PIKES PEAK HILL CLIMB STOP WITHOUT FLUID IT WOULD HAVE BEEN IMPOSSIBLE TO RUN CAR BECAUSE OF EXCEPTIONAL HIGH COMPRESSION USED		
(signed) LOUIS UNSER		
ETC 21294		

HERE and THERE

✓ • The Norfolk & Western Railroad operates numerous trucks and gasoline engines in connection with track construction and maintenance equipment throughout their system. During the past year about 300,000 gallons of gasoline have been consumed, practically all being third grade. In August we received a request from them for assistance in preparing new specifications for a better grade of fuel. Mr. Costello at once went to Roanoke, Va., and worked with their chief chemist and test engineer in revising these specifications. Mr. Hogan, our local representative followed this up with a demonstration for these officials and members of the Railroad's purchasing department. This resulted in bids being called for based on the revised specifications and a contract let for a lead treated gasoline for their requirements during the fourth quarter of the year. Although the cost of the leaded fuel is somewhat higher than they formerly paid for third structure, they are satisfied that improved performance will justify the additional expense.

✓ • During the final two days of the recent Eastern States Exposition at Springfield, Mass., automobile races were held on a half-mile dirt track. Mr. Larry Blatchford of the Boston Division, who gave demonstrations at the Fair, reported that Gus Schrader, driving a Miller Special, broke the world's dirt track record for a half mile. His time was 25.9 seconds and it is needless to say Ethyl Gasoline was used.

• The state aviation director of Virginia reports a tremendous increase in aviation interest in the state during the first nine months of this year. On October 1st there were 132 licensed Virginia pilots as compared to 17 on January 1st. During the same period the number of licensed airplanes has increased from 17 to 90 and eight new airports have been licensed.

✓ • Manager Harold Berg of Kansas City reports that demonstrations were given to the personnel of twenty CCC camps in his division with an attendance of over 3100 at all meetings. The officers in these camps asked questions particularly bearing on octane selectors, and many of them expressed their intention of trying Ethyl Gasoline. Some of the officers' cars were upon request adjusted by our representatives. It is noticeable at these meetings the interest exhibited particularly by that portion of the personnel engaged in automotive maintenance. This is of course quite natural but these individuals amount to a considerable number and unquestionably our demonstrations are making an impression. A great many light trucks are used in the camps and the question of detonation has seemingly been a problem. One of the chief advantages of this activity is the fact that many of these men are now being placed with private concerns, the majority of which are repair garages, automobile agencies, fleet operators, etc. With such a trend, our work with this group takes on considerably more importance, this coupled with the fact that the officers in charge are favorable towards us and believe in our product.

✓ • "On Wednesday a rather amusing incident occurred which is typical of several I have seen during the work here," writes Mr. Peters, who is in charge of our display at the Texas Centennial. "A gentleman watching the demonstration whom I noticed showing keen interest all during the talk and engine running, dashed off after I had finished. In a few seconds he returned pulling his wife along by the arm. He came up to me and asked if I would repeat the demonstration for his wife. This I did and after finishing he turned to her and said: 'Now I guess that'll cure you of using that cheap gasoline in our car.'"

✓ • The Dayton Division is helping to introduce the 1937 Chevrolet and Buick automobiles by appearing on the program of the new product schools in the Charleston and Cleveland zones. With advancing high compression the manufacturers realize that Ethyl Gasoline becomes more important in the operation of these cars; consequently Messrs. Newman and Boehme of

the Division have been invited to lecture and demonstrate on our product. At the conclusion of the Charleston Chevrolet meetings some 400 service managers and mechanics attending the schools, which continued through October, return for a banquet at which time Mr. Newman is to be their guest.

• How a jobber investigation brought unexpected results is illustrated by a recent experience of Mr. Carl Ahlert. A prospect whom he was contacting out in the Imperial Valley, became sufficiently interested to request our representative to drive 200 miles with him to Yuma where his brother was operating a fleet of trucks on the All American Canal project. This resulted in an order from the brother for a high compression head for one of the trucks. The unusual feature is that although the truck was operating outside the jobber's territory, he was willing to travel that distance to study results on which to base his own campaign.

• In spite of the fact that the Atlanta Division is not a large enough user of tractors to warrant a special tractor representative, Mr. Tennent, our new Mississippi representative, has stirred up much interest in his territory. Due to his efforts, a test has been arranged in the Delta Section at the State Experimental Station which will be witnessed by thousands of farmers, principally cotton growers.

• Assistant Division Manager Faller of Dayton has already scheduled universities and automotive schools for talks and demonstrations. Among these are Ohio State University, Case School of Applied Science, and the Cleveland Automotive Trade School, one of the best institutions of its type in the country. He is one of our strongest advocates for making the younger generation Ethyl minded.

• Perseverance is still a good producer. For two years Mr. Lowell Mason has been urging the North and South Carolina manager of Louisiana Oil Co. to stock Crown Service Ethyl at the terminal at Wilmington and to let him carry our cars to the jobbers—this company operates entirely through jobbers in those states. Ethyl is now available at Wilmington and a series of 15 meetings are under way. One of the subjects of permanent interest to the jobbers and their dealers was the No. 15 issue of Facts and Flashes containing the survey of the buying habits of the users of various grades of gasoline.

• C. E. Stevens Co., Inc. of Seattle, who handle our motor advertising in the northwest, have prepared a bulletin stating the advantages to be obtained by the use of Ethyl Gasoline. The bulletin carries a colored reproduction of one of our trucks and is being mailed to all service station operators in the Pacific Company's territory. This kind of cooperation is very gratifying and greatly appreciated.

• During the month of September the Dayton Division had representatives of the Ashland Refining Company and the Elk Refining Company, in separate groups to our Dayton Refining Laboratory for instruction and observation of our business in preparation for coming Ethyl campaigns. The Ashland company is introducing a new 80-octane number Aviation Fuel Pump per Ethyl Gasoline while the Elk Refining Company is actively fostering a Keystone Ethyl Sales Contest during October. Messrs. Mack and Siebenthaler arranged and conducted the parties to Detroit.

• Messrs. Peters and Townsend report continued good attendance at the Centennial and that Ben Berran won the entrance to the Ethyl demonstration after each contest. Mr. Peters gave a special demonstration to Mr. Berran at Mr. Caldwell's expense and Bernie was not only impressed but stated that he would soon forth use Ethyl in his own car.

ate on our
let meet-
ding the
banquet

results is
A pro-
v, became
drive 150
ng a fleet
sulted in
d for one
the truck
willing to
his own

t a large
represent-
ative, has
efforts, a
e Experi-
farmers,

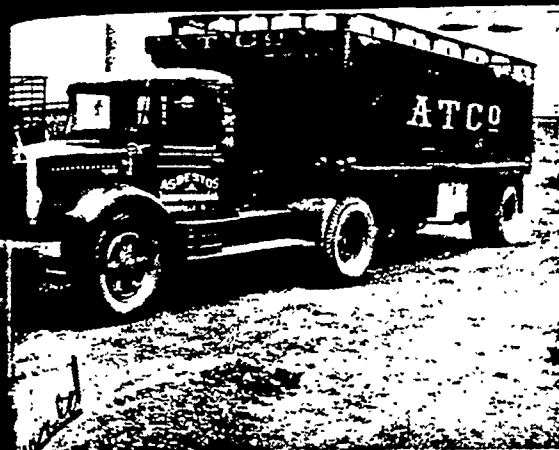
already
ilks and
ity, Case
ve Trade
country.
younger

cars Mr.
Carolina
Ethyl in
ry to the
in these
ies of 15
ramount
30 issue
g habits

outdoor
extoling
line. The
ards and
Stevens
ratifying

ion took
the Elk
-engineer-
facilities
and com-
Red Pep-
- actively
October.
cted the

d attend-
audience
ra gave a
quest and
ld hence-



• THE Asbestos Transportation Company of Manville, N. J., which does all the hauling for the Johns-Manville plant, has recently been converted 100% to Gulf No-Nox Ethyl. This fleet which consists of 25 AC Macks, 2 Whites and 2 Autocars, all 10 wheel jobs, changed to Ethyl fuel after making exhaustive tests which showed that mileage varied from 2.3 to 2.7 on regular gasoline as against 3.3 to 4.5 on Ethyl. This contract for No-Nox was a direct result of Gulf's effort in their recent campaign to increase their sales of Ethyl Gasoline.

• THE following Service Award has been made as of November 1st:

TEN YEARS

A. H. CHENAULT - - - Los Angeles Sales

TRY THIS . . . IT MIGHT WORK ONCE

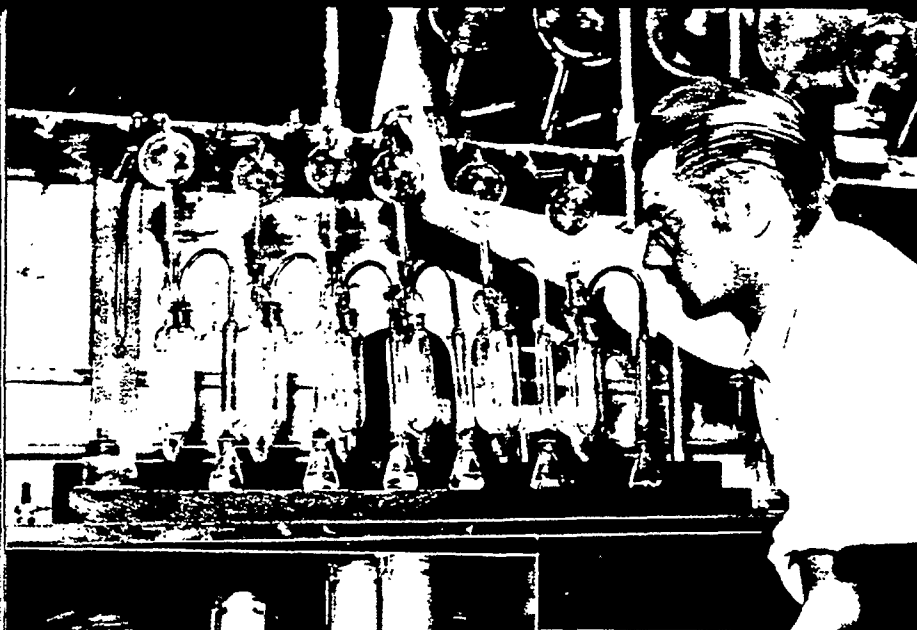
• THE smart young wife of an Ethyl fieldman parked her car the other day in the business district about five feet from a fire hydrant. Returning after a short absence she perceived a policeman lounging comfortably in the front seat awaiting the owner's return. Bringing into action a little quick thinking she hailed a taxi and drove home from whence she immediately called the police department, informing them that her car had been stolen. In a remarkably short time the same officer appeared and accepted with beaming complacency her praise for his efficient work.

CONCRETE HIGHWAYS REGAIN THEIR STRENGTH IF GIVEN REST

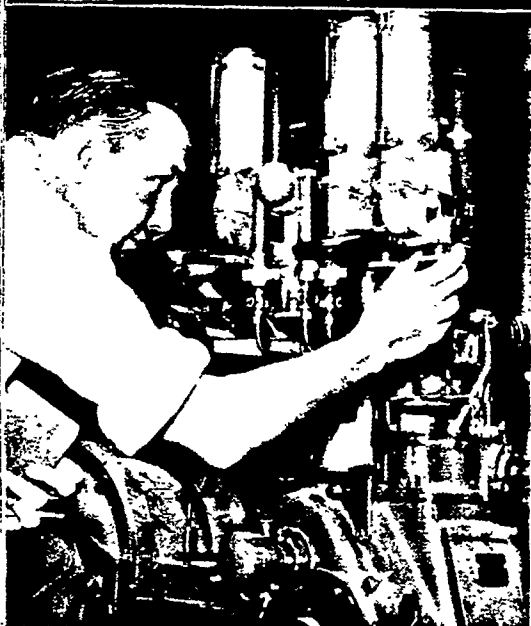
• CONCRETE highways can rest and regain their strength when traffic is light. Square bars of concrete the thickness of pavement and several feet long can be subjected to poundings like those from heavy traffic until they break. This reveals the practical strength of various mixtures and thicknesses.

