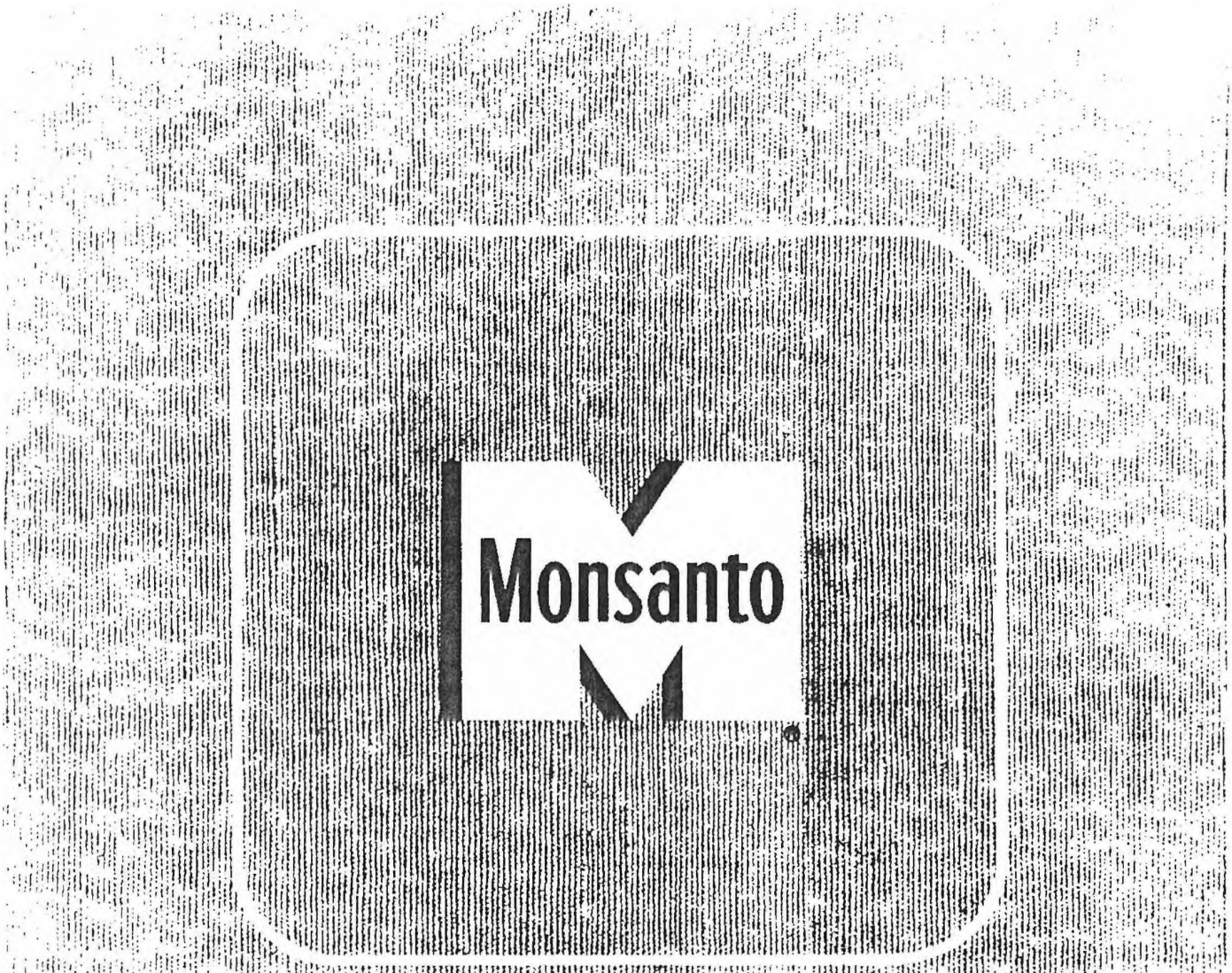

MONSANTO ANNUAL REPORT 1959

PLAINTIFF'S
EXHIBIT
P-1145

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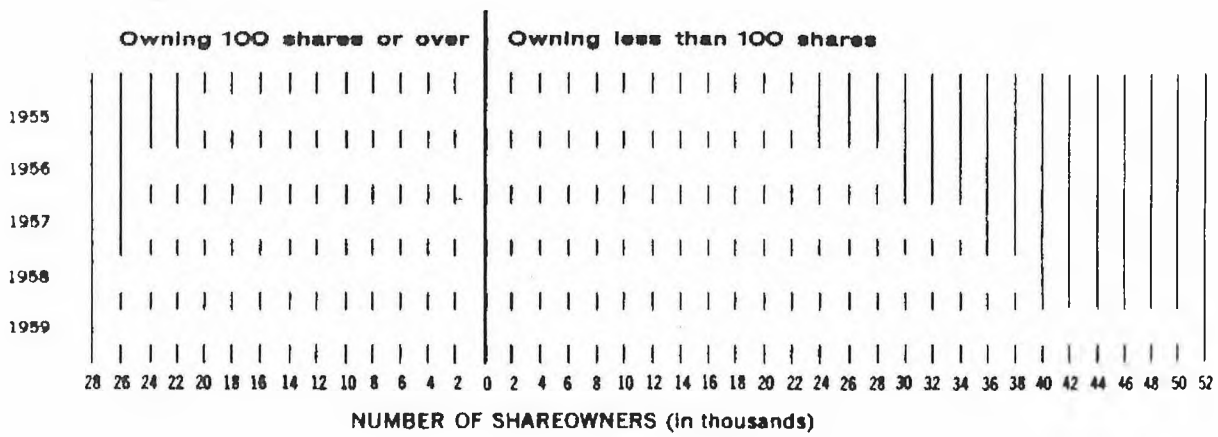
The next Annual Meeting of the shareowners of the Company is to be held on Wednesday, March 23, 1960, at the Company's General Offices, 800 North Lindbergh Boulevard, St. Louis, Missouri. A formal notice of the meeting, together with a proxy statement and form of proxy, will be mailed to each shareowner.

SHAREOWNERS OF RECORD

	1959		1958		1957		1956		1955	
	Number of Shareowners	Number of Shares	Number of Shareowners	Number of Shares	Number of Shareowners	Number of Shares	Number of Shareowners	Number of Shares	Number of Shareowners	Number of Shares
Men	28,830	4,856,599	24,990	4,752,196	22,877	4,811,506	20,412	4,788,326	16,702	4,536,291
Women	23,629	3,673,086	21,460	3,678,163	20,017	3,799,064	18,433	3,667,225	15,149	3,627,534
Joint Accounts	16,654	862,573	11,973	724,561	9,756	648,250	7,641	563,826	5,147	465,640
Charitable Institutions	255	169,421	265	179,961	288	206,025	145	147,082	154	133,830
Educational Institutions	106	92,336	114	131,892	139	145,224	117	117,618	105	126,631
Estates and Trusts	6,458	1,666,564	5,260	1,954,219	4,716	2,004,601	4,155	2,722,940	3,730	2,634,281
Insurance Companies	177	722,566	169	772,671	179	767,352	180	793,439	168	780,424
Brokers and Nominees	1,312	9,953,829	1,126	8,989,736	1,158	8,856,181	971	7,723,290	1,767	7,738,397
All Others	1,254	1,159,883	1,070	1,073,201	906	988,426	964	922,715	694	955,917
Total	78,675	23,156,857	66,427	22,256,600	60,036	22,226,629	53,018	21,446,461	43,616	20,998,945



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TO THE SHAREOWNERS

In company with many American corporations, Monsanto experienced an encouraging first nine months and a discouraging fourth quarter in 1959. Yet, sales and earnings for the year were at an all-time high.

Monsanto consolidated sales were 13.6 per cent above those of the previous year, and earnings showed a 43.9 per cent improvement.

Monsanto shareowners' net interests were:

	1959	1958	Increase
Sales	$811,361,741	$714,410,345	$96,951,396
Income after taxes	61,653,633	42,856,916	18,796,717
Earnings per share	2.66	1.93	.73

These consolidated sales and earnings include not only those of the parent company but also those of its domestic and foreign subsidiaries, and one-half those of 50 per cent-owned associated companies. Comparative balance sheets, complete income statements and other data for Monsanto consolidated appear on pages 16 to 19, inclusive.

Principal components of Monsanto consolidated did not necessarily react uniformly.

The parent company and its domestic and Canadian subsidiaries, responding favorably to economic conditions which began improving late in 1958, established a new high in sales. Despite reductions in the selling prices of some of our major products and despite the steel strike's heavy blow which affected in some degree virtually every part of our domestic business during the fourth quarter, earnings increased likewise, largely because of the year's high production rates and manufacturing economies.

All but two of our foreign subsidiaries and associates had better sales and earnings in 1959 than in 1958. With the exception of the newly formed Fome-Cor Corporation, which is in the developmental stage, our 50 per cent-owned domestic associates also contributed sales and earnings performances better than those of 1958.

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Sales of the parent company and its domestic and Canadian subsidiaries alone during 1959 were $615,377,078, an increase of 12.3 per cent over sales of $547,955,647 in 1958. Earnings of this group alone were $48,977,157, equal to $2.12 a share in 1959, compared to $34,549,517 and $1.55 a share in 1958. Our year-end stock dividend and the exercise of stock options by employes reduced per share earnings by increasing the number of shares outstanding. There were 23,156,857 such shares at the end of 1959; 22,256,600 at the end of 1958.

Included in 1959 earnings are dividends and interest of $5,390,640 received from affiliates, associates and foreign subsidiaries. In 1958, such receipts were $4,746,004.

CAPITAL INVESTMENT

Monsanto continued to invest large sums for new and more efficient plants to make new products or provide expanded output. Such expenditures for Monsanto consolidated were $76,115,000; $72,604,000 was so expended in 1958. Important projects are described later.

Of 1959 expenditures, $58,013,000 was for the account of the parent company and its domestic and Canadian subsidiaries; $10,635,000 was expended by foreign (other than Canadian) subsidiaries; $7,467,000 represented 50 per cent of capital additions by our jointly owned associated companies.

Expenditures included $7,870,000 representing the capitalized cost of our search for oil and gas reserves. A sum of $8,394,000 was invested in or advanced to subsidiary, associated and affiliated companies. Depreciation and depletion for Monsanto consolidated amounted to $64,138,000, compared to $60,559,000 in 1958.

SUMMARY

A high sales volume and its accompanying high throughput provided the primary thrust for improved earnings of the parent company. Manufacturing efficiencies and lower raw material prices were second and third, respectively, in importance.

These improvements more than compensated for selling-price reductions prompted by intense competition both at home and abroad. In several instances, however, we initiated lower prices to strengthen our position in major markets.

SUBSIDIARY COMPANY: A company in which Monsanto Chemical Company owns more than 50 per cent of the voting capital stock. A wholly owned subsidiary is a company in which Monsanto owns all of the voting capital stock.

ASSOCIATED COMPANY: A company in which Monsanto owns 50 per cent of the voting capital stock, the remaining 50 per cent being owned by another single interest.

AFFILIATED COMPANY: A company in which Monsanto owns less than 50 per cent of the voting capital stock.

PARENT COMPANY AND DOMESTIC AND CANADIAN SUBSIDIARIES: Includes Monsanto Chemical Company and all subsidiaries incorporated under the laws of a state within the United States or a province in Canada.

MONSANTO CONSOLIDATED: Includes the parent company, its domestic and foreign subsidiaries, and the 50 per cent interests in associated companies.