Highway concrete is slightly elastic. It bends and stretches a bit under the weight of the passing vehicle. If each stress is not more than half of the force necessary to break the bar, the concrete will stand six to seven million stresses before it breaks. But if the individual stresses reach two-thirds or three-quarters of the concrete's breaking strength, the material will stand only 200,000 to 300,000 of them. The ability of the concrete to "rest" is shown by interrupting the stress machine from time to time. Some initial stresses, if continued long enough, will cause a drop of about 40% in the concrete's tensile strength. That is, a weight 40% less than required at first would break the concrete. If, however, the stress is stopped for awhile and the concrete given a complete rest from pressure, it recovers its original tensile strength. On the other hand no such recovery occurs if the concrete has been over-strained. That is, overloading it too much beyond the 40% limit leaves the concrete permanently weakened. In this respect pavement is like the human constitution. In practice this means that highways on which traffic virtually stops at night need not have the tensile strength as similar roads with 24 hour traffic.

• AN Ethyl fieldman was the father of a small family which he was rarely able to see, being so occupied in giving demonstrations throughout his territory. One night, however, he was to stay at home and take care of the several young offspring. The next morning his wife asked him if he met with any difficulty. "Oh", he replied, "I got them all to bed O.K. except the little red headed one. . . . I had to lick her before she'd go." "Why John", she exclaimed, "that isn't our child. . . . she lives across the street."



• ABOVE: Fuel being tested for sulphur content by California Testing Laboratory.



• ADJUSTING "knock engine" to get exact anti-knock quality of fuel.

*Photos returned to
Popular Mechanics
3 copies 11/2/36*



ETHYL NEWS FILE 11/36 No. 11

oratory men decided after they had followed directions on the label and stirred half an ounce into a gallon of gasoline. The treated fuel had exactly the same characteristics as the original gasoline. This racket started many years ago, a gasoline authority recalls, when someone discovered fuel knocks seemed to be reduced when ordinary moth balls were dissolved in the gasoline. The next step was to give the moth balls a fancy name and sell them at a good price. Ever since then naphthalene, the basic ingredient of moth balls, has been peddled in powder, liquid and pellet form as a carbon remover and fuel economizer. Naphthalene and other coal tar products really have some effect in suppressing detonation, but unfortunately they create excessive carbon deposits in the combustion chambers, leaving the motor in worse shape than it was before.

A typical "magic gas" powder about which startling claims were made was investigated by the Milwaukee Better Business Bureau. After its tests the bureau issued a warning that the powder neither increases the power nor the octane rating of a fuel, hence it has no effect on economy. The Bureau of Standards, after testing hundreds of such compounds declared that "in no case has the treatment of gasoline with one per cent or less of such dope been found to have any significant effect,

- "FIVE MORE miles per gallon!"
- "Removes carbon!"
- "Stops oil pumping!"
- "More power with pep tablets!"

When you see signs like these, stop, look and beware! Magic fuel elixirs and cure-all compounds that are sold in tablet, powder, pill or capsule form to motorists, comprise a wide-spread highway racket. There are hundreds of such preparations on the market that you can buy for a dime or a dollar, but few of them are any good. Some are actually harmful to motors.

Recently a liquid "vegetable compound" said to be distilled from a rare desert plant was investigated. The usual claims of increased mileage and decreased carbon were made for it and to prove it was harmless the salesman would drink one of the tiny bottles that sold for a quarter right before your eyes. It was useless, too, lab-

THE E KET

beneficial or otherwise, unless the dope affects the tendency of the fuel to knock or detonate." A publication of the American Automobile Association reported after similar tests that not a single instance had been found in which fuel dope decreased carbon deposits, knocks, or caused any improvements in the general operation of the automobile to an extent that could be measured.

Don't let a money-back guarantee fool you. One company offered to refund the purchase price of ten bottles if they failed to reduce the carbon. The company will do exactly that, if and when a disgruntled customer comes in with the empty bottles and definite proof that carbon was not reduced. The point is that few customers will use that many bottles and only a few of those who do will bother to claim the guarantee if dissatisfied. This is known as the "one tenth of one per cent racket," which is just about the percentage of dissatisfied customers who actually ask for their money.

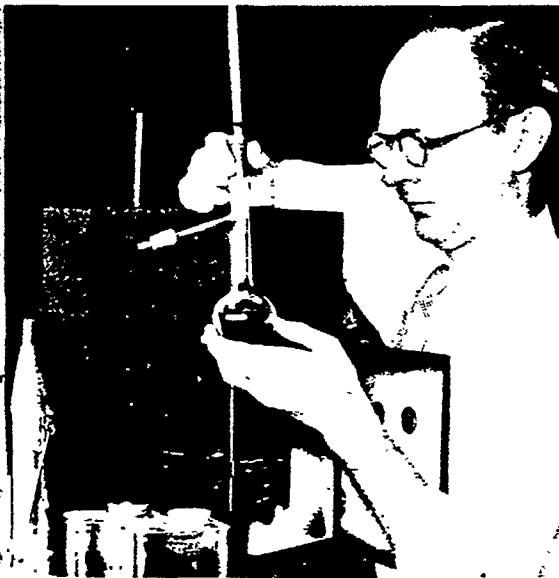
One man who had a "more miles" compound claimed he extracted it with kerosene from a rare mineral deposit. Perhaps he did, a laboratory staff for an oil company admitted after they tested it, but they couldn't find it improved gasoline. Another had a dope he declared was a splendid mileage improver because it was highly radioactive. The laboratory test staff rejected it too after tests showed that no matter what else it might be good for, it was useless as a fuel ingredient. In another case a laboratory tested a dope and found it did all the inventor claimed. The liquid had splendid anti-knock qualities but a complete analysis showed the

material contained tetraethyl lead, a recognized anti-knock compound, which the "inventor" had secretly added to his mixture. In another instance an aromatic compound extracted from Indian tea looked good until it was learned that copious quantities of benzol were required in the extraction process. This was a case in which the discoverer was unaware that benzol alone is a very effective knock suppressor. But benzol, at about forty cents per gallon is too expensive to use as a knock inhibitor in the quantities necessary.

The oil companies are not interested in testing compounds of lead, iron, nickel, aniline, benzene, or xylene. The anti-knock properties of these materials are well known and the ones with any actual value are already patented and available in the regular gasolines of responsible oil companies. One service-station operator in California ran his fuel business up to 3,000 gallons per day with a proposition that seemed sure-fire. He explained his gasoline gave better mileage because it contained a secret compound smuggled to him from Germany. He urged every customer to check the mileage from five gallons of ordinary gasoline, then have any remaining fuel drained from his carburetor and fill up with five gallons of his special gas. Invariably the customer found he really did get two or three more miles per gallon with the treated brand. The secret of this performance was that when the service station operator put in five gallons of his own fuel for a test run he always threw in a half gallon or more extra gasoline. This was hardly enough to register on the average gasoline gauge and yet was enough to materially increase the distance five gallons of fuel would go.

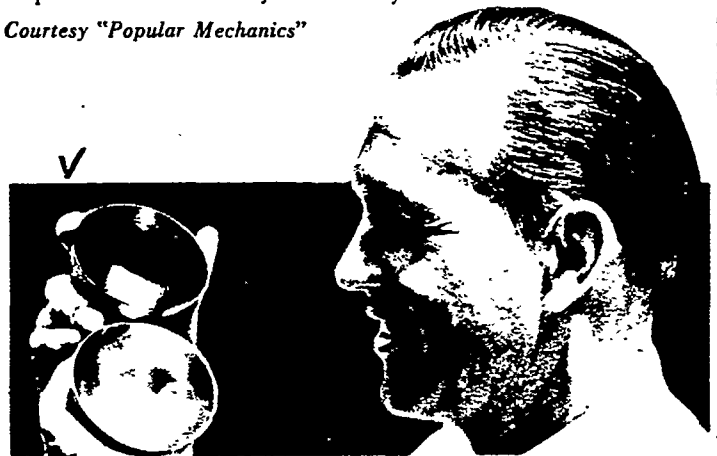
An even greater hoax was the tablets that seemed to change water into gasoline. In this case the "slicker" would drive into a service station and calmly fill his fuel tank with water from a hose. Then to the amazement of the attendant, he would drop a couple of pills into the tank and drive off, his engine running as well as ever. Naturally, after this happened a few times, the attendant would give almost anything for some of the pellets. The motorist would explain that ordinarily he didn't sell any pills but finally would part with several packages he had in the car getting \$15 and \$20 for enough to "convert 500 gallons of water". That was the last the service station man ever saw of his money or the motorist. The answer, of course, was that the motorist had a hidden fuel tank and the rear tank into which he poured the water was just a dummy.

Courtesy "Popular Mechanics"



• TESTING volatility of fuel to which dope has been added.

• RIGHT: Discoloration of upper dish shows excessive gum formed in a doped gasoline.



ctions
llon of
e char-
started
when
duced
e gaso-
a fancy
ce then
as been
carbon
d other
ressing
cessive
leaving

startling
waukee
issued
power
o effect
testing
no case
or less
effect,

Returned Father. ☒ mps

✓

✓

17

✓

11/12



• The Los Angeles Division announced an addition of five personnel. Miss Yvonne Turner has joined as assistant secretary and will serve as secretary to Manager "Doc" Cagney. The opportunity of welcoming her to the office family.

• Four of the commissioners in the Ohio Republican State Association at the Western Hills Country Club at Lakewood, L. to R. Mr. Weth, John W. Johnson, Anthony W. Mack, Ethyl's Dorian Du Mar, Dr. Phil Tate, the Star, and Mr. Treasury, Left Anthony Mack, a friend of the ground Harry Mack's credit and banking, to act as chairman of the committee on their besting the best and the best otherwise improving their marketing pattern, after consultation with Harry's credit. Notwithstanding, a change in ground Harry's credit.



• A recent applicant of the Baltimore office to the
consulate wanted to have two men to assist in
having to travel one man or to contact, to apply for
willing to put up with living in transit, to have the
wanted to get down with a man to provide the
smuggling into transit through the
around. Fortunately the active
had not to 1943



WHAT?
NO BABIES
THIS MONTH?

ETHYL NEWS PHOTO FILE 7/36 No. 12



✓
A NEW PUBLICATION has made its appearance in the organization. There is every reason to expect that it will accomplish its purpose as set forth in the announcement which we print below and which appeared on the inside cover of the initial issue—we wish the Chicago Division every success in this new enterprise.

"Of the Division, by the Division and for the Division—The ChicaGO.

The ChicaGO may be a success or it may be a failure but one thing is certain—it will be what we, ourselves, make it.

From division meetings we have learned the value of group discussions. The ChicaGO will attempt to supplement and keep alive these discussions in order that we may all benefit. We hope to establish a closer coalition of field territories thru a better understanding of division problems. We must all realize that a division will progress in a smoother and more efficient manner when every member is concerned not only with his own work but its relation to the work of the other men.

To accomplish this we shall publish a resume of weekly letters in order that each of you will know what the others are doing, and, more important still, how they have gone about it.

We believe that through mutual discussion of division problems we can formulate a more definite and more efficient sales promotional program. Ideas which appear applicable to broader fields will be forwarded to the New York office for their consideration and possible appearance in the Ethyl News.

From its nature The ChicaGO is, of course, confidential and must always be treated in that manner.

And So—the editors, having broken over each other's heads numerous bottles of Pilsner, declare the launching of The ChicaGO.

Let's GO!"