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Anticipating future growth, we purchased additional land at Nitro, W. Va., and acquired options on two other properties in California and New Jersey. The Nitro acquisition involves about 700 acres, much of which is adjacent to our present plant. This partially developed land is the major portion of the assets obtained from Nitro Industrial Corporation, which we acquired in exchange for 27,675 shares of Monsanto common stock.

A detailed review of the year's endeavors and achievements appears in the sections which follow.

INORGANIC CHEMICALS

Phosphorus and Phosphates

Sales of phosphates as a group were above former levels; sodium phosphates were well ahead; calcium phosphates gained also.

Phosphorus production was up. Expansion at Monsanto, Tenn., is scheduled for early 1960 completion. Economies were realized at Monsanto, Idaho.

Additional facilities under construction included those for phosphoric acid at Long Beach, Calif.; calcium phosphate at Carondelet, Mo.; sodium acid pyrophosphate and monosodium phosphate at Trenton, Mich.

New products introduced during 1959 include improved sodium acid pyrophosphate for leavening in refrigerated doughs and doughnut doughs, light-density sodium tripolyphosphate for detergent manufacturers, and an extremely pure grade of tetrapotassium pyrophosphate benefiting liquid-detergent formulators.

Nitrogenous Chemicals

Sales were up. Our improved non-caking ammonium nitrate fertilizer led the gain. Advanced techniques for direct application of anhydrous ammonia and nitrogen-fertilizer solutions prompted us to establish many new distributing depots.

Urea from the new El Dorado, Ark., plant is now an intermediate for other Monsanto chemicals and a fertilizer for rice and vegetable crops of Arkansas, Arizona and New Mexico.

Expanded ammonia facilities went on stream in October at Luling, La., where ammonia now is being produced in the nation's first completely computer-controlled, closed-loop chemical plant. Computer control has increased efficiency and throughput.

A high nitrogen-content solution, *Tri-Una-Sol* liquid fertilizer, containing urea and ammonium nitrate, was developed to accommodate growing demands for this type of product.

Other Products

The year marked our first major step toward becoming a supplier of a semiconductor material—ultra-pure silicon—for use in electronic transistors and rectifiers. A plant to produce silicon, a material which contains impurities of less than one part in six billion, neared completion at year end at a new site in St. Charles County, Mo.

Surfactant sales as a group were above those of 1958. Gains were strong in alkyl benzenes and *ACL* bleaching agents. Monsanto, Ill., facilities for the former are being enlarged and modified to produce improved forms of this important detergent intermediate.

At Everett, Mass., expanded facilities for *ACL* were completed. *ACL* products are chlorine carriers for dry bleach, sanitizer and scouring-powder formulations.

Sales of acids and heavy chemicals gained; demand for alum and sulfuric acid was heavy. Silica products sales increased. At Everett, expanded facilities permitting integrated production of *Syton* silica sols and *Santocel* silica aerogels began operating in April. *Santocel* FR-C, a new silica aerogel, improves flatting for surface coatings. Two new silica aquasols, *Syton* AS-200 and *Syton* W-200,

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were introduced for the synthetic-fiber industry and for "non-slip" floor waxes.

ORGANIC CHEMICALS

Production and sales of organic chemicals reached record levels, despite lengthy strikes in some consuming industries.

Some products were allocated during the last quarter, due to raw materials shortages induced by the steel strike. Competitive pressures, including those from low-priced imports, forced several product prices lower.

Research and development efforts yielded significant process improvements.

Agricultural Chemicals

Sales of agricultural chemicals substantially exceeded those of 1958, paced by greatly expanded use of methyl parathion to control boll weevils in cotton.

Successful Canadian field tests of our new *Avadex* herbicide led to its registration by the Canadian government for sale in Canada in 1960. *Avadex* is the first commercially practical means of chemically controlling wild oats—ranking enemy weed of Canadian farmers—in flax, sugar beets and small grains.

Santoquin, an antioxidant to preserve the nutritive value of feeds and dehydrated forage, became the first product cleared for sale under new food-additive legislation. Although first-year sales were hampered by a subsequent blanket restriction on new feed additives, *Santoquin* was exempted from this restriction late in the year.

Substantial price cuts were made to broaden the markets for *Vegadex* and *Randox*, herbicides which combat annual grassy weeds in horticultural and field crops.

Our agricultural chemicals marketing staff was strengthened.

Functional Fluids and Petroleum Additives

Sales of petroleum chemicals gained. Additives for motor and gear oils moved especially well. Our St. Louis engine-testing laboratory was doubled to accommodate expanded research.

A uniquely heat-stable and radiation-resistant synthetic lubricant, based on polyphenyl ethers and invented by our Research & Engineering Division under Air Force contract, was under final test at year's end, both by the Air Force and engine makers, for ultrasonic aircraft.

A new gasoline additive which inhibits formation of ice and dirt deposits in automobile carburetors was introduced.

Intermediates

Sales of intermediates—industrial chemicals which are starting materials for a wide spectrum of chemical end products—achieved all-time highs.

Extensive modernization of phenol facilities at Monsanto, Ill., was begun. Phenol production at Avon, Calif., was near capacity.

Major additions to production capacity for nitrochlorobenzene and hydrogenated products were completed.

Paper Chemicals and Wood Preservatives

New facilities for *Mersize*, a chemically fortified rosin size for paper, began operating at Nitro, W. Va., and at Seattle.

Unusually brisk demand for pentachlorophenol wood preservative helped this product group's sales gain.

Nitro's tall oil fractionating unit, a joint enterprise with Emery Industries, Inc., bettered its design capacity level in less than one year of operation.

Pharmaceuticals, Flavors and Condiments

Sales, although above 1958 levels, were less

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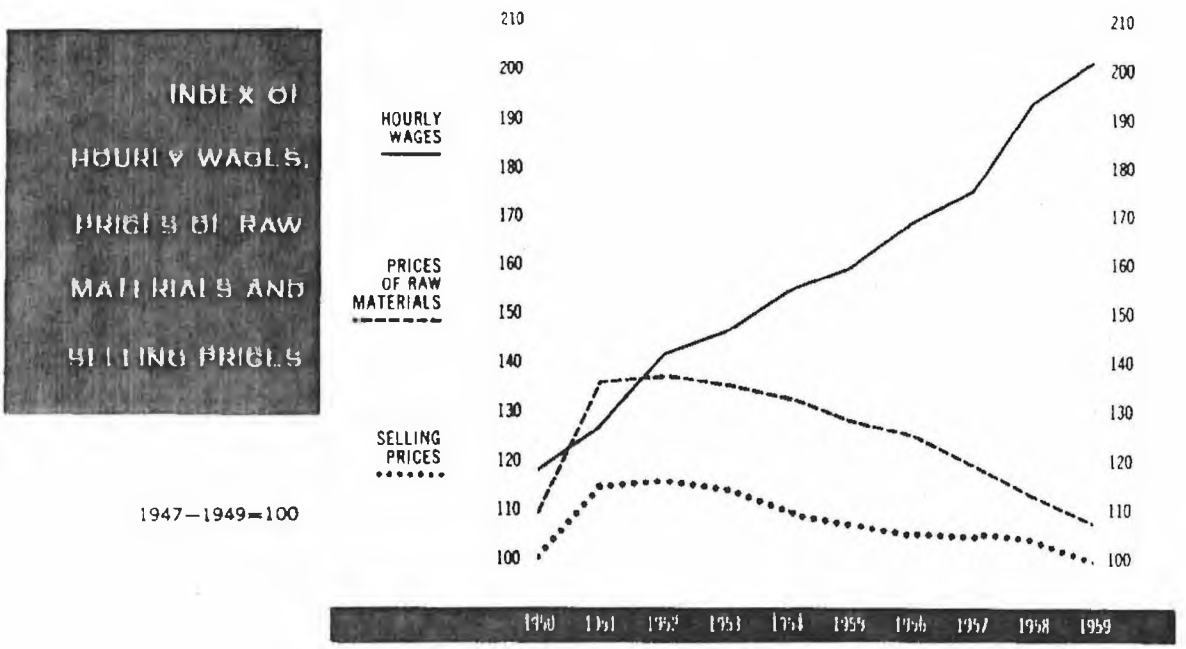

responsive both to 1958's decline and 1959's resurgence of business activity.

The Seattle production unit for vanillin, one of our oldest products, was expanded again.

Lowered tariffs permitted heavy Japanese imports which forced an unwarranted reduction in our price of saccharin, Monsanto's oldest product.

Plasticizers

Unprecedented demand for these compounds—used primarily to give flexibility to vinyl film, sheeting, floor tile, wire coating and moldings—resulted in record sales. This despite the fact that phthalate ester types were allocated late in the year due to the unavailability of naphthalene from the struck steel industry's coke ovens. Four new plasticizers for polyvinyl chloride resins were introduced for upholstery-covering materials.

Everett, Mass., phthalate esters facilities were expanded for the third time in four years.

Santicizer 409, Monsanto's first polymeric plasticizer, achieved full commercial status and acceptance for vinyl plastics requiring "permanent" flexibility.

Aroclor 5460 was found to be an effective, low-cost fire retardant for polyethylene.

Resin Materials

Increased use of polyester resins (for pleasure-boat hulls and structural panels) and alkyd-resin surface coatings spurred our sales to record levels.

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When the steel strike shut off naphthalene supplies, we converted our St. Louis and Everett phthalic anhydride units to ortho-xylene raw material and absorbed the higher unit cost as a customer service. Nevertheless, our output was curtailed.

At St. Louis, capacity for bisphenol A, a raw material for epoxy and polycarbonate resins, was expanded 50 per cent; a similar expansion of our maleic anhydride facility, already the world's largest, was under way at year's end; and fumaric acid capacity was being doubled.

Rubber Chemicals

Sales recovered strongly from last year's decline, despite a lengthy rubber-industry strike early in the year. The year's close found demand for these chemicals off, reflecting delayed effects of the steel strike on the automotive industry and, in turn, on the rubber industry.

PETROLEUM OPERATIONS

While Lion Oil sales did not exceed those for 1958, the division's contribution to Monsanto's earnings increased materially.

At the modernized and expanded El Dorado, Ark., refinery manufacturing efficiencies were effected. Increased returns resulted principally from heavier sales of crude from Lion's Venezuelan concession and from accelerated production of oil and gas from domestic discoveries.

Unfavorable conditions of oversupply continued in the petroleum industry, resulting in depressed prices and restrictions on the amounts of oil permitted to be taken from domestic wells.

Our search for reserves continued. Lion participated in the completion of 64 producing wells in 1959. Our interest is 32.6 net wells. Exploration expenditures for 1959 were $11.4 millions, $0.4 million less than those of 1958. Crude production totaled 8.9 million barrels, 25 per cent above the 1958 figure. Production of natural gas and liquefied petroleum gas increased six per cent and 28 per cent, respectively. Again additions to reserves exceeded withdrawals.

We made oil or gas discoveries in Mississippi, Texas, Louisiana, North Dakota, Colorado, Arizona, Oklahoma and Utah. Additional oil-producing sands were discovered in Simpson County, Miss., and in Matagorda County, Tex., where another gas field was found.

Our foreign explorations continued to be rewarding. Five additional wells were completed successfully in Venezuela in the 2,000-acre Lake Maracaibo concession in which Lion has a 15 per cent interest. Seven wells were completed successfully in Canada. Explorations continued in Bolivia, where Lion holds a 25 per cent interest in 660,000 acres, and in Spain.

Expansion of the El Dorado refinery increased capacity from 29,000 to 33,000 barrels daily. The new facilities include a solvent asphalt-extraction unit, which boosted yields of paving-grade asphalt, and a desulfurization unit to improve further the quality of diesel fuels and heating oils. In accordance with our program of funneling Lion's products toward Monsanto chemicals, a propylene tetramer unit went on stream in October. First shipments of propylene tetramer, used in the manufacture of detergents, were made in November to our Inorganic Chemicals Division.

Lion extended its service stations—previously restricted to the Midsouth—to the Midwest and Gulf Coast areas.

PLASTICS

The plastics industry, growth of which had been retarded by the 1958 recession, regained its characteristic vigor. Industry production soared to about

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5.9 billion pounds, topping the previous year's total by 27 per cent.

Monsanto benefited from increased sales as markets broadened. Beyond that, however, a number of recently introduced specialties penetrated new markets. Some sales gains were attributable to increasing use of plastics as engineering materials.

Saflex vinyl butyral—interlayer for laminated safety glass—sales of which dipped during automotive production slowdowns brought on by the steel strike, improved for the 12-month period. Major gainers, however, were *Lustrex* styrene, *Opalon* vinyl chloride, *Resinox* phenolic resins and *Resimene* melamine resins. *Lustrex* applications include appliance parts, packages, toys and phonograph records; *Opalon* resins and compounds are used widely in wire insulation, flooring, phonograph records, film and sheeting; *Resinox* and *Resimene* go into melamine decorative and industrial laminates, adhesives, and automotive and appliance finishes. Together these represent a substantial portion of our plastics activities.

Several new materials marketed commercially for the first time include a new textile resin which bolsters the wash-and-wear properties of cotton garments; a series of water-soluble ethylene-maleic anhydride copolymers which show promise as thickening agents, dispersants, oil-recovery additives and as building blocks for chemical synthesis; a new vinyl compound for cable jacketing.

Monsanto's new silane-modified phenolic, capable of withstanding the high temperatures to which certain missile components are subjected, formed a new link between our company and the space age. A fast-setting phenolic adhesive began helping the plywood industry upgrade its products for interior and sheathing use. Our new styrene copolymer was adopted in the manufacture of some self-polishing floor waxes.

Modifications at our Texas City, Tex., plant resulted in a more versatile and lower cost process for manufacturing polyethylene and will bring its annual capacity to 100 million pounds. Styrene monomer, acrylonitrile and acetylene capacities were boosted. Styrene monomer enters into the manufacture of styrene plastics and synthetic rubber; acrylonitrile is a raw material for synthetic fibers; acetylene is a chemical intermediate which Monsanto uses to make acrylonitrile and vinyl chloride.

At Springfield, Mass., output of high-impact *Lustrex* styrene was increased one-third and a laboratory was established to develop better machinery for plastics processing. To meet demands for *Lytron* 680 acrylic-type latex binder—now used in a number of water-based paints for outdoor application over wood—our capacity was trebled at Santa Clara, Calif., and doubled at Addyston, Ohio.

Our plans to install 200 million additional pounds of styrene monomer capacity were announced in November.

Operation of our facilities at record levels, improvement of several processes, greater use of new bulk-shipping methods, and increased utilization of computers and other forms of automation helped us overcome the penalties of generally lower prices.

RESEARCH

Our research efforts continued to grow in volume and importance. In 1959, the company was granted 271 U. S. patents and 229 foreign patents. Innovations represented by these patents form a broad technological base for future development.

In 1958, following an eight-year period in which 403 Monsanto products were introduced, 310 of those products contributed almost 26 per cent of total sales for our three chemical divisions and almost 23 per cent of gross profits. In addition, 56

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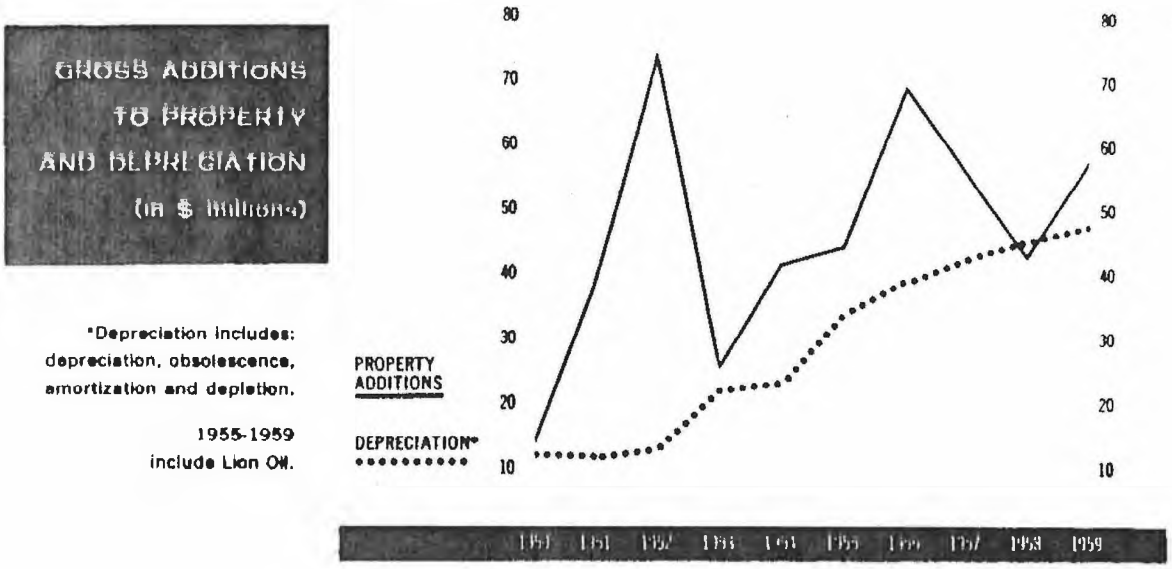

new Monsanto products survived screening tests in 1959 and were sold in commercial volumes.

Additional products were in introductory phases as the year ended. Samples of Monsanto's new micro-fine metal oxides, trademarked *Micria*, were offered to customers for evaluation. So small that a row of 2.5 million of them would measure only one inch, *Micria* particles are expected to find markets in the ceramics, cosmetics, plastics, rubber, paint and metals industries.

We invested about $26.9 millions in research, development, patent work and basic engineering for our own account in 1959, compared to $23.4 millions in 1958. In addition, a substantial number of research projects were under way for government account.

About 65 per cent of the 1959 expenditure was used to bring new products to market and to add to the company's store of basic new information on which future products will be based. The remainder was invested in improving existing products.

At Mound Laboratory, which we operate at Miamisburg, Ohio, for the Atomic Energy Commission, new facilities were built to meet increased demand for neutron sources and other items produced there. New unclassified projects include production of alpha sources, isolation of naturally occurring isotopes in research quantities, and research on plutonium-alloy fuel systems for fast-neutron reactors.

In the third quarter, we broke ground at our Creve Coeur site in suburban St. Louis for our new Research Center, which will make possible consolidation of certain research functions when the first building is completed in 1961.

Bringing together many of our research facilities now housed at widely separated locations will result in economies and increased efficiency. Located be-

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tween the present Inorganic Chemicals Research Laboratory and the Agricultural Chemicals Laboratory, the new center is being built to accommodate extensive expansion.

FOREIGN OPERATIONS

Sales and earnings of major foreign affiliates were greater than those of 1958, reflecting improved economic conditions abroad, coupled with aggressive selling and expanded and improved manufacturing operations.

Our exports were greater also, despite an increasingly competitive world market. Impact of the six-nation European Common Market, which began functioning in 1959, already is being felt. It is anticipated this impact will be intensified further as the Common Market member nations continue tariff reductions among themselves and adopt common tariffs to nations outside. Increasing self-sufficiency of many smaller nations resulted in reduced demands for some of our chemicals, but demand for our specialties increased.

Our manufacturing interests within the Common Market and elsewhere enhance our stability in global markets. Our policy is to export as long as practical and to shift to our own local foreign manufacture when necessary to retain markets or gain sales advantages. This we have done in numerous instances, dating to our first overseas investment in 1920. And the same policy influenced our December decision to build a multi-million dollar plant in Europe to produce *Saflex* polyvinyl butyral sheeting for laminated safety glass. The location will be announced soon. This plant, expected to be producing by late 1960 or early 1961, represents an effort to secure our *Saflex* position within the Common Market.

Our earliest overseas manufacturing subsidiary, Monsanto Chemicals Limited, which manufactures a wide range of chemicals and plastics in the United Kingdom, began operating a new polyethylene plant at Fawley, England, near Southampton. This new facility augments operations at Newport, on the Bristol Channel, and at Ruabon, North Wales. The company's sales increased over those of 1958 and earnings likewise moved upward.

Sicedison, S.p.A., in which we hold a 40 per cent equity, is one of Italy's largest chemical companies. In its plants at Mantova in the Po Valley and at Porto Marghera near Venice, Sicedison manufactures organic, inorganic, plastics and petrochemical products. This company continued its rapid growth in 1959, with completion of new facilities for manufacture of hydrogen cyanide and fluorine derivatives, and expansions of acrylonitrile, polystyrene and polyvinyl chloride facilities. A 40,000-square-foot, up-to-date research laboratory and a pilot plant near Milan were completed. Sales increased substantially over those of 1958.

Our jointly owned French company – Societe Monsanto Boussois – reported decreases in sales and earnings, due to a first-half dip in French industrial activity. Marked improvement was noted in the second half, however. Expansion of its high-impact polystyrene unit was completed, enabling the company to maintain its position as leader in France's polystyrene market.

Monsanto Canada Limited, a wholly owned subsidiary serving the Canadian market with a broad line of products including plastics, adhesives, fine chemicals, paper chemicals and petroleum additives, increased sales and earnings over those of 1958. Late in the year, this company began construction of Canada's first maleic anhydride plant at Montreal to serve Canadian manufacturers of surface coatings, paper sizes and polyester resins.

In Japan, 50 per cent-owned Mitsubishi Monsanto Chemical Company enjoyed substantially increased sales and earnings, reflecting the remarkable re-

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covery of the Japanese economy from its 1958 recession. Major expansions for this plastics producer are currently under way.

Monsanto Chemicals (Australia) Limited, in which we have a 77 per cent direct and indirect interest, set new sales and income records. A styrene monomer plant is being built in Sydney by Australian Petrochemicals Pty. Limited, a new 55 per cent-owned subsidiary for the manufacture of petrochemicals. This company is a joint venture with Petroleum and Chemical Corporation (Australia) Limited.

Monsanto Mexicana, S.A., a wholly owned subsidiary, experienced lower earnings, due to a severe drop in demand for agricultural chemicals and increased competitive activity in several product lines. New plants began producing phosphoric acid and sodium tripolyphosphate, the latter being a key raw material for the local detergent industry.

Our wholly owned subsidiary in Argentina, Monsanto Argentina, S.A.I.C., added units for manufacture of vinyl compounds, phthalic anhydride and plasticizers. Resins for the vinyl compounds will come from a newly formed Monsanto subsidiary – Monsanto Andes, S.A.I.C. – which has a plant nearing completion at Mendoza, Argentina. Sales and earnings of Monsanto Argentina were higher than those of 1958.

Gross assets of foreign companies in which Monsanto holds, directly or indirectly, 40 per cent or more of the equities, approximate $300 millions. A substantial part of these assets—more than 75 per cent—is in Great Britain and Western Europe.

50 PER CENT-OWNED DOMESTIC ASSOCIATED COMPANIES

All established domestic associates exceeded their 1958 sales and earnings. Fome-Cor Corporation, which was formed in February as our fifth associate, did not participate in profits, as it is still in the developmental stage.