At least 127 DAYS TO SPRING

NOW'S THE TIME TO BUILD YOUR ETHYL BUSINESS



REMEMBER LAST WINTER? Another long, tough one is just ahead. That means *hundreds* of cold starts . . . *thousands* of slippery miles for your customers. Tell them the comfort, safety and quick starting you have for them in your Ethyl pump...they want it. This advertisement in color in leading magazines will help you build Ethyl business now. And remember — Ethyl buyers are better customers for every high-grade product and service you sell — *more profitable customers* to you. Talk up Ethyl now.

**SIGN OF THE BEST
WINTER GASOLINE**

STARTS QUICKER... AND STOPS KNOCK



(Copyright, 1934, Ethyl Corp.)



This winter use Ethyl

THESE 117 ARE THE
FINING COMPANIES, MORE THAN ONE
HUNDRED THOUSAND DEALERS, AND
MORE THAN TEN THOUSAND JOCKEYS!

IN UNITED STATES

Aetna Oil Service, Inc.
Allegany Refiners, Inc.
Allingbury-Arrow Oil Co.
American Oil Co.
Anderson-Prichard Refining Corp.
Arro Oil & Refining Co.
Ashland Refining Co.
Associated Oil Co.
Atlantic Refining Co.
Atlas Pipeline Corp.
Barnadall Refining Corp.
Bell Oil & Gas Co.
Bradford Oil Refining Co.
R. R. Bush Oil Co.
Caminol Company, Ltd.
Cashfield Oil Co.
Chalmers Petroleum Corp.
Champion Refining Co.
Cities Service Oil Co.
Cities Service Refining Co.
Colonial Beacon Oil Co.
Col-Tex Refining Co.
Continental Oil Co.
Continental Refining Co.
Crystal Oil Refining Corp.
Cushing Refining & Gasoline Co.
Deep Rock Oil Corp.
Derby Oil Co.
Eason Oil Co.
El Dorado Refining Co.
Elk Refining Co.
Empire Oil & Refining Co.
Fleet-Wing Corp.
Freedom Oil Works Co.
General Petroleum Corp. of California
Gilmore Oil Co.
Globe Oil & Refining Co.
Gulf Oil Corp.
Hawcock Oil Co. of California
Hickok Oil Corp.
Home Oil & Refining Co.
Humble Oil & Refining Co.
Independent Refining Co.
Indian Refining Co.
Johnson Oil Refining Co.
Kanawha Refining Co.
Kendall Refining Co.
Lafayette Refining Co.
Lion Oil Refining Co.
Louisiana Oil Refining Corp.
MacMillan Petroleum Corp.
Magnolia Petroleum Co.
Mid-Continent Petroleum Corp.
National Refining Co.
Ohio Oil Co.
Oil Creek Refining Co.
Omar Refining Co.
Pan American Petroleum Corp.
Pashanale Refining Co.
Pennsylvania Oil Products Refining Co.
Pennsylvania Refining Co.
Pensacola Co.
Petrol Corporation
Phillips Petroleum Co.
Pure Oil Co.
Quaker State Oil Refining Corp.
Refiners, Inc.
Republic Oil Refining Co.
Richfield Oil Co. of California
Richfield Oil Corp. of New York
Rio Grande Oil Co.
Rock Island Refining Co.
Rodgers Oil & Refining Corp.
Root Petroleum Co.
St. Helen's Petroleum Co., Ltd.
Seaside Oil Co.
Shell Eastern Petroleum Products, Inc.
Shell Oil Co.
Shell Petroleum Corp.
Signal Oil Co.
Sinclair Refining Co.
Skelly Oil Co.
Soccony-Vacuum Oil Co., Inc.
Lubric Division
White Eagle Division
White Star Division
Standard Oil Co. of California
Standard Oil Co. (Indiana)
Standard Oil Co. (Kentucky)
Standard Oil Co. of Louisiana
Standard Oil Co. (Nebraska)
Standard Oil Co. of New Jersey
Standard Oil Co. (Ohio)
Standard Oil Co. of Pennsylvania
Standard Oil Co. of Texas
Standard Oil of New York
Sterling Oil Co.
Scott Oil Refining Co.
Succor Oil Co.
Texas Company
Texas Pacific Coal & Oil Co.
Tide Water Oil Co. (Alabama)
Tri-State Refining Co.
Union Oil Co. of California
United Refining Co.
Utah Oil Refining Co.
Valvoline Oil Co.
Vickers Petroleum Co.
Viking Distributing Co.
Weddell Oil Co.
Waggoner Refining Co., Inc.
Warner-Ontario Co.
H. F. Wilson Oil & Gas Co.
Wirt Franklin Petroleum Corp.
Wolverine-Empire Refining Co., Inc.
Yale Oil Corp.

ETC 21301

FILE COPY - W. CARY HARRIS



ETHYL NEWS PHOTO FILE 12/36 No. 1

Christmas
1936

ETC 21302

Mr. Wilton 12/8/57

OK

Unless otherwise indicated, all artwork and photographs destroyed May 1957.

As a
Year
ful a
diffic
pass
with
own
To it
mulat

agement, the wholehearted cooperation of their associates has been a source of real inspiration. The members of our organization have shown a loyalty to our company which is most gratifying.

In appreciation of that support and in acknowledgment of the enthusiasm it engenders for the duties before us, the members of your Board of Directors join me in wishing you and yours

Joyful Christmas and Health and
Happiness During the Coming Year

Edward Webb
President

Mr. Weston 12/8/3

The Season's Greetings

To All Members
of the Organization

As we approach this holiday season and the New Year, happily we find less anxiety and a more cheerful atmosphere than has prevailed in some of the difficult years through which we have recently passed. Reports of economic improvement, coupled with the unmistakable signs of recovery, inspire our courage and faith.

In those of us having the responsibility of formulating the policies of our company, and its management, the wholehearted cooperation of their associates has been a source of real inspiration. The members of our organization have shown a loyalty to our company which is most gratifying.

In appreciation of that support and in acknowledgment of the enthusiasm it engenders for the duties before us, the members of your Board of Directors join me in wishing you and yours

Joyful Christmas and Health and
Happiness During the Coming Year

W. W. Webb
President



ETHYL GASOLINE CORPORATION
CHRYSLER BUILDING
NEW YORK CITY

Published monthly for the entertainment and benefit of members of the organization.

W. CARY HARRIS
Editor

EDWIN DOWNS
RUSSELL B. WESTON
Associate Editors

Correspondents

GEORGE W. WARREN
Atlanta

L. W. SHANK
Baltimore

DONALD S. FLYNN
Boston

H. C. DEES
Chicago

R. R. FALLER
Dayton

C. M. BERRY
Kansas City

CARL ABELL
Los Angeles

R. L. GOLTZ
New York

J. N. FITZGERALD
Toronto

HARRY KUHE
Tulsa

JULIAN J. FREY
Engineering Dept.

ARTHUR P. STOVER
Manufacturing Dept.

E. R. ANDERSON
Gasoline Testing Dept.

HUBERT FOSSETT
Export Dept.

ALL MATERIAL FOR PUBLICATION
SHOULD REACH THE EDITOR'S DESK
BY THE TWELFTH OF THE MONTH.

VOL 3, No. 12

Demand for High Compressioning Is Developing in Canada ✓

• "MOTOR MAGAZINE" (Toronto), which is published for the Canadian trade, comments editorially in its Fall number on high compressioning and it is evident that the Dominion is little, if any, behind us in awakening to the possibilities it affords. To our own company which has taken part in this movement, it should be of interest to note the progress Canada has made along this line. Under the heading "A New Field for Service," the publication says:

"Engine rebuilders and shop operators who concentrate on engine overhaul work report substantially increased business this year in high compressioning fleet and passenger car engines. In Canada the idea is quite new, and even in the United States where progressive shop operators have been high compressioning engines for the past five years, the surfaces have not yet been scratched, so great is the potential market for this type of work.

"It is in fleet operation that the greatest benefits are to be derived from high compressioning, and it is this classification that has the greatest possibilities for the shop operator who makes a study of this work. By raising the compression of truck engines the fleet operator may accomplish one of the following three objectives: He may operate his trucks at higher road speeds, while hauling the same load on the same fuel consumption. Or, his trucks may be made to haul heavier loads at the same speeds and on the same fuel consumption. Or, his trucks may haul the same loads at the same speeds, but at a saving of fuel. Regardless of the application there is a definite saving resulting from high compressioning the engine. When a passenger car engine is high compressioned this saving may be translated into either greater mileage per gallon at the same speed, or higher road speeds on the same fuel consumption. High compressioning can be applied to both new and old engines (provided, of course, they are not already equipped with high compression heads) and when the operation is performed at the time a motor is being overhauled the cost is almost negligible. Due to the higher operating pressures, however, the high compressioning of old engines is not recommended unless the motor is being entirely rebuilt. Only about 20% of the cars and trucks now in service have high compression heads.

"An entirely new, and as yet untapped market in Canada for high compressioning, is the farm tractor field. By high compressioning gasoline tractors, farmers can effect a saving in fuel consumption of from 10 to 25%. The fact that there are something like 100,000 gasoline tractors on Canadian farms gives one a fair idea of the potential business to be got from this field alone. This summer the writer ran across a shop operator in a small town who had lined up 42 tractor jobs to be done in the winter months when his car business would be at a standstill."

PAGE ONE

ETC 21305



Handwritten signature or initials.

MEET MR. BERG

✓ • HAROLD R. BERG was born in Manchester, N. H., on April 14, 1905. He received his early education in the local schools of Portsmouth and then entered the University of New Hampshire in 1923. Upon completing his college course he became associated with the Mexican Petroleum Corporation in their Portsmouth District and served as Operating Manager until August, 1928, when he joined the Ethyl Gasoline Corporation. Mr. Berg's first assignment with the company was in the capacity of field representative in the northwest territory under Mr. Jordan who was then Manager of our Chicago Division. In 1930 he was appointed Assistant Manager of the division, serving as such until later that year when the Kansas City Division was formed. Mr. Berg was then transferred to the new division and appointed Manager, where he remained until 1932. Early that year he was brought to New York for some temporary specialized work with the Sales Department. This assignment occupied his time for about a year until March, 1933, and upon its completion he returned to his old post at Kansas City.

Mr. Berg is married and has one son. He takes a keen interest in all athletic sports, especially baseball and football.

by
th
sh
ba
vic
At
se
Et
me
me

visi
siti
sho
to
on
18



• LEFT: Adjoining postings of Ethyl and Standard Oil Company of Ohio which appeared during the month of July throughout the state. ✓

• BELOW: One of the sessions of the 1937 New Product School, conducted by the Charleston, W. Va., Zone of the Chevrolet Motor Company with the assistance of Mr. W. A. Newman of the Dayton Division. The picture shows the men at a breakfast of coffee and doughnuts. Standing in the background from left to right are Mr. H. W. Bayer, assistant zone service manager, Mr. E. H. Ennis, Zone Service Manager and Mr. Newman. At the head of each table are Messrs. R. N. Pryse and G. H. Baldner, service representatives. Later Mr. Newman went into action with his Ethyl charts and demonstrator. These meetings extended over the entire month of October with each agency in the zone sending salesmen, service managers and mechanics. *Filed*



• ABOVE: The Columbia Refining Company of Cleveland is doing a good Ethyl business which is stimulated by outdoor painted bulletins. Mr. A. H. Bingham of the Dayton Division has helped with this promotional work and submits this sample. ✓



• BELOW: One of our Pennsylvania customers, the Pennsylvania Refining Company of Butler, Pa., recently had a campaign on their Penn Drake Ethyl. A prize was given to each service station salesman at the station showing the largest increase. Every man asked each car owner driving in "Shall I fill it up with Ethyl?" The result was an average 50% increase over the same period last year, which increase is being maintained even after the prizes were awarded. ✓

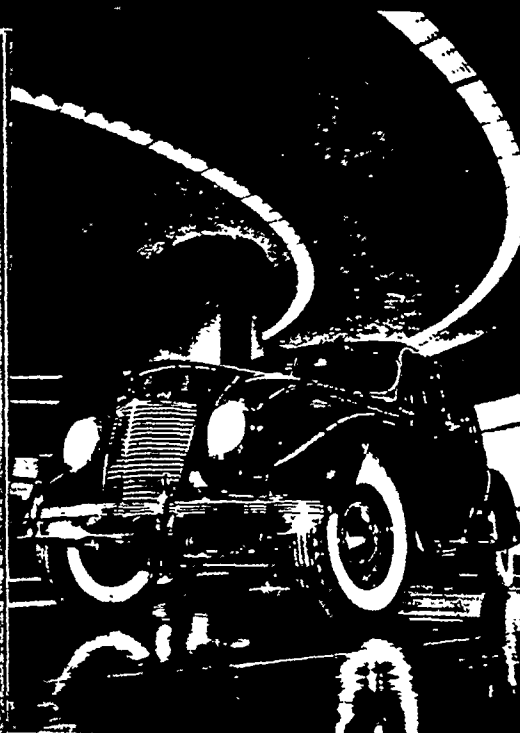
Mr. Murdock, our Western Pennsylvania representative, sent this photograph showing one of Pennsylvania Refining Company's tank truck trailers filling up with their Penn Drake Ethyl which they use in their own equipment because of the superior performance and economy. *Winton* *Filed*

• WITH THE cooperation of the Gulf Oil Corporation the New York Division conducted a No-Nox Ethyl demonstration at the Staten Island Exposition of Progress, October 16th to 24th, inclusive. Demonstrations and short talks were held at regular intervals to groups ranging from twelve to twenty-five people. M. Fred Nixon attended the exhibit and commented on the number of people who witnessed our program out of the total 183,000 who saw the Exposition. *Filed*



3 copies
 To J. S. ...
 Harry ...

CHRYSLER CORPORATION OPENS UNIQUE MOTOR CAR SALON



• TOP: Unusual lighting effect with lights set flush with ceiling.

• MIDDLE: There's plenty of action in the new Salon. In the foreground, people can be seen taking a ride on the revolving showroom floor. In the background the escalators running to and from the second floor.

• BOTTOM: Another view of island and escalators.

PAGE FOUR

• THE NEW Chrysler International Automobile Salon has just been opened in the Chrysler Building, New York City, and is understood to be the most modern and elaborate automobile showroom in the world. The Salon occupies 5,000 square feet in the southwest corner of the ground floor and 15,000 square feet of the mezzanine. It presents such innovations as a revolving showroom floor, the largest installation of invisible glass in the country, special lighting effects which do away with glare and shadows, a motion picture display room and escalators to carry people to and from the second floor. Another feature is the complete air-conditioning of both floors for winter and summer comfort.

The revolving showroom floor occupies most of the first floor of the Salon and is of sufficient size to permit a showing of five cars. It moves at a speed of four revolutions an hour around a stationary island from which rise the escalators taking visitors to the second floor where additional cars are on display.

The invisible glass windows contain more than 1,000 square feet of curved glass in the seven large windows, three of which are on 42nd Street and the remaining four on Lexington Avenue. Through the curving of the glass, light reflection is eliminated, thus giving the effect of open space between the passer-by and the interior of the Salon.

The revolving floor is so situated that each of the five cars displayed is continually passing in front of one of the windows on the street.

Construction and lighting of the ground floor of the Salon has the appearance of a series of concentric circles extending outward from the center of the revolving floor. A semi-circular glass partition rounds out the north end of the room and two continuous and concentric circles of lights are set flush with the ceiling. Rubber tile in two tones of grey is used on the floor, while the ceilings are covered with grey accoustical material designed to reduce noise and reverberation. Walls on the lower floor are painted a neutral blue and on the upper floor grey, thus through the proper manipulation of lights, the wall colors can be made to complement the colors of the cars exhibited.

The motion picture display room is located on the second floor and is of sufficient size to permit 150 guests to view motion picture demonstrations of Chrysler Corporation cars undergoing tests. Throughout, a generous use of mirrors gives an added effect of spaciousness.

ETC 21308

NEW MEMBERS OF SALES FORCE ATTEND TRAINING SCHOOL

• **BEGINNING** Monday, November 16th, a training school was opened for the men who have recently joined the Sales Department. This was conducted under the direct supervision of Director of Sales, Personnel, Bob Jordan, and was held in Detroit. The entire group made their headquarters at the Fort Shelby Hotel during the two weeks period of special training. These new men in the organization, mentioned further on the following pages, were in attendance:

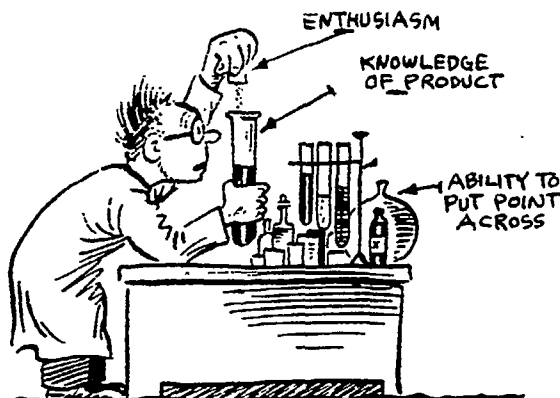
A. J. Baldwin, W. R. Barnes, G. E. Calef, J. L. Eppley, G. A. Gallagher, Peter Hay, A. F. Johnson, M. A. Kinley, E. K. Locher, P. B. MacEwen, C. D. McConnell, J. S. Maynard, R. R. Mead, F. Y. Mercer, J. K. Morris, L. Myatt, W. F. Nixon, L. D. Reis, A. C. Vallier.

Although the school was primarily for the new men, the following older members of our staff were also included for additional training:

W. W. Sweeney, Jr., Atlanta Division
T. H. Tennent, Atlanta Division
Dwight Andrews, Baltimore Division
P. M. Perry, Boston Division
B. D. Harrison, Chicago Division
M. L. Olsen, Chicago Division
Neil M. Urquhart, Chicago Division, recently with G. M. Caravan
Alexander Hamilton, Kansas City Division
J. W. Wright, New York Division
Bruce Crane, New York Office, will join G. M. Caravan
G. E. Townsend, Tulsa, recently with Dallas Exposition

The schedule for the two weeks, as laid out by Mr. Jordan, was very comprehensive and should prove of great value to the men who took the course.

Monday, Nov. 16th: The school was opened by Mr. Jordan and a talk given regarding its purpose: Dr. Pottoff of Socony Vacuum gave a talk on gasoline.



MIXING THE PROPER PORTIONS -



from source to the tank to the car owner's car. There was also a visit to the Gasoline Testing Laboratory, and a talk by Mr. Hudson W. Kellogg.

Tuesday: Entire day in our Laboratory. Mr. Frey talked on the fundamentals of the Otto and Diesel engines, covering such details as compression ratio, principles of two and four cycle engines, aluminum and cast iron pistons, piston rings, bearings, etc. with a lengthy discussion on valves.

Wednesday, A.M.: Visit to the Detroit Motor Valve Company where the men had an excellent opportunity of seeing the making of valves in production. Also a talk by Mr. James, Chief Engineer of the plant. Afternoon at Ethyl Laboratory on further discussion regarding the motor car, particularly the new 1937 cars.

Thursday A.M.: Talk by Mr. F. R. Speed of our Laboratory and Mr. J. B. Funk, Champion Spark Plug Company. Afternoon spent at the A. C. Spark Plug plant where talks were given by Mr. McDougall and Mr. Rabezzana.

Friday and Saturday: The school was divided into four groups, each spending a half day on one of the following subjects:

Carburetion—by Mr. Errol Gay of our Engineering Staff.

Valve Grinding and Reconditioning—by Mr. J. B. Taylor.

Exhaust Gas Analysis—by a member of our Engineering Staff.

Gasoline testing and actual running of the various tests in the laboratory under the supervision of Mr. Kellogg.

Monday, Nov. 23rd, A.M.: A review and discussion on all the various technical subjects covered during the preceding week. After that the major portion of the day spent with Mr. Krieger and Mr. Wilt on our farm program.

Tuesday: Visit to the Ford Plant and in the afternoon returned to the Engineering Laboratory to hear a talk by Dr. Calingaert on Ethyl Fluid and one on Research by Mr. Bartholomew. Also Mr. Weston delivered an address on jobber investigation and Mr. McElroy on advertising.

Wednesday: Training in the operation of the Ethyl demonstrator under the instruction of our Mr. C. E. Smith. Later a discussion by Mr. Jordan on fleet work and motor vehicle service reports with a general discussion on sales. This included all of the various report forms that the men must make up in their work in the field.

Thursday: Thanksgiving Day and no regular program.

(Continued on Page 15)

HERE and THERE

• Automobile owners in this country did substantially more touring during the first nine months of this year than in the corresponding period of 1935, judging from touring inquiry figures announced by official of the Esso Touring Service of the Colonial Beacon Oil Company. These revealed that inquiries for this period were 17% ahead of the first nine months of last year. Touring inquiries were answered to the number of 154,476 as against 132,753 for the same nine months last season. The gain continued through September with inquiries for the month totaling 14,971 against 12,118 in September of 1935.

• Mr. Johnson, Chrysler New York Zone Manager, is for the first time organizing service managers clubs covering Chrysler, Dodge, DeSoto and Plymouth dealers. There will probably be six new clubs operating next month, and Mr. Johnson is very much interested in having us present our program to their various groups, probably during the November meetings.

• The U. S. Army recently issued instructions that all Army gasoline was to be purchased on the V-65 and V-75 contracts, as G-101, or third grade gasoline, was considered unsuited for Army use. This is just another indication of increased "Q" and Ethyl sales.

• A report from Virginia, by Mr. Hogan, states that the Delta Oil Co. changed from non-lead gasoline to Republic "Q" and Ethyl on May 1st of this year. From that time to November 1st, 1936, approximately 2,000,000 gallons of leaded gasoline was sold and what is more interesting the jobber showed an increase of 100,000 over the same period last year.

• A report comes to us from Mr. Trelease that the Highway Department at Bismarck, N. D., installed high compression pistons in one of their road graders upon his recommendation. After it had been in operation for a time he contacted the Superintendent of Equipment and found him enthusiastic. That gentleman assured him that he intended to have more of the graders high compressioned. The driver reported that in spite of the fact that he was doing more work with the unit, the daily consumption of gasoline was 12% to 15% less.

• At the request of Mr. Franklin Fricker of our Detroit Laboratory, Mr. Faller is to speak at the meeting of the Akron Tech Club. This organization is composed of alumni of the Massachusetts Institute of Technology of which Mr. Fricker is a graduate and because of which the request was made.

• A meeting was held recently at the Allis Hotel by Mr. Carl Berry (Kansas City Div.) for the District Managers of the Wichita Division of Phillips Petroleum Corporation. A series of 15 charts were specially designed for the presentation. The subject matter included "A Discussion of the Recent Changes in Design of Automobile Engines." The advantages of higher compression engines was brought out by facts which indicated more power, greater economy, and better performance with high compression. The necessity for the use of Phillips "77" Aviation Ethyl was discussed. It was also mentioned that a retarded spark is not a substitute for Phillips "77" Aviation. A demonstration was run at the conclusion of the talk and the District Managers were much interested in the spectacular demonstration with the quartz window. Mr. Walter Kindermer from the Sales Promotion Department at Bartlesville, as well as Mr. Ted Lyons, Division Manager at Wichita, seemed pleased with this presentation and a series of six meetings was scheduled with Phillips in Kansas and Colorado, starting in November.

• Another automobile course to regularly include the Ethyl program is the University Extension Course, "The Principles of Operation of Automobile Engines." This course conducted by the Department of University Extension, State of Massachusetts,

is available to all residents of Massachusetts, and has an estimated enrollment of two hundred.