The Chemstrand Corporation marked its tenth anniversary in 1959 by achieving sales, earnings and production figures better than those for 1958. Chemstrand, owned jointly with American Viscose Corporation, is the world's second largest producer of chemical textile fibers.

We again are enclosing copies of Chemstrand's Annual Report in our shareowner mailings. The Chemstrand report discloses that, despite reductions in the price of nylon tire yarns, consolidated net income increased 31 per cent over that of 1958. Consolidated sales for 1959 were $197,321,000, compared to $172,968,000 in 1958. Earnings on such sales were $24,078,000, compared to $18,355,000 in 1958.

In December, Chemstrand paid a dividend of $5,000,000 divided between its two owners. Monsanto received $2,500,000, the net of which, after providing for intercorporate dividend tax, was $2,305,000. The company also retired $5,000,000 of subordinated notes held equally by us and Viscose.

Within the year, Chemstrand announced plans to build a new nylon plant at Greenwood, S. C., and a research laboratory in what is known as the Research Triangle (formed by Raleigh, Durham and Chapel Hill) of North Carolina. In February, a new "Acrilan" acrylic fiber plant in Coleraine, North Ireland, was dedicated by Chemstrand's wholly owned British subsidiary, Chemstrand Limited. Acrylic fiber also is being produced by Chemstrand affiliates in Japan and Italy.

In the fourth quarter, the company entered the carpet-nylon field with a new yarn trademarked "Cumoloft".

Mobay Chemical Company, owned jointly with Farbenfabriken Bayer A.G. of West Germany, con-

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tinued to make significant gains in sales and earnings.

At year end, a 50 per cent expansion of plant capacity was nearing completion for tolylene diisocyanate, used in urethane foams, elastomers and protective coatings. A third major expansion will be completed by mid-1960. The new facilities will raise annual capacity from 18 million pounds to more than 25 million pounds.

A new plant for making polycarbonate plastics, to be marketed under the trademark "Merlon", also is scheduled for start-up early in 1960.

A new 26,000-square-foot headquarters-office building, now being constructed for Mobay in Pittsburgh, will utilize a variety of urethane materials—one application being steel-faced exterior, curtain-wall panels which have a rigid urethane-foam core for insulation and structural support.

Technical advances in urethane chemicals for elastomers, marketed under Mobay's trademark "Multraphane", helped expand uses for these tough, cast materials in the automotive and aircraft industries.

Some major refrigerator and freezer manufacturers are introducing units with urethane-foam insulated walls which permit design of thinner wall sections, increasing interior space up to 50 per cent with no increase in outer dimensions.

Cushioning components for military rockets, missiles and guidance systems—including the new Astronaut space capsule—provided other new uses for urethane foams.

Shawinigan Resins Corporation's sales were up significantly over those of 1958. Vinyl butyral resin, its largest volume product, is used by Monsanto for laminated safety-glass interlayer. Such sales increased for the year despite the effect of the steel strike on the automotive industry.

When sales of "Gelvatol" polyvinyl alcohol taxed capacity, plans to double production were moved ahead. "Gelvatol" has made headway in the adhesives, textile, packaging and paper industries.

Special grades of "Butvar" vinyl butyral resin gained additional acceptance in the manufacture of corrosion-resistant metal primers and structural adhesives, particularly those used for metal-to-metal bonding. "Formvar" polyvinyl formal resin continued to hold its outlets in wire insulation.

Shawinigan is owned jointly with Shawinigan Chemicals Limited, a Canadian company.

Plax Corporation's sales and earnings were up sharply over those of 1958, due primarily to the winning of a big new market for high-density polyethylene containers for liquid detergents. Also, a new, square, one-gallon plastic container, made at high speed on new machinery designed by Plax, is selling successfully in competition with conventional containers.

Light-gauge styrene film, trademarked "Polyflex", is entering the overwrap market and is being used in the "see-through" merchandising of such diverse items as lettuce, meats, cigars and stationery. The window in the envelope which contained this report is made of "Polyflex".

A 40,000-square-foot addition to the Deep River, Conn., plant was virtually complete at year's end. Additional high-speed bottle-making machines were installed at the Ligonier, Ind., plant, where capacity ultimately will be doubled.

An 18-acre site was purchased at Anaheim, Calif., where Plax plans construction of a plastic-bottle plant to serve the West Coast.

Plax is owned jointly with Emhart Manufacturing Company.

Fome-Cor Corporation, formed in February, is a joint venture with St. Regis Paper Company. Its

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TOWOLDMON0014117

product, "Fomecor", is a sandwich of styrene foam between layers of paper. The lightweight board has exceptional cushioning and insulating properties. Full-scale production began at Addyston, Ohio, in July. We believe "Fomecor" board will have many applications. It is being used now to package shipments of wet and frozen products, such as flowers, vegetables, fruit and poultry. The automotive industry is testing "Fomecor" in the fabrication of interior trim for cars. There appear to be possibilities for its use in display panels and outdoor shelters.

PERSONNEL

In a year when labor-management strife was national, our relations with our employes were good. Eleven of the 18 labor contracts in the United States and Canada expired or were opened for renegotiation; 10 were concluded equitably and amicably and most were signed for two or more years. Only at Mound Laboratory, which Monsanto operates for the Atomic Energy Commission at Miamisburg, Ohio, was there any difficulty: production and maintenance employes struck for three weeks, primarily over involvements in contractual language. The strike ended when a three-year contract was signed. Despite the walkout, production schedules were met.

As computer-controlled plants neared reality, more attention than ever focused on the new skills and knowledge being required at all levels of the organization. The chemical industry long has been built around highly instrumented plants. Nevertheless, it is necessary to train employes continually in special skills required by the new technologies.

In addition, our divisions have stepped up management training programs; new educational courses have been established for sales personnel and for technical service managers. These supplement previously established educational-leave and tuition-payment programs.

Because of our deep involvement in science, we long have sought better means of recognizing creativity in research and engineering. In recognition of outstanding ability in these fields, we have created the positions of Senior Scientist, Senior Technologist, Scientist and Technologist. Such men—now 40 in number—have been freed of all administrative duties in order that they may pursue exclusively and independently their search for useful knowledge.

In September, 2,968 salaried employes and 1,663 hourly employes received 150,182 shares of Monsanto common stock at the conclusion of the 1956 Employes' Stock Plan. All eligible employes had been offered an option on as much stock as each could pay for with monthly deductions not to exceed 10 per cent of salary or wages, for a period of three years. The option price was $38.50—95 per cent of the closing market price the day the plan went into effect. An additional 19,783 shares were acquired by employes at earlier option-exercise dates.

In June, the Board of Directors elected Charles H. Sommer to the post of executive vice president, to the board and to the Executive Committee. Mr. Sommer has spent his entire business career with Monsanto and had been both a vice president and general manager of the Organic Chemicals Division. To succeed Mr. Sommer, Robert M. Morris, who had been assistant general manager, was elected a vice president and appointed general manager of the division. Herbert Hoover Jr., who joined our board in 1958, was elected to the Finance Committee.

At the 1959 Annual Meeting of Shareowners, for reasons of health and age, two of our directors did not stand for re-election: Thomas H. Barton and Francis J. Curtis. A third director, Charles S. Chesston, retired at the end of the year upon reaching Monsanto's retirement age.

Mr. Barton had been identified with the former Lion Oil Company since its inception and had served it as president and board chairman. After the

MONS 351900

TOWOLDMON0014118

Monsanto-Lion merger, he was an active member of our board and Finance Committee. Mr. Curtis, who had been a vice president since 1943 and a board member since 1949, spent his entire career with Monsanto or the predecessor Merrimac Chemical Company, serving in research, development and personnel activities. Mr. Cheston was elected to our board in 1945 and had served as chairman of the Finance Committee since 1947. In recent years, he also had been a member of our Bonus, Stock Option and Auditing Committees.

All three of these men made many significant contributions to the company, and their pleasing personalities and constant association will be missed by their former associates, especially by the undersigned. However, their advice and counsel remain available to us.

In November, the board elected Alan H. Temple to its membership. Mr. Temple, who presently serves The First National City Bank of New York as vice chairman of its board and is one of its directors, has had a distinguished career. His counsel, especially in financial matters, will be helpful in formulating policies.

Recognizing the increasing need for employe education in governmental and political matters, the company created the Office of Civic Affairs to implement company-wide programs of employe information and participation. We have established Business Climate Committees at locations in 17 states where we have major operations and we are undertaking programs aimed at making available to our employes information on national and local issues which affect Monsanto. Objective: to solicit their interest and understanding and, wherever possible, their help. Thomas J. Diviney, who had been assistant director of the Personnel Relations Department, was appointed director of civic affairs.

In 1959, Monsanto established the second best safety record in its history, with an accident frequency rate of .73 accidents per million man-hours worked, one-fifth the latest chemical industry average of 3.56 and one-eighth the all-industry average. In fact, our employes were nine times safer on the job than away from it.

Monsanto consolidated now employs 31,346; the parent company, 19,317. We should be negligent if we did not acknowledge in this report to shareowners the great loyalty, ability and, in many cases, ingenuity of our people. Spearheading their efforts are members of our management team, about whom we receive frequent expressions of interest from shareowners, financial analysts and others. Although these men are introduced at our Annual Meetings, this year we introduce them to our entire shareowner family—which, by the way, had grown to 78,675 at year's end.

Starting on page 29, we have included photographs and brief biographical sketches of our management. These men and their subordinates guide our company with vitality into the sixties and, we hope, with resultant progress.

Sincerely,



Chairman of the Board



President

St. Louis, Missouri
February 12, 1960

MONS 351901

TOWOLDMON0014119

PARENT COMPANY, DOMESTIC AND CANADIAN SUBSIDIARIES

SALES BY PRODUCT GROUPS

	1959 %	1958 %	1954 %
Plastics, Synthetic Resins and Surface Coatings	29.2	28.4	29.9
Phosphate Products and Detergents	17.2	16.9	25.3
Intermediates and Plasticizers	14.4	13.7	15.9
Petroleum Products—Net of purchases	9.3	10.8	—
Agricultural Chemicals and Wood Preservatives	9.2	9.1	4.2
Rubber and Oil Chemicals	6.6	6.6	9.1
Textile and Paper Chemicals	6.1	6.0	2.6
Pharmaceuticals, Flavors and Condiments	4.2	4.5	5.8
Heavy Chemicals	3.3	3.3	5.5
Other	.5	.7	1.7
	100.0	100.0	100.0

PARENT COMPANY

SALES TO PUBLIC AND CONSUMING INDUSTRIES

	1959		1958		1957	
	Position	% of Total	Position	% of Total	Position	% of Total
Soap and Detergent	1	12.75	1	13.24	4	9.17
Agriculture	2	11.46	3	10.02	6	8.06
Plastics and Resins	3	10.03	4	9.70	2	10.56
Petroleum	4	9.88	2	11.53	1	11.17
Rubber	5	8.94	5	7.92	3	10.12
Textile	6	6.54	6	6.00	8	5.75
Metal	7	6.07	7	5.77	7	5.85
Stone, Glass and Vitreous Product	8	6.00	11	4.65	9	5.45
Paper and Printing	9	4.96	9	4.80	11	3.52
Public-Service station sales, etc.	10	4.35	8	4.98	5	8.34
Paint, Varnish and Printing Ink	11	4.01	10	4.66	10	4.00
Pharmaceutical	12	2.72	12	3.49	12	3.45
Food	13	2.50	13	3.04	13	3.17
Lumber and Timber	14	2.31	14	2.53	14	2.49
Color and Dyestuff	15	1.58	15	1.76	17	1.37
Transportation Equipment	16	1.32	17	.87	16	1.44
Iron, Steel and Related Product	17	1.28	16	1.38	15	1.98
Non-ferrous Metal	18	.56	18	.73	18	1.11
Other		2.74		2.93		3.00
		100.00		100.00		100.00

MONS 351902

TOWOLDMON0014120

MONSANTO CONSOLIDATED

As mentioned in previous reports, the statements of financial position and income, for the parent company and its domestic and Canadian subsidiaries, do not reflect the total interests of Monsanto shareowners. To present such over-all equities, the following pages contain consolidated financial statements and other data respecting the company and its domestic and foreign subsidiaries, together with that portion of the assets, liabilities, sales, income, employes, additions to property and other data which are represented by our 50 per cent ownership in associated companies.