• Meetings held during the past month in the Boston Division included the Chelsea, Mass., Kiwanis Club; the Meriden, Conn., Lions Club; the Bangor, Maine, Kiwanis Club; the Allston-Brighton, Mass., Kiwanis Club; the Arlington, Mass., Kiwanis Club; the Woodbury, Conn., Lions Club; and the American Legion Posts in Bangor and Augusta, Maine; and Manchester, N. H. Meetings were also held for the following educational institutions: Waterville, Maine, High School; University of Maine A. S. M. E. Student Branch; Winslow, Maine, High School, and the Cony High School of Augusta. In addition to many oil company and automotive groups our program was also presented to the National Guard at Concord, N. H.; the Army base in South Boston and the Pratt & Whitney Aircraft School in East Hartford, Conn.

• During the extreme hot weather this summer, continual complaints were received on regular gasoline "pinging" in the engines of one of the lower priced cars. So severe were the complaints from the Dealers Association at Des Moines, Iowa, that they decided to use and recommend Ethyl Gasoline to correct these customer complaints. The Standard Oil Company mailed a bulletin out to all agencies of this car in their marketing area. We quote from this bulletin as follows:

"You have the cure for that 'ping' right in your Solite With Ethyl Pump..."

"Cooling Systems are overloaded and cannot maintain proper temperatures when it is necessary for it to combat both Sub-normal external temperatures and preignition disturbances..."

"You have in Solite With Ethyl, the finest fuel for high compression automobiles that science has been able to produce—and furthermore it means money in your pockets."

• A series of meetings for Louisiana Oil Refining Company jobbers in North and South Carolina by Messrs. Mason and Andrews have just been completed. This company operates entirely through jobbers in these states. Heretofore no definite program of sales promotion had been held for the entire operation but with the cooperation of Mr. Frank Whitehurst, the Louisiana Oil Company's manager in the Carolinas, an extensive program was worked out. In many instances dinners, barbecues, etc., preceded the meetings which were devoted entirely to Ethyl. Many of these jobbers who handled only "Q" planned to start marketing Ethyl at once. One of the outstanding arguments that convinced them was Facts & Flashes No. 30 which showed that Ethyl buyers spent more money in the stations.

• Crooks in the "Good Old U. S. A." had better be on their guard. Mr. Jerry Townsend, Ethyl Representative at the Texas Centennial, reports that during a convention of the Federal Investigation Bureau in Dallas, twenty "G" Men witnessed our demonstration. They were very much impressed with it and said in the future they were going to use Ethyl Gasoline. Of course it is only fair to say that probably an equal number of crooks have also witnessed the exhibit and will probably do likewise, which evens things up.

• Messrs. Lou Wilson and Carl Berry of the Kansas City Division recently conducted a series of eight meetings with the Chevrolet Service Clubs. These were scheduled out of the Kansas City Office and covered the territory of Western Missouri and Eastern Kansas. Mr. Newman, Zone Service Manager, as well as the service men in attendance, believed that they received considerable information regarding the proper fuel to use in 1937 Chevrolets. The demonstration proved convincing and the explanation of the advantages of higher compressions was easily understood by demonstrating with an ordinary coil spring. Mr. Newman and his assistant, Mr. Hamilton, intended to use the coil spring explanation of high compression in sales schools which will be held in the future.

HERE AND THERE — Continued

• A very successful Skelly Aromax Ethyl contest was held in Minneapolis and St. Paul, Minn., in September in which Mr. Naylor of our Chicago Division took an active part. With the sale of four new Royal Master tires going to the station operator who showed the greatest increase in Ethyl sales for September over August, the Skelly station salesman stepped out and increased Ethyl sales in the Twin Cities 81.2%. The winner, Bill Marshall of Minneapolis, increased his Ethyl sales 366% over August and got the four tire sale. Aromax Ethyl sales for October remained approximately the same as for the contest month September. What a difference a little salesmanship makes!!

• While our Georgia representative, Mr. Pruitt, was holding special demonstrations recently at the Carmichael Service Station at Carrollton for the City Fire and Police Departments, the owner of a large trucking company stepped in. He became extremely interested and at the close of the talk, by coincidence, one of his trucks rolled by. Noting this the gentleman in question hailed the driver and calling him in, instructed him to fill the tank up with Ethyl. Mr. Pruitt adds all the meetings were well attended and in most cases, operators and attendants of competitive stations were present.

• Dick Coveney, of the Boston Division, recently addressed the mechanical training school for officers of the Motor Repair Corps, located at the U. S. Army base in South Boston. As a result, we have been asked to include our entire Ethyl educational program as a regular part of this course, which is given twice a year.

• Recently a meeting was held by our South Carolina representative, Mr. Lowell Mason, for 500 students at the high school in Camden. The faculty was so well pleased that there followed a request for him to stay and address the Physics class. Upon its completion the chemistry teacher also asked that the talk be given for his group of students. When Mr. Mason was finally about to depart the faculty urged him to return at an early date as they said that our program was the best ever presented in the school.

• A short time ago Mr. Faller (Dayton Div.) conducted an educational meeting and demonstration before the combined student branches of the S. A. E. and the American Society of Mechanical Engineers at Ohio State University in Columbus. Altogether there were 200 students and members of the faculty present. The members of the faculty expressed themselves as much pleased with the information we present as well as the manner in which it is delivered. We have received a cordial invitation to return at regular periods to acquaint the students with the latest developments in engines and fuels.

• The Esso Marketers, a publication of the Standard Oil Company of New Jersey, reports that August figures, just released by the Company, show that sales of Aerotype Esso during that month were 19.8% higher than for the same month a year ago as well as being the highest for any single month since the introduction of the product. During the first four months of 1936, sales of Esso showed some decline as compared with the months of 1935. From May onward, however, Esso sales increased markedly.

• THE following Service Awards have been made as of December 1st:

TEN YEARS

C. E. BOYLE Toronto
FREDERICK K. BROWN Manufacturing
GENEVIEVE CORCORAN Administration



• MR. W. W. ("MAC") McCULLOCH, of the Kansas City Division, demonstrated the merits of Solite Ethyl Gasoline at the Iowa State Fair held at Des Moines early in September. During the nine days that the Fair operated, approximately 8,000 people witnessed the Solite demonstration and considerable interest was created regarding the demonstration. A great many people offered voluntary testimonials as to how much Ethyl Gasoline had improved the operation of their cars.

A novel stunt was tried the last day of the Fair with remarkable success. The current Standard Oil Company advertisement was the one in which "Thaddeus Whinney" was supposed to have worn out three sets of tires trying to use up a gallon of Red Crown Gasoline. The character was dressed up to resemble Thaddeus and he used the public address system to tell the audience a number of interesting results secured with the use of Ethyl Gasoline. Each time this character appeared he drew crowds of at least 200 people. When he had finished his stories regarding Solite with Ethyl, "Mac" took over the microphone and told the crowds in much the same manner as the advertisements do it that Mr. Whinney was not to be trusted but that we had a demonstration on Solite with Ethyl that *could* be believed. He then ran the Ethyl demonstration to prove to the audience the merits of the product.

THIS MONTH'S COVER

• FRA ANGELICO, one of the most famous painters of the Florentine School, was born in Tuscany 1387, died at Rome 1455. While christened Guido, he is known by the full title of "Blessed Fra Angelico Giovanni da Fiesole".

He painted always with a prayer, believing that in order to paint Christ he should be Christlike.

His most important works were painted at Florence, where Cosmo de' Medici was patron of the order which he had joined. Some of his most noted pictures are the "Saviour between Two Thieves," surrounded by a group of twenty saints, "The Coronation of the Virgin" in the Uffizi Gallery, "The Preaching of St. Peter," "The Adoration of the Magi," and "The Nativity." (See cover.)

His "Annunciation" has received wide appreciation, as well as his "Ascension" and "Last Judgment."



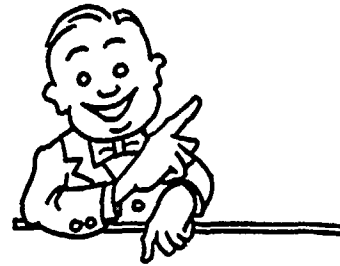
MARTIN L. ALSPAUGH ✓



W. ROLLIN BARNES ✓



ALVIN J. BALDWIN ✓



THE

✓ • MARTIN L. ALSPAUGH, who is the latest addition to the Tulsa Lab., came to us on October 12th. He is a graduate of Agricultural and Mechanical College at Stillwater, Okla., receiving his degree in Chemical Engineering in 1928. Since leaving college and up to the time he joined our organization, Martin has been associated with the Mid-Continent Petroleum Corporation in their Tulsa laboratory. He is married and has two children.

✓ • ALVIN J. BALDWIN, who will represent us in Pennsylvania and is attached to the New York Division, was born in Iowa thirty-seven years ago. He received his early education in James City, Virginia, but later attended Iowa State College, from which he graduated in 1922. He has had considerable business experience having been with Westinghouse Electric for several years and then with Standard Oil Development Company in Research and Sales Engineering. Alvin is married and will make his headquarters in Harrisburg, Pa.

✓ • W. ROLLIN BARNES will fill a vacancy in the field staff of the Tulsa Division. A graduate of the University of Nebraska, he received his degree in chemistry seven years ago and since that time he has been associated with the Mid-Continent Petroleum Corporation. In 1934 he was appointed Lubrication Engineer for Mid-Continent's Eastern Division and transferred from Tulsa to Terra Haute, Ind. While in college Rollin became a member of the Alpha Chi Sigma fraternity and is also a member of the American Chemical Society. He joined our organization November 1st.

✓ • GEORGE E. CALEF, a new representative attached to the Tulsa Division is a graduate of Massachusetts Institute of Technology in the class of 1928. He is a Chemical Engineer and has had considerable experience

in both the rubber and sugar industries. Shortly before coming to Ethyl he was in the sales organization of the Central Scientific Company, representing them in Pennsylvania and New Jersey. George is a native of Massachusetts.

✓ • JESS J. CARMICHAEL, who, on October 6th, joined the staff of our Tulsa Laboratory, comes to us with rather varied experience. For several years he was employed by the Kansas City Power & Light Company, the Independent Electric Machine Company and the Kansas City Branch of Ford Motor Company in the Maintenance Department. Also a geologic oil survey occupied a period of time. A year at Kansas City Junior College was followed by two more at the University of Michigan, from which institution he received a degree in Electrical Engineering. While at the University he was employed by the Engineering Research Department. Since leaving college, Jess was again with the Ford Motor Co. and the Burns & McDonnell Engineering Co., coming to us from them. He is a member of the honorary engineering association of Tau Beta Pi.

✓ • JOHN L. EPPLEY is a native of North Carolina, but migrated to California in 1929, where he occupied the position of Sales Manager for the West Los Angeles Motor Company. He later was associated, for a short time, with the General Petroleum Corporation in the Sales Department. John came to us from the May Company of Los Angeles, where he was engaged as a department manager. He will be attached to Los Angeles Division.

✓ • GEORGE A. GALLAGHER, who contributes his varied experience to the Chicago Sales force, is a native of Boston and a graduate of Sheffield Scientific School, Yale University. On leaving college he engaged for a time in the investment business until 1929, when fol-

GEORGE E. CALEF ✓



JOHN L. EPPLEY ✓



GEORGE A. GALLAGHER ✓



PETER HAY ✓



THE FAMILY GROWS AND...

Following the advice of Horace Greeley, he settled in Los Angeles where for a year he was occupied in sales production work. Later he was successively employed in the oil fields at Venice, mining in the Mojave Desert, and newspaper work in Mexico City. Finally, 1934 found him with Standard of Indiana, where "Mike" remained until he heard the call of Ethyl on October 27th, last.