These consolidations include our proportionate 50 per cent interests in The Chemstrand Corporation, Fome-Cor Corporation, Mobay Chemical Company, Plax Corporation, Shawinigan Resins Corporation, Monsanto Boussois (France), Mitsubishi Monsanto (Japan), and the following active subsidiaries:

Monsanto Export Company

Monsanto Overseas, S.A. (Panama)

Monsanto Argentina, S.A.I.C.

Monsanto Andes, S.A.I.C.

Monsanto Research, S.A.

Monsanto Canada Limited and subsidiary

Monsanto Mexicana, S.A.

Monsanto Chemicals Limited and British subsidiaries

Monsanto Chemicals (Australia) Limited and subsidiary

Monsanto Chemicals of India Private Ltd.

Subsidiaries participating in oil and gas exploration in Canada, Bolivia, Venezuela and Sicily.

In years when such enterprises suffered losses, income taxes were reduced in the statements by the amounts they would have been reduced had our portions of the operations been integral parts of the parent company. Conversely, when such companies became profitable, no reduction was made in the income taxes shown in the consolidation because tax credit had been taken in prior years. All the companies operated profitably in 1959, with the exception of Fome-Cor and some exploration subsidiaries.

All earnings of the consolidated subsidiaries and associated companies are available for dividends with the exception of those of Chemstrand, whose dividends are limited to the terms of its indenture, and in some foreign countries dividends are still subject to exchange controls. However, assuming that our share of all such earnings had been received as dividends, we have included in each year's income taxes a provision for additional income and corporate dividend tax which we estimate would have been payable.

All dollar amounts are stated in millions except those relating to book values, per share earnings, dividends per share and capital per employe. Foreign currencies have been converted to U. S. dollars at exchange rates prevailing at each year's end, except long-term debt, capital stock, and property and related reserves, which have been converted at approximate rates in effect at dates of issuance or acquisition.

TOWOLDMON0014121

SHAREOWNERS'

IN PARENT COMPANY, DOMESTIC

50% OWNED ASSO

Consolidating Only That Percentage of Associated Companies

(In millions)

ASSETS

	1959	1958	1957	1956	1955	10 YEARS AGO 1949	25 YEARS AGO 1934
Current Assets:							
Cash	$ 32.5	$ 37.0	$ 36.7	$ 32.9	$ 59.3	$ 27.4	$ 3.5
Marketable securities	106.7	38.8	24.5	21.7	24.4	2.7	.3
Net receivables	115.5	106.5	88.5	86.1	72.4	20.4	1.7
Inventories	125.7	117.7	122.6	113.9	100.0	34.1	4.1
	380.4	300.0	272.3	254.6	256.1	84.6	9.6
Investments, etc.	40.5	32.1	14.4	7.9	6.4	2.3	1.4
Property:							
Land	15.4	12.7	11.8	11.5	10.7	4.2	1.3
Buildings	140.5	138.2	128.7	114.5	98.0	39.7	3.6
Machinery and equipment	649.2	604.2	561.4	505.7	455.6	134.1	10.7
Phosphate deposits	6.9	6.2	6.1	5.9	5.6	1.5	
Producing oil and gas properties	76.6	74.9	67.7	64.6	59.5		
Undeveloped oil and gas leaseholds	10.0	12.8	19.7	15.1	10.4		
Accumulated depreciation, etc.	*358.9*	*313.8*	*267.4*	*227.6*	*199.5*	*61.2*	*5.3*
Accumulated depletion	*25.6*	*24.4*	*22.3*	*21.2*	*19.6*	*.5*	
Net property	514.1	510.8	505.7	468.5	420.7	117.8	10.3
Deferred Charges	16.0	14.7	12.7	7.2	7.0	1.6	.2
	$951.0	$857.6	$805.1	$738.2	$690.2	$206.3	$21.5

See explanation, page 15.
Italics indicate deduction.

MONS 351904

TOWOLDMON0014122

NET INTERESTS

AND FOREIGN SUBSIDIARIES AND

CIATED COMPANIES

which is Represented by Monsanto Shareowners' Equity

(In millions)

LIABILITIES

	1959	1958	1957	1956	1955	10 YEARS AGO 1949	25 YEARS AGO 1934
Current Liabilities:							
Accounts payable and accruals.....	$ 71.6	$ 66.9	$ 64.8	$ 59.1	$ 51.5	$ 15.2	$ 1.9
Income taxes less tax notes.....	49.4	33.0	31.3	25.5	13.2	4.0	.6
Sinking funds and notes payable...	13.2	13.0	6.6	6.0	3.1	.2	
Employes' bonus awards.....	3.1	2.0	3.3	3.0	3.1		
	137.3	114.9	106.0	93.6	70.9	19.4	2.5
Debentures, Bonds, etc......	118.0	129.9	133.7	123.9	130.4	30.4	.9
Income Debentures.....	141.0	116.0	91.0	91.0	91.0		
Other Liabilities:							
Deferred income taxes.....	28.6	25.7	22.7	16.2	10.2	.5	
Pensions, etc.....	1.2	2.0	2.8	4.2	4.4	7.6	.5
Employes' bonus—unawarded.....	1.4	1.2	1.1	1.2	.9		
	31.2	28.9	26.6	21.6	15.5	8.1	.5
Minority Interests in Subsidiaries.....	20.5	19.4	20.1	18.1	17.7	13.0	1.9
Capital Stock and Surplus:							
Preference shares.....						33.0	
Common shares.....	46.3	44.5	44.5	42.9	42.0	21.4	8.6
Paid-in surplus.....	225.9	190.2	188.6	165.9	151.4	35.1	1.2
Earned surplus.....	230.8	213.8	194.6	181.2	171.3	45.9	5.9
	503.0	448.5	427.7	390.0	364.7	135.4	15.7
	$951.0	$857.6	$805.1	$738.2	$690.2	$206.3	$21.5

MONS 351905

TOWOLDMON0014123

SHAREOWNERS'

IN PARENT COMPANY, SUBSI

Consolidating Only That Percentage of Associated Companies

(In millions except per share earnings)

	1959	1958	1957	1956	1955	10 YEARS AGO 1949	25 YEARS AGO 1934
Income:							
Net sales	$811.4	$714.4	$708.0	$653.8	$630.4	$185.1	$17.5
Other	9.9	5.5	6.1	3.7	2.5	1.5	.4
	821.3	719.9	714.1	657.5	632.9	186.6	17.9
Deductions:							
Cost of goods sold	584.0	531.3	515.0	467.7	434.9	131.1	12.4
Selling, administrative, research	98.4	90.9	87.4	88.1	83.0	23.2	2.3
Provision for employes' bonus	2.5	.2	1.2	1.4	2.2		
Income charges	14.5	14.6	14.4	11.5	11.4	2.4	.2
Minority interests	1.5	.9	1.0	.9	1.0	.4	
	700.9	637.9	619.0	569.6	532.5	157.1	14.9
Income Before Income Taxes	120.4	82.0	95.1	87.9	100.4	29.5	3.0
Provision for Income Taxes	58.7	39.1	46.2	42.1	50.1	12.2	.4
Net Income	$ 61.7	$ 42.9	$ 48.9	$ 45.8	$ 50.3	$ 17.3	$ 2.6
Per Common Share[1]	$ 2.66	$ 1.93	$ 2.20	$ 2.13	$ 2.37	$ 1.25	$ .34

See explanation, page 15.
(1) Adjusted for splits.

MONS 351906

TOWOLDMON0014124

NET INTERESTS

DIARIES AND ASSOCIATES

which is Represented by Monsanto Shareowners' Equity

(In millions except where italicized)

	1959	1958	1957	1956	1955	10 YEARS AGO 1949	25 YEARS AGO 1934
Depreciation, depletion, etc.	$ 64.1	$ 60.6	$ 53.3	$ 46.8	$ 44.7	$ 10.3	$ .9
Book value a share[1]	*$21.72*	*$20.15*	*$19.24*	*$18.18*	*$17.37*	*$7.98*	*$2.01*
Gross additions to property	$ 76.1	$ 72.6	$ 90.1	$ 98.7	$ 61.8	$ 16.6	$ 2.0
Employes[2]	*31,346*	*30,306*	*30,011*	*27,547*	*26,621*	*14,878*	*2,833*
Net working capital	$243.1	$185.1	$166.3	$161.0	$185.2	$ 65.2	$ 7.1
Employed capital[3]	$782.5	$713.8	$672.5	$623.0	$603.8	$178.8	$18.5
Employed capital per employe	*$24,963*	*$23,553*	*$22,408*	*$22,616*	*$22,681*	*$12,018*	*$6,530*
Parent company:							
Cash dividends on common shares	$ 22.4	$ 22.2	$ 21.5	$ 21.0	$ 20.3	$ 8.6	$ 1.0
Per common share[1]	*$1.00*	*$1.00*	*$1.00*	*$1.00*	*$ .92*	*$ .67*	*$ .13*
Preference shares outstanding						*330,116*	
Common shares outstanding[1]	23.2	22.3	22.2	21.4	21.0	12.8	7.8
Number of shareowners	*78,675*	*66,427*	*60,036*	*53,018*	*43,616*	*15,637*	*4,129*

(1) Adjusted for splits. (2) Excluding employes of government plants. (3) Net worth and long term debt.

MONS 351907

TOWOLDMON0014125

FINANCIAL REVIEW

Financial statements of the parent company and its domestic and Canadian subsidiaries are presented on pages 22 through 25 and should be read in conjunction with the following comments and explanations. Comparative sales and income of the companies in this group alone were:

	(In Thousands) 1959	1958	Per Cent Increase
Sales:			
First quarter	$149,792	$127,475	17.5
Second quarter	165,150	137,571	20.0
Third quarter	150,944	138,020	9.4
Fourth quarter	149,491	144,890	3.2
	$615,377	$547,956	12.3
Income:			
First quarter	$ 11,339	$ 6,066	86.9
Second quarter	14,140	6,933	104.0
Third quarter	10,543	7,959	32.5
Fourth quarter	12,955	13,592	(4.7)
	$ 48,977	$ 34,550	41.8

	1959	1958	
		As Reported	Adjusted for 1959 Stock Dividend
Per share earnings were:			
First quarter	$ .49	$ .27	$ .27
Second quarter	.61	.31	.30
Third quarter	.46	.36	.35
Fourth quarter	.56	.61	.60
	$2.12	$1.55	$1.52
Shares outstanding December 31	23,156,857	22,256,600	

Equity in the unaudited 1959 net income of unconsolidated subsidiaries was approximately $4,502,000 and of 50 per cent-owned companies, $13,141,000. Dividends of $3,755,469 were received from these companies in 1959 and have been included in the parent's income.