• **PETER HAY**, the new fleet contact representative in our Dayton Division, secured his higher education at the University of Tennessee. He has had considerable business experience which should serve him in good stead, having been with the White Motor Company for several years. Following this he was transportation and maintenance engineer for the Kroger Grocery & Baking Co., the U. S. Truck Lines and finally with B. F. Goodrich Rubber Co. Peter became a member of the Ethyl family on November 1st.

• **ARTHUR F. JOHNSON**, who is a native of Michigan, becomes a field representative attached to our Kansas City Division. He is a graduate of the University of Michigan in the Class of 1928 with a degree in Mechanical Engineering. At one time he was associated with Nash Motors and later with the Detroit Sheet Metal Works and Standard of Indiana.

• **MILES A. KINLEY**, who takes up the duties of field representative in the Chicago Division, is a native of Pennsylvania and a graduate of Carnegie Institute of Technology, receiving his degree of B.S. in Mechanical Engineering in 1932. Returning for post-graduate work he secured his Master's degree in Mechanical and Automotive Engineering the following year. Soon after, he joined General Motors and has had considerable experience both at the Proving Grounds and the Research Laboratory. Much of his work was spent on

instrumentation tests and investigation of streamlining. He also spent some time with the Delco Products Division, studying independent wheel suspension and hydraulic brakes. More recently he has been at Dallas in charge of the Research Division in connection with the Texas Centennial Exposition. Miles should prove a valuable addition to our Chicago staff.

• **ELLIS K. LOCHER**, who has been assigned as our representative for Westchester County and Metropolitan New York, is a graduate of Cornell University, receiving his degree in Mechanical Engineering in 1932. Ellis comes to us from the Read Machinery Company, having served them as service manager in New York and later as sales engineer. He is married and resides in New York City.

• **PETER B. MACEWEN**, our new Canadian representative, received his education at the University of Saskatchewan which he attended for two years and then completed a four year course in Mechanical Engineering at the University of Toronto from which he graduated in 1925. He subsequently was employed by the Massey-Harris Co. in Toronto for more than a year and then joined the General Motors Corporation of Canada in 1927. He has been with them until coming to us early in November. Peter is married and makes his home in Oshawa, Ontario.

• **ELMER F. MAHLKE** was born and raised in Ann Arbor and attended the University of Michigan, receiving his B.S. degree in Mechanical Engineering in 1933. Graduate work at the University brought him his Master's degree in 1935. Following he did work in the laboratory of the Ternstedt Manufacturing Company until joining our Detroit Laboratory early in October. Already Elmer has definitely made a place for himself with the rest of the staff.

PETER HAY

ARTHUR F. JOHNSON

MILES A. KINLEY

ELLIS K. LOCHER

PETER B. MACEWEN



... NEWCOMERS TAKE A



ELMER F. MAHLKE ✓



JOHN S. MAYNARD ✓



CLAYTON DE V. MC CONNELL ✓



ROBERT R. MEAD ✓



FRITZ YOUNG MERCER ✓

✓ • JOHN S. MAYNARD, who joined the Baltimore Division November 1st, is a native of that city, having cut his first tooth there some twenty-seven years ago. He entered Johns Hopkins University from the Baltimore Polytechnic Institute in the class of 1931. After graduating he did post-graduate work at the University of Maryland from 1933 to 1936. B.S. degree in Mechanical and Electrical Engineering from Johns Hopkins. John comes to us from the Rehabilitation Service of the State Department of Education. He will make his headquarters in Wilmington, Del., and his territory will include Delaware and the Eastern Shore of Maryland and Virginia.

✓ • CLAYTON DEVERE MCCONNELL, although born in Ohio, early in life moved with his family to Tulsa, where his father was engaged in the oil business. After completing a Civil Engineering course at Oklahoma University he was engaged as an engineer in the natural gas business and was associated with the Central States Power and Central States Edison Company. The Phillips Petroleum Company also claimed his services for a time. Clayton will be attached to our Tulsa Division. He is married and has one daughter.

✓ • ROBERT R. MEAD, a new fieldman in the Los Angeles Division came to us on October 26th. He was born in Los Vegas, N. M., twenty-four years ago and is a graduate of the California Institute of Technology in the class of 1933. While in college he worked for the Southern California Edison Co. during summer vacations and after graduation was with the Public Service Department of the City of Burbank as Sales Promotion Manager.

✓ • FRITZ YOUNG MERCER was born in Georgetown, S. C., in November, 1909. He graduated from Clemson College, S. C., in the class of 1930, receiving his degree in Mechanical Engineering. He has been employed by Texaco Distributor and the Mercer Lumber Company, coming to us from the latter organization. Fritz will make his home in Columbia, S. C., and will act as our representative in the Palmetto State.

✓ • DONALD F. MILLER, who has been engaged by the Los Angeles Division as a driver for the Mobile Clinic, entered our employ on September 21st. Don, who is a native of La Crescenta, Cal., graduated from the Polytechnic High School and thereafter for a time was active in Pro-Athletics. More recently, however, he was associated with an optical company in Los Angeles.

✓ • JOHN K. MORRIS, who comes to us from General Motors Corporation, will be attached to the Chicago Division. He has had some years experience with General Motors, having been active in sales promotion work at the Century of Progress Exhibit in 1933 and afterwards with Pontiac Motors. John joined our organization on November 1st.

✓ • LAWRENCE L. MYATT, a new addition to the Boston Division, should feel thoroughly at home in his territory, as he was born and bred in the State of Massachusetts. After completing his elementary education in Quincy, Mass., he entered the U. S. Naval Academy at Annapolis, where he remained for three years. He took his senior year at Massachusetts Institute of Technology, graduating in 1931. He gained his first

ABOW

ETC 21315



YOUNG MERCE ✓ J. CARMICHAEL ✓ JOHN K. MORRIS ✓ LAWRENCE L. MYATT ✓ W. FRED NIXON ✓ JOHN C. RENFROE ✓

etown,
emson
degree
ved by
pany.
z will
act as

business experience in Cleveland, where he was located for over four years and from there moved to Detroit. Lawrence joined the Ethyl family on October 26th.

our organization on October 12th as field representative in the Tulsa Division. "Larry" is a member of the national fraternity, Delta Tau Delta, is married and has one son.

• W. FRED NIXON, who became a member of the New York Division field staff on October 8th, received his education at the University of Georgetown. Before joining our organization he gained experience with the American Oil Company, with whom he was associated for about five years, serving as their special representative in charge of sales and operation in New York and New Jersey. Fred now becomes an Ethyl Representative in our New Jersey territory. He is unmarried and makes his home in Totowa Borough, N. J.

• J. FRED SESSIONS joined our organization on October 1st and will be located at the Baton Rouge Lab. Fred is a native of Natchez, Miss. and a graduate of Louisiana State University, receiving the degree of Bachelor of Science (Sugar Engineering) in 1922. His college course was interrupted when he enlisted in the A.E.F. in 1917 and served overseas as a second lieutenant. After completing his college course he was associated with the Cuban-American Sugar Company in Cuba. He is a member of the Sigma Alpha Epsilon National Fraternity and is a Mason. He is married and makes his home in Baton Rouge.

• JOHN C. RENFROE, who came with us on October 6th, is attached to the Baton Rouge Lab. He was born in Texas but received his education at Louisiana State University from which he graduated in 1931 with a degree of Bachelor of Science in Electrical Engineering. During his college days he was quarterback on the varsity team for three years. Before joining Ethyl, John was with the Louisiana Highway Commission in the testing laboratory and later with the marketing department of Standard Oil of Louisiana. He is a member of Pi Kappa Alpha fraternity, is married and has one daughter.

• ARCHIBALD E. VALLIER, JR., was born in Columbus, Neb., in 1914. He attended the local schools and then entered Doane College at Crete, Neb., where he took two years and completed his education with three years at Iowa State College. Received degree of B.S. in Mechanical Engineering in 1935. He was associated with the Goodyear Tire & Rubber Co. of Akron for some months after graduation and then with the Allis-Chalmers Manufacturing Co. in the Tractor Division, coming to Ethyl on October 12th. "Arch" will be attached to the Kansas City Division.

• LAWRENCE D. REIS is a native of Iowa, having been born in Little Rock thirty-one years ago. He attended Iowa State College where he specialized in Civil Engineering. After finishing college he went to Chicago for five years and then spent two in Fairfield, Iowa. Later he moved to Texas and was engaged in highway construction work up to the time he joined

LAWRENCE D. REIS ✓ J. FRED SESSIONS ✓ A. E. VALLIER, JR. ✓



by the
Clinic,
who is
m the
time
wever,
n Los

eneral
icago
Gen-
eration
3 and
ur or-

o the
in his
ite of
duca-
Naval
three
stitute
s first



THIRTY EXTRA SECONDS AT PUMP PAYS

• A SHORT WHILE AGO an item appeared in the Oil Marketer under the heading "Ethyl Sales Boosted by Dealer." Quite naturally this caught our attention and continuing, we read: "Nearly 50% of the gasoline sales of L. & J. Kane's service station consist of Ethyl Gasoline." This indeed was "music to our ears" but when we discovered that the Kane Brothers based their success on the theory that "premium-priced products are economical in the long run" our interest was so keenly aroused that we determined to pay them a visit and get the story first hand.

The station is located on North Broadway in Yonkers, N. Y., about half a mile from the center of the city. Probably as much traffic passes as on any highway in Westchester County but their business for the most part is local and through courteous and efficient service they have built up an enviable reputation. Mr. Kane says that during the years he has been operating he has gone on the theory that an extra 30 seconds at the pump devoted to a sales talk on the advantage of Ethyl is responsible for his steadily increasing volume. He is convinced that a customer once sold on Ethyl is invariably a satisfied customer and as he puts it "this makes my task easier when it comes to recommending other premium products."

The truth of this psychology was demonstrated by a national survey recently made to determine the relative cash value of buyers of Ethyl, regular and third grade gasoline and the following statistics seem to bear out Mr. Kane's theory:

	Ethyl Users	"Regular" Users	3rd Grade Users
Average price paid for oil.....	30.4c	26.7c	21.3c
Buy premium oil.....	74.7%	44.3%	10.9%
Buy "regular" oil.....	24.3%	48.9%	30.1%
Buy 3d grade oil.....	5%	6.8%	57.6%
Average mileage between crankcase drains.....	1,382	1,451	2,331
Average mileage between grease jobs.....	1,190.7	1,505.5	2,149
Average gallons of gas purchased per stop.....	9.7	6.8	4.34
Percent of users who filled tanks when buying gasoline.....	75.2%	37.4%	16.4%
Percent of buyers who made pur- chases of other than gasoline.....	29.5%	10.0%	8.2%
Average amount of these additional purchases.....	\$2.47	\$2.15	\$1.77

PAGE TWELVE

The station itself has rather an unusual history in that not many years ago it was a church. In 1922 old St. Paul's Parish, which had occupied the site since the middle of the last century, acquired other property and determined to build a new edifice. The old church was purchased by the Kanes and remodelled for business purposes though a semblance of the original structure still remains as may be noted by the accompanying illustrations.

WINNERS OF NATIONAL SAFETY AWARD HAVE OWN "COURT"

• CARTER BROTHERS of Richmond, Va., recently received the National Safety Award presented annually by the American Trucking Association to the long distance truck operator having the best safety record in the United States. The company had only one minor accident during that period, despite the fact that its 32 trucks traveled 831,335 miles over the main highways of Virginia.

A unique feature of Carter Brothers' management is their "traffic court" composed of twelve veteran truck drivers chosen from the company's ablest and most experienced men. Drivers or helpers who violate traffic rules or become involved in an accident are summoned before the court, which decides whether they are "innocent" or "guilty" and the court's decision determines the disposition of the case. If a driver is dismissed or demoted by the company he still has the right to appear before the court and state his case and should the court believe the man has been treated unfairly, the management reinstates him and gives him another chance. On the other hand if the court decides that dismissal was justified, the driver is never again employed by the firm.