MONS 351908

TOWOLDMON0014126

Equity in the unaudited net assets of unconsolidated subsidiaries was	$ 35,627,000
And in 50% owned companies was	77,163,000
Totaling	$112,790,000
Which exceeded our carrying value of	57,548,000
By	$ 55,242,000

Charges against income for depreciation, obsolescence and depletion totaled $46,696,006, of which $43,622,681 was depreciation and obsolescence, and $3,073,325 depletion of mines and wells. In 1958, such charges were $42,451,789 and $2,616,959.

Depreciation in excess of normal provided by the sum of the years digits method of computing depreciation on recent property additions increased from $6,533,635 in 1958 to $6,592,788.

Accumulated depreciation and depletion at year end:

	1959	1958
Depreciation	$281,364,253	$251,372,069
Depletion	25,589,565	24,414,999
Total	$306,953,818	$275,787,068

Repair and maintenance charges included in operating expenses were $45,964,622 in 1959 and $37,719,105 in 1958.

Inventories are valued substantially at the lower of cost or market. Valuation of approximately one-sixth has been determined on the last-in, first-out basis. Annual rates of inventory turnover were 5.3 in 1959 and 4.7 in 1958.

Reserves for doubtful accounts were $1,364,741 in 1959 and $1,277,208 in 1958.

The company issued in December and sold at par to an institutional investor an additional $25 millions of 4¼ per cent income debentures for which it had a prior commitment. The series, including the $25 millions sold in March, 1958, matures in 2008; a sinking fund begins in 1988. The interest on these debentures, as well as on the $91 millions of 3¾ per cent income debentures sold in 1952 and 1955, is cumulative but payable currently only if earned.

The May 1, 1961 and 1962, sinking fund payments on the 2.65 per cent debentures were anticipated by the purchase in 1959 of $2 millions of these debentures. The May 1, 1960, payment was anticipated by the purchase of $1 million of debentures in 1958.

During 1959, four quarterly cash dividends of 25 cents each were paid on the common shares. Also, a share dividend of two per cent was paid in December.

Until September 30, 1959, Monsanto had two stock option plans in effect: the plan authorized by shareowners in 1951 for key employes and the Employes' Stock Plan, authorized by shareowners in 1956 for hourly and salaried employes, except participants of the preceding plan. The status of the authorized shares of each and the changes occurring during the year were:

	Stock Option Plan	Employes' Stock Plan
Options outstanding 1/1/59	658,774	179,057
Unoptioned 1/1/59	60,341	—
Optioned during year	2,500	—
Exercised during year	249,912	169,854
Terminated during year	—	9,203
Options outstanding 12/31/59	420,809*	—
Unoptioned 12/31/59	59,035*	—

*Adjusted for 1959 two per cent stock dividend.

Under the Stock Option Plan, 208 options are outstanding, at prices ranging from $27.06 to $45.10 a share, the prices having been adjusted for the 1955 three-for-one split and the 1955, 1956, 1957 and 1959 stock dividends of two per cent each. The Employes' Stock Plan expired on September 30, 1959, when the then outstanding options were either exercised or terminated, and cash balances returned to employes with 3½ per cent interest.

MONS 351909

TOWOLDMON0014127

PARENT COMPANY, DOMESTIC

STATEMENT OF FINANCIAL POSITION

ASSETS

	1959	1958
Current Assets:		
Cash	$ 21,814,084	$ 20,264,731
Marketable securities	91,439,192	35,496,872
Net receivables	84,412,412	79,620,295
Inventories	88,732,867	84,921,615
	286,398,555	220,303,513
Investments and Miscellaneous Assets:		
Investment in and advances to subsidiaries	15,256,512	13,946,354
Investment in and advances to associates	42,291,292	43,691,192
Common shares held for bonus awards	907,438	763,937
Miscellaneous investments and receivables	30,945,352	25,558,653
	89,400,594	83,960,136
Property, Plant and Equipment	662,306,737	626,844,713
Less accumulated depreciation and depletion	306,953,818	275,787,068
Net property	355,352,919	351,057,645
Deferred Charges	10,554,688	8,770,968
	$741,706,756	$664,092,262

The above statement should be read in conjunction with pages 20 and 21 of this report.

MONS 351910

TOWOLDMON0014128

AND CANADIAN SUBSIDIARIES

AT DECEMBER 31, 1959 AND 1958

LIABILITIES

	1959	1958
Current Liabilities:		
Accounts payable and accruals	$ 52,927,443	$ 51,117,509
Income taxes	31,829,265	18,027,514
Sinking fund payments (less $1,000,000 debentures in treasury)	1,790,000	1,790,000
Employes' bonus awards	2,713,791	1,917,853
	89,260,499	72,852,876
Debentures and Bonds—Less Current Portion Above:		
3¼% Debentures, due 1968	13,750,000	15,000,000
2.65% Debentures, due 1971 (less in treasury, $2,000,000 in 1959 and $1,000,000 in 1958)	24,000,000	26,000,000
3⅝% Debentures, due 1972	12,000,000	12,500,000
Other (less in treasury, $289,500 in 1959 and $80,000 in 1958)	290,500	540,000
	50,040,500	54,040,000
Income Debentures:		
3¾%, due 2002	91,000,000	91,000,000
4¼%, due 2008	50,000,000	25,000,000
	141,000,000	116,000,000
Other Liabilities:		
Deferred income taxes	15,055,317	15,754,317
Pensions	802,126	1,660,854
Employes' bonus—unawarded	722,462	692,215
	16,579,905	18,107,386
Capital Stock and Surplus:		
Common shares—authorized, 25,000,000 shares, par value $2 each; outstanding, 23,156,857 shares in 1959 and 22,256,600 shares in 1958	46,313,714	44,513,200
Surplus:		
Paid-in	215,860,588	180,406,603
Earned	182,651,550	178,172,197
	444,825,852	403,092,000
	$741,706,756	$664,092,262

MONS 351911

TOWOLDMON0014129

PARENT COMPANY, DOMESTIC

STATEMENT OF INCOME

	1959	1958	Increase Decrease
Income:			
Net sales	$615,377,078	$547,955,647	$67,421,431
Dividends	4,337,151	3,639,676	697,475
Other	7,425,912	4,659,394	2,766,518
	627,140,141	556,254,717	70,885,424
Deductions:			
Cost of goods sold	458,323,515	422,265,756	36,057,759
Selling, administrative and research expenses	71,997,690	66,962,098	5,035,592
Provision for employes' bonus	1,884,502		1,884,502
Interest	6,356,721	6,272,363	84,358
Other	2,804,556	3,152,983	*348,427*
	541,366,984	498,653,200	42,713,784
Income Before Income Taxes	85,773,157	57,601,517	28,171,640
Provision for Income Taxes:			
Current	36,796,000	22,123,000	14,673,000
Deferred		929,000	*929,000*
	36,796,000	23,052,000	13,744,000
Net Income	$ 48,977,157	$ 34,549,517	$14,427,640

The above statement should be read in conjunction with pages 20 and 21 of this report.

MONS 351912

TOWOLDMON0014130

AND CANADIAN SUBSIDIARIES

STATEMENT OF SURPLUS

PAID-IN SURPLUS

	1959	1958
Balance at Beginning of Year	$180,406,603	$179,594,503
Additions:		
Excess of approximate market value of common capital stock distributed as a stock dividend over the par value thereof	21,178,204	
Excess of amounts received over the par value of common capital stock issued under stock option plans	13,006,190	812,100
Excess of approximate market value over the par value of common capital stock issued for all of the outstanding stock of Nitro Industrial Corporation	1,269,591	
Balance at End of Year	$215,860,588	$180,406,603

EARNED SURPLUS

Balance at Beginning of Year	$178,172,197	$165,840,689
Add—Net Income for the Year	48,977,157	34,549,517
	227,149,354	200,390,206
Deductions:		
Dividends on common capital stock:		
Cash—at the rate of $1 a share	22,413,968	22,218,009
Stock—2%	22,083,836	
	44,497,804	22,218,009
Balance at End of Year	$182,651,550	$178,172,197

The above statement should be read in conjunction with pages 20 and 21 of this report.

MONS 351913

TOWOLDMON0014131

ACCOUNTANTS' OPINION

HASKINS & SELLS
CERTIFIED PUBLIC ACCOUNTANTS

BOATMEN'S BANK BUILDING
SAINT LOUIS 2

Monsanto Chemical Company:

We have examined the statement of consolidated financial position of Monsanto Chemical Company and its domestic and Canadian subsidiary companies as of December 31, 1959 and the related statements of consolidated income and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying statement of consolidated financial position and statements of consolidated income and surplus (pages 22 through 25) present fairly the financial position of Monsanto Chemical Company and its domestic and Canadian subsidiaries at December 31, 1959 and the results of their operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

January 27, 1960.

Haskins & Sells

TOWOLDMON0014132

PARENT COMPANY,

DOMESTIC AND CANADIAN SUBSIDIARIES

SOURCE AND DISPOSITION OF FUNDS

(In Thousands)

	TOTAL	1959	1958	1957	1956	1955
Source of Funds:						
Net income	$201,759	$ 48,977	$ 34,550	$37,416	$38,646	$ 42,170
Lion Oil balance at beginning of year	10,389					10,389
Provisions for:						
Depreciation, etc.	207,908	46,696	45,069	42,665	38,449	35,029
Deferred income taxes	14,504		929	3,976	4,769	4,830
Sale of 4¼% income debentures	50,000	25,000	25,000			
Sale of 3¾% income debentures	25,000					25,000
Common stock issued under options	18,755	13,846	872	558	799	2,680
Other—net	16,517	5,489	6,417	28	3,602	981
	544,832	140,008	112,837	84,643	86,265	121,079
Disposition of Funds:						
Dividends paid:						
Preference	601					601
Common	107,484	22,414	22,218	21,517	20,992	20,343
	108,085	22,414	22,218	21,517	20,992	20,944
Redemption of preference stock:						
Parent company	15,600					15,600
Canadian subsidiary	850					850
Plant additions and replacements	269,400	58,013	42,588	54,404	69,239	45,156
Investment in affiliated companies	42,263	5,894	23,433	6,316	*553*	7,173
Sinking fund payments	15,119	3,999	3,870	2,750	2,750	1,750
Increase—*decrease* in working capital[1]	9,736	*7,804*	3,439	*665*	3,105	11,661
	461,053	82,516	95,548	84,322	95,533	103,134
Increase—Decrease in Cash and Securities	$ 83,779	$ 57,492	$ 17,289	$ 321	$ *9,268*	$ 17,945

Italics indicate decrease.
(1) Exclusive of cash and securities.

MONS 351915

TOWOLDMON0014133

PETROLEUM OPERATING DATA

	1959	1958	1957	1956	1955
Expenditures for Exploration	$11,374,804	$11,765,858	$15,647,840	$20,175,034	$13,245,034
Portion Capitalized	$ 7,869,800	$ 8,031,826	$11,401,163	$14,656,754	$ 9,452,742
Portion Expensed	$ 3,505,004	$ 3,734,032	$ 4,246,677	$ 5,518,280	$ 3,792,292
Leaseholds Expired and Abandoned	$ 4,363,793	$ 4,038,948	$ 2,654,890	$ 1,452,725	$ 964,766
Number of Producing Wells (net)	1,167	1,157	1,141	1,098	1,062
Natural Gas Produced—Net MCF[1]	22,454,760	21,161,443	21,456,156	20,906,875	18,622,567
Liquefied Pet. Gas Produced—Bbls	936,923	733,306	884,804	994,517	744,160
Gross Crude Oil Produced—Barrels	10,300,226	8,050,160	8,568,035	9,322,559	9,415,719
Net Crude Oil Produced—Barrels	8,927,401	7,103,196	7,502,654	8,163,161	8,244,486
Average Crude Price Per Barrel[2]	$2.87	$2.90	$2.98	$2.75	$2.74
Domestic Undeveloped Acreage	629,463	1,301,657	2,392,507	2,250,591	1,808,552
Domestic Producing Acreage	83,450	79,203	78,141	71,800	66,144
Crude Oil Run to Stills—Barrels	10,943,015	10,392,687	10,527,774	8,393,703	9,294,844
Daily Average Crude Oil Runs—Barrels	29,981	28,473	28,843	22,934	25,465
Refinery Production—Barrels	11,758,846	11,375,494	11,347,931	8,943,546	10,180,126
Station Sales—Gallons	130,968,526	114,177,697	111,562,216	116,057,474	109,476,394
Refined Oil Sales—Gallons[3]	455,425,433	478,416,598	455,120,546	372,239,287	411,997,884

(1) Excludes gas returned to formations.
(2) At end of year.
(3) Includes station sales.

MONS 351916

TOWOLDMON0014134

BOARD OF DIRECTORS



EDGAR M. QUEENY, Board Chairman, 62. Cornell, class of 1919. Lieutenant jg, U. S. Navy, World War I. Joined Monsanto, which was founded by his father, in 1919. Served in export department, sales department; later sales manager and vice president. Director since 1919. President from 1928 to 1943 when elected board chairman. Elected to Executive Committee, 1939; chairman of Finance Committee, January, 1960. Trustee, American Museum of Natural History. Director of The Chemstrand Corporation, American Airlines, Union Electric Company of St. Louis, Sicedison, S.p.A., Italy, and Monsanto Canada Limited.



FREDRICK M. EATON, Board Member on leave of absence while in government service, 54. BA, Harvard; LLB, Harvard Law School. Partner in law firm of Shearman & Sterling & Wright. Elected to Monsanto's board, 1947; member of Finance, Bonus, Stock Option, Auditing Committees. Chairman, American delegation to 10-nation disarmament committee, meeting in Geneva in 1960. Director of First National City Trust Co., New York Life Insurance Company, Great American Insurance Company, Owens-Corning Fiberglas Corporation.



CARROLL A. HOCHWALT, Vice President of Research, Development and Engineering, 60. BChE, DSc, University of Dayton. Research chemist, General Motors Research Corporation; production manager, Ethyl Gasoline Corporation; vice president, Thomas & Hochwalt Laboratories, Dayton, Ohio. Monsanto acquired Thomas & Hochwalt Laboratories in 1936. Associate director of Central Research Department; later director. Vice president, 1947; elected to board, 1949; elected to Executive Committee, 1950. Director of The Chemstrand Corporation, Sicedison, S.p.A., Italy, Kettering Foundation, Boatmen's National Bank of St. Louis. Chairman, President's Council, St. Louis University.

CHARLES ALLEN THOMAS, President, 59. Transylvania and M.I.T. AB, DSc, LLD. Research chemist, General Motors Research Corporation and Ethyl Gasoline Corporation; president of Thomas & Hochwalt Laboratories, Dayton, Ohio. Joined Monsanto, 1936, as director of Central Research Department when Monsanto acquired Thomas & Hochwalt Laboratories; later vice president and technical director, executive vice president, chairman of Executive Committee. Director since 1942. Elected president, 1951. Director of The Chemstrand Corporation, Southwestern Bell Telephone Company, St. Louis Union Trust Company, First National Bank in St. Louis. Member, National Academy of Sciences; Board of Trustees, Carnegie Corporation of New York.



JOHN L. GILLIS, Vice President of Marketing, 48. BS, Washington University. Joined Monsanto as assistant export manager, 1933; then export manager, assistant director and director, former Foreign Department; later general manager of former Merrimac Division; elected vice president, 1950; appointed general manager, Organic Chemicals Division, 1951; appointed vice president of marketing, 1953; elected to board, 1955; elected to Executive Committee, 1958. Director of Mobay Chemical Company, The Chemstrand Corporation, St. Louis County National Bank, General Contract Finance Corp. and Securities Investment Co.



HERBERT HOOVER JR., Board Member, 56. AB, Stanford University; MBA, Harvard University. President, later board chairman, United Geophysical Corporation, 1934 to 1953; consultant to Secretary of State, 1953; Under Secretary of State, 1954 to 1957. Consulting engineer since 1957. Elected to Monsanto's board, 1958. Elected to Finance Committee, 1959. Director of Southern California Edison Company, Lockheed Aircraft Company; trustee, University of Southern California, Claremont Men's College, Freedoms Foundation of Valley Forge, Boys' Clubs of America.



MONS 351917

TOWOLDMON0014135



TRUEMAN M. MARTIN. Vice President of Oil and Gas Operations; President of Lion Oil Company Division, 64. BA, Brown's College. With Crane Company, Stromberg Motor Devices Company, Advanced Petroleum Corporation, Diamond Petroleum Company from 1914 through 1929. First Lieutenant, U. S. Army, World War I. Joined Lion Oil Company, 1929, as vice president and director; later executive vice president, then president in 1947. Elected Monsanto vice president and director, 1955. Elected to Executive Committee as vice president of oil and gas operations, 1958.



CHARLES H. SOMMER. Executive Vice President, 49. BS, chemistry, University of Arizona. Joined Monsanto, 1934, as a salesman; later product sales manager, Organic Chemicals Division; then assistant general manager of sales, assistant coordinator of sales, assistant division general manager. Appointed general manager, former Merrimac Division, 1951. Elected a vice president and appointed general manager of Organic Chemicals Division, 1954. Elected to board and to Executive Committee, 1959; elected executive vice president, 1959.



FELIX N. WILLIAMS. Vice President of Manufacturing, 58. University of Virginia, 1923; joined Swann Chemical Company (acquired by Monsanto in 1935) in production department; later research department, purchasing agent, assistant plant manager, plant manager. Supervised construction of Monsanto, Tenn., elemental phosphorus plant, later plant manager there. Production manager, former Phosphate Division; general manager, Plastics Division. Elected vice president, 1944; elected to board, 1947; member, Executive Committee, 1950. Appointed vice president of manufacturing, 1954. Director of Monsanto Canada Limited, Mercantile Trust Company of St. Louis, Wabash Railroad Company.

BOARD OF DIRECTORS *(Continued)*



WILLIAM W. SCHNEIDER. Vice President of Finance and Law, 62. LLB, St. Louis University. Lawyer with insurance company before joining Monsanto, 1921, as assistant in Legal Department; later director, Legal Department; corporation secretary, 1925-1951. Elected vice president, 1947, board member, 1951; treasurer, 1953 to 1956; member, Finance Committee, 1954; appointed vice president of finance and law, 1954; member, Executive Committee, 1956. Director of Monsanto Canada Limited and Mobay Chemical Company.



ALAN H. TEMPLE. Board Member, 63. B Litt., Journalism, Columbia University. Former managing editor and editor, COMMERCE AND FINANCE; financial editor, NORTH AMERICAN REVIEW; president of Theo H. Price Publishing Company. Joined National City Bank of New York as a statistician; later vice president and executive vice president. Director since 1956 and, since 1958, vice chairman. Elected to Monsanto's board, 1959; elected to Finance Committee, January, 1960. Director of International Banking Corporation, Mead Corporation, Moore Corporation, Limited, Prudential Insurance Company of Great Britain (in N. Y.), Seaboard Surety Co. Trustee, Atlantic Mutual Insurance Co.

DIVISION GENERAL MANAGERS



H. HAROLD BIBLE. Vice President; General Manager, Lion Oil Company Division, 43. BS, chemical engineering, University of Oklahoma. With Humble Oil Company before joining Lion, 1942, as synthesis supervisor, Ozark Ordnance Works, operated by Lion. Plant later became Lion's El Dorado chemical plant. Became assistant manager of manufacturing and later director of manufacturing. Elected Lion vice president and appointed assistant general manager of Lion division, 1957. Elected Monsanto vice president and appointed general manager of Lion Oil Company Division, 1958.

JOHN L. CHRISTIAN. Vice President; General Manager, Inorganic Chemicals Division, 49. BS, chemical engineering, Alabama Polytechnic; post graduate work at Columbia. Joined research department of Swann Chemical Company, 1933 (which was acquired by Monsanto in 1935), later in pilot plant and production departments; superintendent of furnaces at Monsanto, Tenn., elemental phosphorus plant; then plant manager. Appointed general manager of Phosphate Division (now Inorganic Chemicals Division), 1948. Elected vice president, 1954.



MONS 351918

TOWOLDMON0014136



ROBERT M. MORRIS Vice President, General Manager, Organic Chemicals Division, 46. BS, mechanical engineering, Washington University. Joined Monsanto, 1936, as an area engineer. Then design engineer, Plastics Division; superintendent of maintenance, later production superintendent, Longhorn Ordnance Works; assistant plant manager, Texas City; plant manager, Springfield; appointed director of manufacturing, Organic Chemicals Division, 1953; appointed assistant general manager, 1956. Elected a vice president and appointed division general manager, 1959.



HOWARD K. NASON, Vice President; General Manager, Research & Engineering Division, 46. BA, University of Kansas. Joined Monsanto, 1936, as research chemist, Organic Chemicals Division; later assistant director of research, Plastics Division; director of development, associate director and director, former Central Research Department, assistant to vice president for research, development and patents; director of research, Organic Chemicals Division. Elected vice president, appointed general manager, Research & Engineering Division, 1956.



MARSHALL E. YOUNG, Vice President; General Manager, Overseas Division, 47. Washington University. Joined Monsanto, 1934, in service department; later in export department; then general export manager. Assistant director, then director, former Foreign Department. Commercial manager, Overseas Division, then assistant general manager. Elected vice president and appointed general manager, 1955. Director of Monsanto affiliated companies in England, Australia, India, Canada, Japan, France, Italy, Belgium and Spain.

DIVISION GENERAL MANAGERS (Continued)

ROBERT K. MUELLER, Vice President, General Manager, Plastics Division, 46. BS, chemical engineering, Washington University; MS, chemistry, University of Michigan. Chemist, Sinclair Refining Company. Joined Monsanto, 1935, as a control chemist, operating superintendent, Plastics Division; operating superintendent, general production superintendent, plant manager, Longhorn Ordnance Works, plant manager, assistant production manager, production manager, assistant general manager, Plastics Division, before appointment as general manager, 1952. Elected vice president, 1954. President and director of Shawinigan Resins Corporation; director of Plax Corporation, Fome-Cor Corporation, Valley Bank & Trust Company, Springfield, Mass.



J. RUSSELL WILSON, Vice President; General Manager, Domestic Subsidiaries & Affiliates Division, 55. BS, chemical engineering, Auburn; MS, George Washington University; LLB, Kent. Chemist, U. S. Department of Agriculture; examiner, U. S. Patent Office; attorney, Standard Oil Company of Indiana. Joined Monsanto, 1938, as member of Patent Department; later director of Patent Department then of former General Development Department; elected vice president, appointed general manager of Research & Engineering Division, 1954; appointed to present position, 1956. Director of The Chemstrand Corporation, Mobay Chemical Company, Shawinigan Resins Corporation, Plax Corporation and Fome-Cor Corporation.



VICE PRESIDENT OF PLANNING AND CONTROL

IRVING C. SMITH, Vice President of Planning and Control, 50. BASc, chemical engineering; MASc, chemistry, University of British Columbia. With Canadian Department of Agriculture; I. F. Laucks, Ltd., of Canada which Monsanto purchased in 1944. Became vice president and director of Monsanto Canada Limited, then assistant general manager of former Western Division at Seattle. Became division general manager, 1949. Then assistant to the president and chairman, Budget Committee. Elected controller and Accounting Department director, 1955. Elected vice president of planning and control, 1958.