Drivers who have an accident-free record over a period of one year are rewarded with a week's vacation with pay. Minor accidents in which the driver was blameless are not counted against his record.

THE CLICHÉ EXPERT TAKES THE STAND FOR THE ETHYL GASOLINE CORPORATION

(Apologies to Frank Sullivan)

- Q. Mr. Bixby, we hold you to be an expert in the use of the cliché. This is true?
- A. Yes, Sir. My credentials testify to my expertness in the use of the cliché.
- Q. Would you answer a few questions telling us the many ways the cliché is used in the Ethyl Gasoline Corporation?
- A. My time is your time.
- Q. Thanks, kindly. Now let us look at the records. What kind of men do you hire for the field?
- A. By and large, we hire only the tried and true, fountains of youth.
- Q. You have educational requirements, I suppose?
- A. Many of our men have burned the midnight oil at institutions of higher learning.
- Q. All city boys, I suspect?
- A. Not at all—many have been tillers of the soil, some down to the sea in ships, while others just men about town.
- Q. How do they work?
- A. Like dogs.
- Q. They do keep fit?
- A. Fit as fiddles and right as rain.
- Q. How do they report their work?
- A. With clock-like precision and in apple-pie order.
- Q. Of what does their work consist?
- A. Pouring oil on troubled waters.
- Q. How can they make motors sing?
- A. The even tenor of their ways.
- Q. How do they conduct research?
- A. In the odor of sanctity.
- Q. Your Corporation is destined—
- A. To go far.
- Q. Your customers?
- A. The salt of the earth—of the first water, the real McCoy.
- Q. How is corruption—*ex-cathedra*?
- A. Oh, rife as usual and so much claptrap.
- Q. What do you recommend?
- A. Sackcloth and ashes and condemn them to dungeons vile.
- Q. How do you often find yourselves?
- A. Between the devil and the deep blue sea.
- Q. And then?
- A. Caution is thrown to the winds.
- Q. There follows?
- A. A hue and cry.
- Q. And at the end?
- A. You kick the bucket.

- Q. I see, Mr. Bixby, that after this cock and bull story you are simply a diamond in the rough and as a cliché expert you are trying only to keep the wolf from the door.
- A. Thank you. This exchange of shibboleths and abracadabra has been most stimulating.

ETHYL BRIDEGROOM TAKES TO SEA

• MR. FERD GILLIG, of our Detroit Laboratory, was married to Miss Myrtle Ballard on October 3, 1936, and spent his honeymoon in Florida. While there he decided that the wheels of his car needed washing, and the inviting sandy beach at Clearwater led him to drive said automobile practically into the waves. The sand was quite soft—so much so, in fact, that it absorbed the wheels up to their hubs and with an incoming tide, it was only a short time before the water had risen to the running boards. While Ferd ran for an AAA tow-wagon the new Mrs. Gillig paced frantically up and down the beach, no doubt tearing her hair. The tow-truck could not dislodge the car and so Ferd climbed in and believe it or not, was able to start the motor. The water, by this time, had reached the floor boards and waves were rolling completely over the car. Between the car's engine and the tow-truck they finally got the vehicle back on the road. True to the tradition of the sea, the young skipper stuck to his ship notwithstanding the entreaties of his young bride.

• THE FOLLOWING newspaper clipping found its way to the Editor's desk—no doubt sent by some sympathetic friend. While your Editor is at the present time apparently of sound mind this will call to your attention the hazards of his job:

House Magazine Editor Goes Berserk; Produces Issue to Suit Himself Portion of Writings Salvaged as Journalist is Confined

NEW YORK, Oct.—Noel Crupper, said to be a house organ editor for the Sum-Klass Manufacturing Co. 000 Broadway, was committed yesterday to the State Hospital for the Insane after examining psychiatrists had labeled his case incurable.

Crupper, it is said, went berserk in the preparation of an issue of his magazine, "Sum-Klass Komments," a monthly periodical. In one of his few lucid moments, Crupper declared that he wanted to put out an honest-to-God house organ but had never had the chance.

PAGE THIRTEEN

ETC 21317

NEW YORK'S HAYDEN PLANETARIUM

• ONE OF THE newest educational attractions which New York offers the public is the Hayden Planetarium which opened its doors to visitors in the fall of 1935. It is operated in connection with the American Museum of Natural History and brings to a realization a project of ten years standing made possible through a gift of Charles Hayden. The total cost was over one half million dollars. Dr. Clyde Fisher, Curator of Astronomy of the Museum of Natural History and the active head of the Planetarium, made two visits to Europe to study similar exhibits there and also spent some time at the Chicago Planetarium.

The building is a two story structure surmounted by a beautifully proportioned dome which forms the ceiling of the circular auditorium which will seat 750 people. Suspended over this chamber is a white dome of perforated stainless steel serving as a screen on which images of the heavenly bodies are cast by the Planetarium Projector. This bizarre-looking instrument, built by Zeiss at a cost of about \$180,000, is some 12 ft. long and resembles a huge dumbbell. The globes on either end are for the projection of the fixed stars, one globe being for the northern hemisphere of the sky and the other for the southern. Each globe consists of sixteen stereopticons pointing in all directions with one central lamp. The lantern slides are not rectangular but are so shaped that their images fit together like the cells of a honeycomb, thus making a complete picture of the starry heavens without overlapping and without gaps.

With the aid of this apparatus, it is possible to show every object in the sky that is visible to the unaided eye in a most realistic manner. The rising and setting of the sun, moon and stars are represented just as they occur in nature. The moon goes through its phases. The planets are shown as wanderers among the stars, their direct eastward and their retrograde westward motions being represented with great accuracy. Even the precession of the equinoxes, together with the swinging of the celestial pole around a circle, which in the sky takes 26,000 years, can be shown by this apparatus in a few minutes.

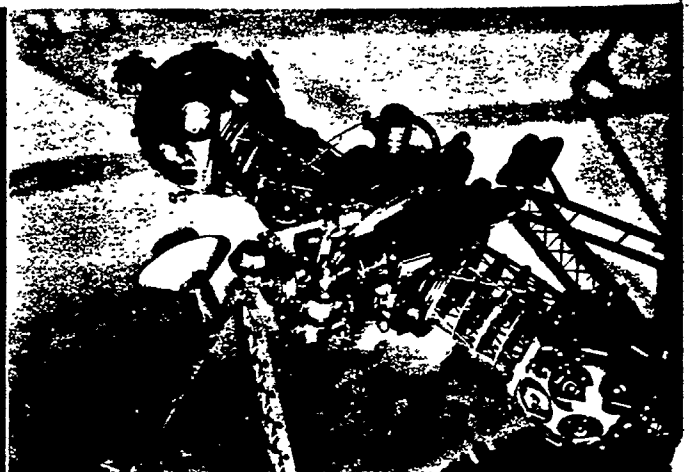
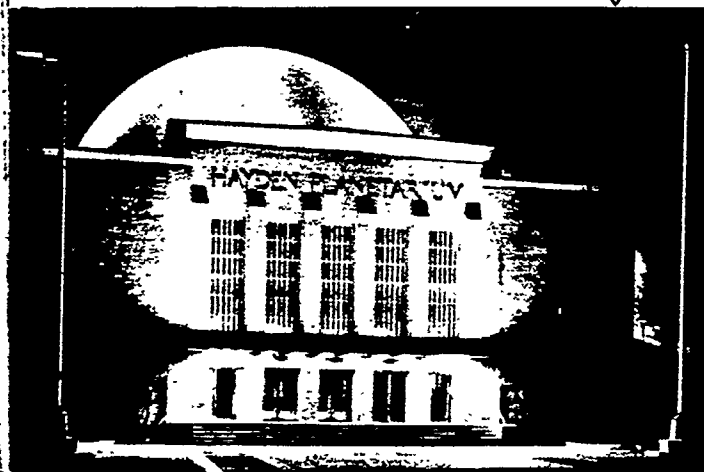
There are no globes to represent the heavenly bodies. Everything is shown on the inside of the dome by projection of light from the projection apparatus. The dome becomes an artificial sky and since there are no pillars or posts to intercept the light, the illusion of depth of space is perfect. When the lights are dimmed it is as if the ceiling rolls away and reveals the sky itself. This illusion is further heightened by the skyline of New York which is painted on the circular wall of the auditorium and may be seen in the accompanying illustration.

The presentation lasts from 35 to 40 minutes and is accompanied by a lecturer who explains the march of the stars across the artificial sky. He stands in a sort of "cockpit" equipped with a very elaborate instrument board, by means of which he can virtually control the stars in their courses. This unique "sky-pilot" can transport his audience on incredibly rapid journeys to the land of the Midnight Sun or even to the North Pole itself or dash under the Southern Cross and through the Megellanic clouds to Antarctica.

By pushing buttons and pulling levers, the lecturer can shift his audience backward and forward over the invisible tracks of time. He can set the instrument back to 3,000 B. C. when Alpha Draconis, the brightest star in the constellation, the Dragon, was the North Star or he can set it forward 12,000 years when Vega will be the North Star, and the Southern Cross will hang over the roofs of New York.

The Planetarium also contains many unusual exhibits both for the student of astronomy and the layman. These include transparencies of the finest astronomical photos from the worlds' observatories. Also a number of unusual paintings by the late Howard Russell Butler and Leonard M. Davis. These latter being executed in Alaska. There is a replica of the famous Aztec Calendar Stone and numerous other displays, paintings and photo-murals of unusual interest.

On the first floor will be found a Copernican Planetarium of the solar system which includes the sun and the six inner planets with their satellites all moving in their proper relative speeds. This is the largest of its kind in the world. The essential difference between the Zeiss Planetarium and the Copernican is that in the one the spectator gazes into space from the earth and in the latter he stands in space and views the entire solar system including Earth itself.



ly bodies.
dome by
ratus. The
re are no
llusion of
e dimmed
s the sky
ne skyline
ur wall of
ompanying

antes and
he march
nds in a
porate in-
virtually
ue "sky-
bly rapid
ern even to
rn Cross
ica.

e lecturer
! over the
nent back
htest star
orth Star
Vega will
will hang

usual ex-
l the lay-
est astro-
as. Also a
vard Rus-
ter being
e famous
displays,
erest.

an Plane-
e sun and
l moving
largest of
e between
hat in the
earth and
the entire



OUR DEBT TO OLEAN

OUR WESTERN PENNSYLVANIA representative, Mr. M. P. (Mac) Murdock, advances a new claim for the discovery of oil which we have all heretofore associated with Colonel Drake's famous well at Titusville. Perhaps "Mac's" home town pride has something to do with his findings.

We are told American Indians used oil for medicinal purposes over 200 years before the first well was drilled. "Mac" points out that the first known deposits of petroleum were found at what is now called the Seneca Oil Spring located on an Indian Reservation 10 to 12 miles northeast of Olean, N. Y. The Spring was given recognition in 1927 when prominent members of the oil industry met there to dedicate the bronze tablet shown in the accompanying photograph.

The inscription on the tablet reads:

1627 SENECA 1927
 OIL SPRING

Its history forms the first chapter in the development of the Petroleum Industry in America—a gigantic world enterprise transforming modern life.

1627 Oil on American Continent first recorded in this region by the Franciscan Friar, Joseph de la Roche D'Allion

1656 Spring mentioned by the Jesuit Father, Paul de Jeune

1721 Prior to this year, spring visited by Joncaire the Elder

1767 Oil from this spring sent to Sir William Johnson as a cure for his wounds

1797 Spring permanently reserved by Indians in Treaty of Big Tree

1833 Description of spring by Professor Benjamin Silliman of Yale University

Erected as a Tercentenary Memorial on July 23, 1927, by the University of the State of New York and the N. Y. State Oil Producers Association.