MONS 351919

TOWOLDMON0014137

STAFF DEPARTMENT DIRECTORS



EDWIN J. CUNNINGHAM, Controller; Accounting Department Director, 62. Attended St. Mary's College; BCS, St. Louis University. Was an auditor with Price, Waterhouse & Co., before joining Monsanto's Accounting Department in 1929. Was elected assistant controller in 1931. In 1958, was elected controller and appointed Accounting Department director.

PATRICK J. DOWD, Treasurer; Treasury Department Director, 47. CPA, Washington University. Auditor, Farm Credit Administration before joining Monsanto in 1941 as director of payrolls and pensions. Later, director of internal auditing. Appointed executive officer, Overseas Division, 1954. Elected treasurer and appointed Treasury Department director, 1958.





EMBERT W. DWYER, Personnel & Administrative Services Department Director, 51. LLB, Washington University. Practiced law, served with Missouri Division of Employment Security and was personnel manager, Curtiss-Wright Corporation, St. Louis, before joining Monsanto as personnel director, Plastics Division, 1945; later director industrial relations, former Industrial and Public Relations Department; then assistant director, Personnel Relations Department. Appointed to present position, 1954.

WILLIAM R. FARRELL, Marketing Services Department Director, 52. BA, business administration, University of Michigan. Was vice president, A. C. Nielsen Company, New York; vice president, Benton & Bowles, New York; vice president, Kastor, Farrell, Chesley & Clifford Inc., New York; first vice president, Ward Wheelock Company, Philadelphia. Joined Monsanto, 1954, as manager of advertising; appointed director of advertising, 1955; appointed to present position, 1959.





DAN J. FORRESTAL, Public Relations Department Director, 47. St. Louis University. Was assistant managing editor, St. Louis GLOBE DEMOCRAT. Joined Monsanto as assistant director, Industrial and Public Relations Department (now Public Relations Department), 1947. Later, manager of public relations. Appointed to present position, 1958.

HOWARD J. HEFFERNAN, Purchasing and Traffic Department Director, 62. Lafayette and Fordham Law School. Was with Miner Edgar Company, New York; was a salesman with Merrimac Chemical Company, which Monsanto acquired in 1929. Later, branch manager, New York; assistant general manager of sales, then general manager of sales, former Merrimac Division. Appointed to present position, 1953.





R. EMMET KELLY, M.D., F.A.C.P., Medical Department Director, 50. BS, MD degrees, St. Louis University. In private practice before joining Monsanto in 1936 as plant physician, John F. Queeny Plant. Lieutenant Colonel, Army Medical Corps, World War II. Appointed director, Medical Department, 1946.

J. RUSSELL WILSON, Patent Department Director. Mr. Wilson also is general manager of the Domestic Subsidiaries & Affiliates Division. His biography and photograph are on page 31.

EDWIN J. PUTZELL JR., Corporate Secretary; Law Department Director, 47. BA, Tulane; LLB, Harvard Law School. Was with law firm of Donovan, Leisure, Newton and Lumbard, New York and Washington. Executive Officer, OSS; Lieutenant, U. S. Navy, World War II. Joined Monsanto, 1945, as assistant treasurer; then assistant to executive vice president; attorney in Law Department and assistant secretary. Elected secretary, 1951; appointed director of Law Department, 1954.



MONS 351920

TOWOLDMON0014138

DIRECTORS AND OFFICERS

BOARD OF DIRECTORS

Edgar M. Queeny, *Chairman*	St. Louis
Fredrick M. Eaton	New York
John L. Gillis	St. Louis
Carroll A. Hochwalt	St. Louis
Herbert Hoover Jr.	Los Angeles
Trueman M. Martin	El Dorado, Ark.
William W. Schneider	St. Louis
Charles H. Sommer	St. Louis
Alan H. Temple	New York
Charles Allen Thomas	St. Louis
Felix N. Williams	St. Louis

EXECUTIVE COMMITTEE

Charles Allen Thomas, *Chairman*

John L. Gillis	Edgar M. Queeny
Carroll A. Hochwalt	William W. Schneider
Trueman M. Martin	Charles H. Sommer

Felix N. Williams

FINANCE COMMITTEE

Edgar M. Queeny, *Chairman*

Fredrick M. Eaton	William W. Schneider
Herbert Hoover Jr.	Alan H. Temple

Charles Allen Thomas

Transfer Agent

Morgan Guaranty Trust Company of New York

Registrar

The Chase Manhattan Bank

OFFICERS

Edgar M. Queeny	*Chairman, Board of Directors*
Charles Allen Thomas	*President*
Charles H. Sommer	*Executive Vice President*
John L. Gillis	*Vice President*
Carroll A. Hochwalt	*Vice President*
Trueman M. Martin	*Vice President*
William W. Schneider	*Vice President*
Felix N. Williams	*Vice President*
H. Harold Bible	*Vice President*
John L. Christian	*Vice President*
Robert M. Morris	*Vice President*
Robert K. Mueller	*Vice President*
Howard K. Nason	*Vice President*
Irving C. Smith	*Vice President*
J. Russell Wilson	*Vice President*
Marshall E. Young	*Vice President*
Edwin J. Cunningham	*Controller*
Edwin J. Putzell Jr.	*Secretary*
Patrick J. Dowd	*Treasurer*
Lloyd R. Cole	*Assistant Controller*
Alfred W. Long	*Assistant Controller*
Walter C. Thilking	*Assistant Controller*
Earl J. Wipfler	*Assistant Controller*
Charles E. Caspari Jr.	*Assistant Secretary*
Jeff Davis	*Assistant Secretary*
John N. Ehlers	*Assistant Secretary*
Franklin C. Rehfeld	*Assistant Secretary*
John F. Martin	*Assistant Treasurer*
J. Robert Matlock	*Assistant Treasurer*
Rolla H. Stocke	*Assistant Treasurer*

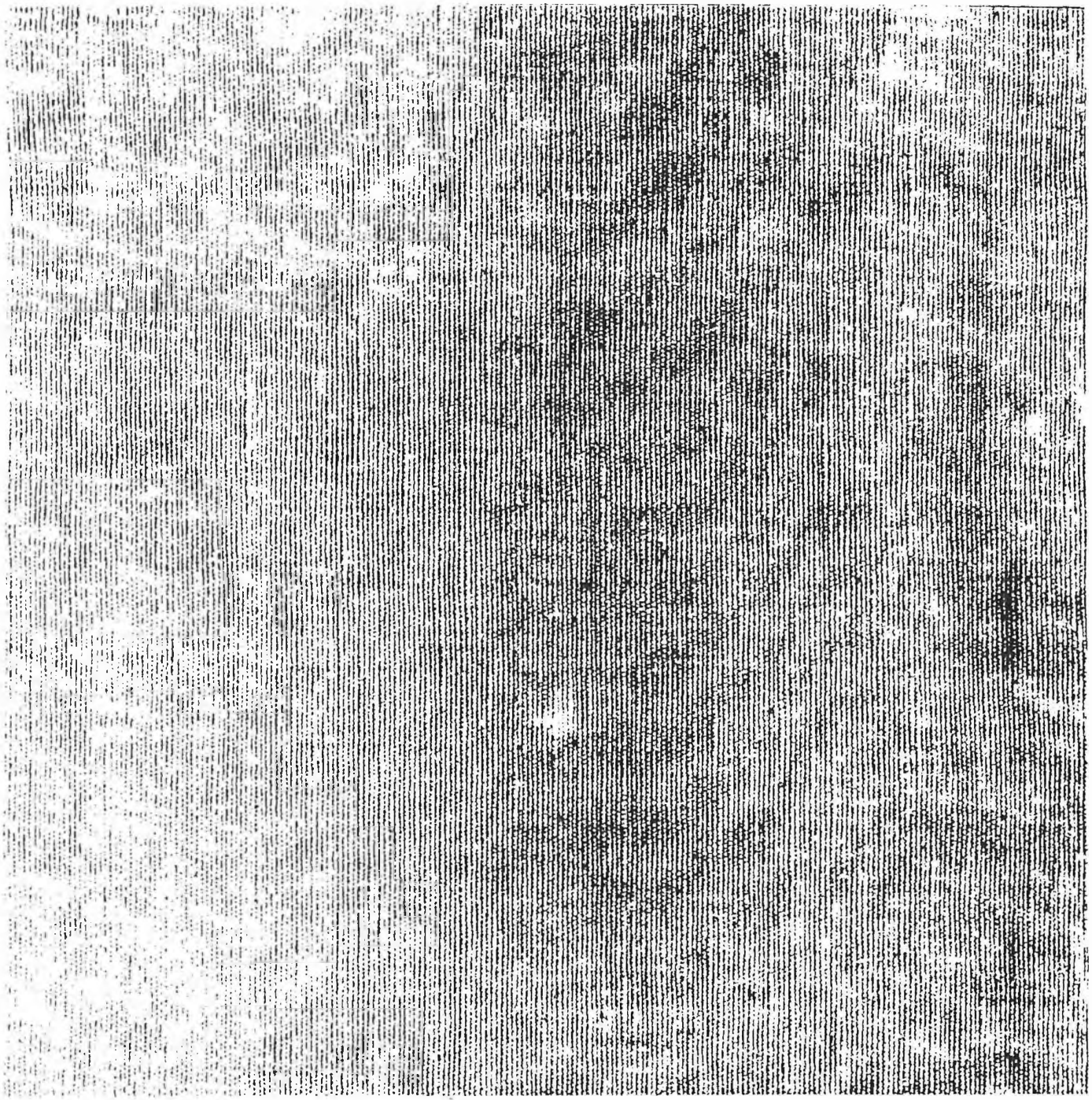
Regional Vice Presidents

Roy L. Brandenburger	Edward W. Gamble Jr.

Victor E. Williams

MONS 351921

TOWOLDMON0014139



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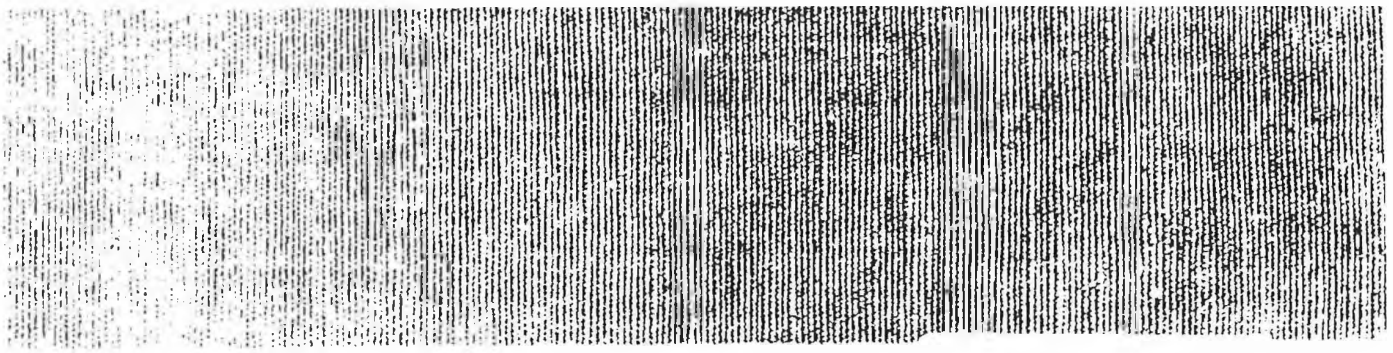

MONS 351922

TOWOLDMON0014140