Mac reasons that without petroleum there would be no gasoline and it follows therefore no Ethyl Gasoline Corporation. But our organization's debt to Olean does not stop there. It should be remembered that both Mac Murdock and Dick Murphy are native sons of this historic New York town.

NECESSITIES OF LIFE "EVENTUALLY" WILL COME FROM THE SEA

• THAT's what Mr. C. M. Shigley, manager of the Ethyl-Dow Chemical Company plant at Kure Beach, predicted. But he hastened to explain to the members of the Rotary Club at a luncheon on November 10th at the Cape Fear Hotel, that by "eventually" he meant millions of years hence. This might easily be classed as a "Shig" by those who know him, so characteristic is it of his casual reference to time.

While speaking on the subject of "Water," particular reference was made to the Ethyl-Dow plant. Since the earth was created "by the chance passing of two cosmic nebulae", the water in the atmosphere has been falling on land, washing down into the sea salts and rocks. By evaporation this process continues "with everything going to the ocean and nothing coming back" to quote Mr. Shigley. He predicted that more and more industries will be located on the brink of the sea, extracting the organic materials by which men live. "We pay back all we take with interest, for human wastes eventually go back into the sea and when we die the bucket of ashes and eight buckets of water that constitute our bodies, also are washed down to the sea." Mr. Shigley further stated that one third of the gasoline so treated during 1935 was treated with ethylene dibromide made at the local plant, the only one of its kind in the world and that approximately four gallons of sea water are required to secure sufficient bromine to treat one gallon of gasoline.

T. A. BOYD of the General Motors Research Laboratories, Detroit, has been elected chairman of the division of industrial and engineering chemistry of the American Chemical Society. Mr. Boyd, co-discoverer with Mr. Thomas Midgley of the use of tetraethyl lead, will direct arrangements for the third national symposium on chemical engineering in New York, December 28th and 29th.

NEW MEMBERS OF SALES FORCE ATTEND TRAINING SCHOOL

(Continued from Page 5)

Friday: Written examination on all subjects covered in the school and a discussion of the quiz, the men being graded on the results. In the evening a banquet at the Fort Shelby Hotel was addressed by Mr. Kaley from the New York Office.

Saturday: Most of the day taken up in arrangements for the men returning to their various divisions.

Mr. Jordan says that he has been most favorably impressed with the intelligence and sincerity shown by those attending the school and believes they will return to the field well equipped to bat 100% for Ethyl.

NEWS BRIEFS

✓ • Miss Helen A. Welch, Secretary in the Boston Office since its opening, died very suddenly on the morning of November thirteenth from septicemia. She had always enjoyed excellent health until several days previously when blood poisoning set in from some unknown cause. She is survived by her father, three sisters and two brothers. A marvelous personality, a keen sense of humor, an untiring enthusiasm in her work, a rare sense of loyalty and constant consideration for others made her beloved by all. Her associates in the Boston Division and her friends in the oil industry will greatly miss her. The Company has suffered a severe blow in the death of Helen Welch.

✓ • John Stump, formerly of the Denver and Kansas City field staffs, has transferred to the Manufacturing Department. He has been assigned to special work with the refineries on the Pacific Coast and has set up housekeeping in Glendale where most of the "heavies" in the Los Angeles office reside. John says that in about 18 months he will be a "Native Son."

✓ • On Saturday, October 31st, an eight pound daughter, Elinor Jane, was born to Mr. and Mrs. Edgar Holton. Edgar is in the Shipping Department at the Manufacturing Plant. Congratulations to the proud parents.

✓ • Prior to his transfer to Boston, Henry Ball had spent almost six years in Albany. Upon leaving, his many friends in the Socony Albany Division office tendered him a surprise banquet. After the customary festivities, "Hank" was presented with a testimonial scroll, a beautiful fountain pen desk set and various other useful articles. It is understood that he now wants to be transferred more often.

✓ • It might be of interest to know that several of the members of the Baton Laboratory Staff own their homes, another has a home under construction and still another purchased a lot recently and will build at once.

✓ • We welcome into the Ethyl family, Miss Karin Holm who has recently joined the Accounting Dept. in the New York office. She is a graduate of Hunter College in the Class of 1936 and before coming to us was with the Statistical Department of the Standard Oil Company of New Jersey, Rockefeller Plaza.

✓ • Recently the New York office sent word to Baltimore that a request for information about high compression had been received from a certain Mr. B. in Hillsboro, N. C. Full of hope, ambition and burning desire, Joe St. Germain tore around to see him. There seems to be a note of sadness in the "Mighty Mite's" report which was as follows: "This appeared, from your letter to be a fine high compression prospect but an interview revealed that the party concerned was only a young boy interested in high-compressing his Model T Ford. My hopes ran high for a time after receiving your letter, as the inquiry came from my territory and it was quite a let-down when I learned the truth."

✓ *Editor's Note: Well Joey, Cheer up—we can always count on you to "pull" something to give us copy and you have our undying gratitude. We recall you've had some tougher breaks than this. How about when you were robbed?*

PAGE SIXTEEN



• The versatile Harry Cottrel, whom we already know is a fancier of apes and beautiful dancers, gives further proof of his interest in the various forms of vertebrates. Here we find him seated atop a Brahma steer. We knew he could "throw" it but didn't think he could "ride" it.

• Friends of Art Hutson of the Boston Division will be sorry to hear that he has been under treatment for a serious eye malady at the Harbour Sanitarium in New York City. We understand that Art will be able to leave the sanitarium around November 24th.

• There have been all sorts of stories printed of unusual, even unbelievable incidents in the drought area this summer most of them being the bunk—but here's one we cannot question as Harold Berg vouches for its authenticity. It seems that out in Kansas one day last August, three trees were seen following one dog.

Mundinger Becomes Famous

• DURING THE Louisiana State Fair at Donaldsonville, our Bill Mundinger of the Tulsa Division and Mr. Trusilla, the local Gulf agent, using a microphone and amplifier, started an amateur contest of local singers. Small Gulf souvenirs were given to each contestant and did they drag in the crowds! To keep the other exhibitors in the building happy—with all the crowd in front of the Gulf booth—they gave each exhibitor a 'plug' several times during the day and invited the crowd to see the other booths. The contest went over big and Bill became quite a figure as a radio announcer but was very nearly "floored" when the first request for an autograph was presented by a sweet young thing. After that first one it came easier and "Bill Mundinger announcing for Gulf No-Nox Ethyl" is now inscribed on programs, memory books and what have you, as a remembrance of the event. We anticipate that Bill will get his share of fan mail in the future.

ETC 21320

S



ady know is a
urther proof of
ere we find him
uld "throw" it

n will be sorry
a serious eye
York City. We
itarium around

f unusual, even
ummer most of
ot question as
ms that out in
seen following

Famous

onville, our Bill
a, the local Gulf
ed an amateur
were given to
s! To keep the
ll the crowd in
a 'plug' several
o see the other
became quite a
"floored" when
ted by a sweet
sier and "Bill
s now inscribed
u, as a remem-
ill get his share



At least 127 DAYS TO SPRING

NOW'S THE TIME TO BUILD YOUR ETHYL BUSINESS



REMEMBER LAST WINTER? Another long, tough one is just ahead. That means *hundreds* of cold starts . . . *thousands* of slippery miles for your customers. Tell them the comfort, safety and quick starting you have for them in your Ethyl pump...they want it. This advertisement in color in leading magazines will help you build Ethyl business now. And remember — Ethyl buyers are better customers for every high-grade product and service you sell — *more profitable customers* to you. Talk up Ethyl now.

SIGN OF THE BEST WINTER GASOLINE

STARTS QUICKER... AND STOPS KNOCK



(Contains tetraethyl lead)



"This winter use Ethyl"

SOLD BY
THESE 117 OIL RE-
FINING COMPANIES, MORE THAN ONE
HUNDRED THOUSAND DEALERS, AND
MORE THAN TEN THOUSAND JOBBERS

IN UNITED STATES

Acton Oil Service, Inc.
 Allegheny Refiners, Inc.
 Allegheny-Arrow Oil Co.
 American Oil Co.
 Anderson-Prichard Refining Corp.
 Arco Oil & Refining Co.
 Ashland Refining Co.
 Associated Oil Co.
 Atlantic Refining Co.
 Atlas Pipeline Corp.
 Barnard Refining Corp.
 Bell Oil & Gas Co.
 Bradford Oil Refining Co.
 R. R. Bush Oil Co.
 Canfield Oil Co.
 Canfield Oil Co.
 Chalmers Petroleum Corp.
 Champion Refining Co.
 Cities Service Oil Co.
 Cities Service Refining Co.
 Colonial Beacon Oil Co.
 Col-Tex Refining Co.
 Continental Oil Co.
 Continental Refining Co.
 Crystal Oil Refining Corp.
 Cushing Refining & Gasoline Co.
 Deep Rock Oil Corp.
 Derby Oil Co.
 Esso Oil Co.
 El Dorado Refining Co.
 Elk Refining Co.
 Empire Oil & Refining Co.
 Fleet-Wing Corp.
 Freedom Oil Works Co.
 General Petroleum Corp. of California
 Gilmore Oil Co.
 Globe Oil & Refining Co.
 Gulf Oil Corp.
 Hancock Oil Co. of California
 Hickok Oil Corp.
 Home Oil & Refining Co.
 Humble Oil & Refining Co.
 Independent Refining Co.
 Indian Refining Co.
 Johnson Oil Refining Co.
 Kanotex Refining Co.
 Kendall Refining Co.
 Latonia Refining Corp.
 Lion Oil Refining Co.
 Louisiana Oil Refining Corp.
 MacMillan Petroleum Corp.
 Magnolia Petroleum Co.
 Mid-Continent Petroleum Corp.
 National Refining Co.
 Ohio Oil Co.
 Oil Creek Refining Co.
 Omar Refining Co.
 Pan American Petroleum Corp.
 Panhandle Refining Co.
 Pennsylvania Oil Products Refining Co.
 Pennsylvania Refining Co.
 Pennacoil Co.
 Petrol Corporation
 Phillips Petroleum Co.
 Pure Oil Co.
 Quaker State Oil Refining Corp.
 Refiners, Inc.
 Republic Oil Refining Co.
 Richfield Oil Co. of California
 Richfield Oil Corp. of New York
 Rio Grande Oil Co.
 Rock Island Refining Co.
 Rodessa Oil & Refining Corp.
 Root Petroleum Co.
 St. Helen's Petroleum Co., Ltd.
 Seaside Oil Co.
 Shell Eastern Petroleum Products, Inc.
 Shell Oil Co.
 Shell Petroleum Corp.
 Signal Oil Co.
 Sinclair Refining Co.
 Skelly Oil Co.
 Socomey-Vacuum Oil Co. Inc.
 Lubette Division
 White Eagle Division
 White Star Division
 Standard Oil Co. of California
 Standard Oil Co. (Indiana)
 Standard Oil Co. (Kentucky)
 Standard Oil Co. of Louisiana
 Standard Oil Co. (Nebraska)
 Standard Oil Co. of New Jersey
 Standard Oil Co. (Ohio)
 Standard Oil Co. of Pennsylvania
 Standard Oil Co. of Texas
 Standard Oil of New York
 Scoring Oil Co.
 Scott Oil Refining Co.
 Sunset Oil Co.
 Texas Company
 Texas Pacific Coal & Oil Co.
 Tide Water Oil Co.
 Tide Water Oil Co. (Oklahoma)
 Tri-State Refining Co.
 Union Oil Co. of California
 United Refining Co.
 Utah Oil Refining Co.
 Valvoline Oil Co.
 Vickers Petroleum Co.
 Viking Distributing Co.
 Wadham Oil Co.
 Wagoner Refining Co., Inc.
 Warner-Quicksilver Co.
 H. F. Wilcox Oil & Gas Co.
 Wirt Franklin Petroleum Corp.
 Wolverine-Empire Refining Co., Inc.
 Yale Oil Corp.