

FILE NAME: Trade Publications (TR)

DATE: 1951 July

DOC#: TR052

DOCUMENT DESCRIPTION: Trade Journal Article - Legislation Dominates Silica Meeting



JULY, 1951

ROCK PRODUCTS

THE INDUSTRY'S RECOGNIZED AUTHORITY



VOL. 54, No. 7

Bror Nordberg
Editor**Nathan C. Rockwood**
Editorial Consultant

This Month

We Hear	35
Editorial—Agstone Associations Approaching Merger	39
Rocky's Notes—Confused Chemistry of Portland Cement	41
Labor Relations Trends	43
The Personal Side of the News	45
Industry News	49
Hints and Helps	52
New Machinery	54
Handling Large Tonnages of Gravel	56
Large mining operation in Nevada employs belt conveyors to effective advantage and suggests practical ideas for best performance <i>Walter B. Lenhart</i>	
Legislation Dominates Silica Meeting	60
Car supply, improved packing methods and industrial hygiene legislation also emphasized at annual meeting	
Evaluation and Development of Kiln Efficiencies	65
Part IV. Flame characteristics for maximum heat transfer and minimum loss discussed in detail <i>Victor J. Azbe</i>	
Gyratory Screen Developed for Sizing Fine Materials	69
Plant Designed for Low Labor Cost	70
Campbell Limestone Co. granite plant uses surge pile, large platform scale, interlocked motors and offers many details for efficient production <i>Walter B. Lenhart</i>	
Expanding Perlite in Rotary Kiln	74
Jacketed kiln at New Orleans plant permits pre-heating and controlled expansion of ore	
Lime Producers Discuss Market Development	77
Research, safety and government restrictions also given prominence at annual convention	
Research on Hydraulic Properties of Granulated Blast Furnace Slag	82
<i>Taro Tanaka & Kunihira Takemoto</i>	
Selection of V-Belt Drives for Best Performance	85
Vermiculite Producers Hold Annual Meeting	86
New markets and promotional ideas emphasized by Vermiculite Institute	
Nonmetallic Minerals in Northwest	88
Minerals conference discloses great development in natural resources and potentials for future <i>Ralph S. Mason</i>	
New Applications of Prestressed Assembly of Masonry Units	109
Basalt Rock Co. finds that its Stresterete development has widened sales outlets into many fields	
Chicago's Ready Mix Industry Continues Rapid Growth	112
Material Service Corp. has ultra-modern central mixing plant and now has more than one hundred trucks serving city and suburbs <i>L. David Minsk</i>	
Selling Block Throughout Wide Area	116
Campbell Supply Co., Marquette, Mich., utilizes dealers and advertising, has large capacity mechanized plant	

Walter B. Lenhart, Associate Editor
 L. David Minsk, Associate Editor
 M. K. Smith, Assistant Editor
 E. M. Amacher, Assistant Editor
 M. A. Christiansen, Assistant Editor

Contributing Editors

Victor J. Azbe
 Dr. F. O. Anderegg
 M. W. Loving
 James A. Barr, Jr.

Home Office

Morgan K. Cottingham, Ad. Manager
 Mary A. Whalen, Subscription Dir.
 M. S. Hendricks, Dir. of Research
 C. M. Hancock, Production Manager
 C. P. Teats, Field Representative

District Offices

Eastern Area—Richard Y. Fuller, Manager; John F. Lockitt, Assistant, 522 Fifth Ave., New York 18, Tel. Murray Hill 2-7888.

Central Area—R. P. Keine, Manager, Hanna Bldg., Cleveland 15, Tel. Main 1-4362.

Midwest Area—E. H. Hickey, Representative, 309 W. Jackson Blvd., Chicago 6, Tel. Harrison 7-7890.

Western Area—L. C. Thawn, Manager, 309 West Jackson Blvd., Chicago 6, Tel. Harrison 7-7890.

Pacific Area—Duncan Scott & Co., Mills Bldg., San Francisco 4, Tel. Garfield 1-7950. In Los Angeles 5, 2978 Wilshire Blvd., Tel. Dunkirk 8-4151.

London, England—Harold F. Charles, Managing Director, Maclean-Hunter, Ltd., Sun Life of Canada Bldg., Trafalgar Square, London, S.W.1.

ROCK PRODUCTS is published monthly by MACLEAN-HUNTER Publishing Corporation, 309 West Jackson Blvd., Chicago 6, Illinois; Horace T. Hunter, President; E. R. Gaulley, Vice President; J. L. Frazier, Secretary, Copyright, 1951. Entered as second-class matter, Jan. 30, 1936, at the Chicago, Ill. post office under the act of Mar. 3, 1879. Additional entry at Milwaukee, Wis. ROCK PRODUCTS is indexed regularly by Engineering Index, Inc. and the Industrial Arts Index.

SUBSCRIPTION INFORMATION

Subscription Price: United States and Possessions. Canada one year, \$2.00; two years, \$3.00; three years, \$4.00. Pan American, one year, \$4.00; two years, \$7.00; three years, \$10.00. All other foreign, one year, \$6.00; two years, \$12.00; three years, \$15.00. Twenty-five cents for single copies. Canadian subscriptions and remittances may be sent in Canadian funds to ROCK PRODUCTS, P. O. Box 100, Terminal "A," Toronto, Canada. To Subscribers—Date on wrapper indicates issue with which your subscription expires... In writing to have address changed, give old as well as new address.

Legislation Dominates Silica Meeting

Car supply, improved packing methods and industrial hygiene legislation also emphasized at annual meeting

NATIONAL INDUSTRIAL SAND ASSOCIATION's fifteenth annual meeting, held May 16-18 at The Homestead, Hot Springs, Va., had a diversified program and was highlighted by round-table, informal discussions of industry problems. Production problems, traffic matters, federal laws and restrictions, industrial health, foundry sand problems and a round-table discussion of current problems confronting the industry were covered, followed by an extremely interesting talk on the Washington scene by executive secretary V. P. Ahearn.

Sterling N. Farmer, Sand Products Corp., Cleveland, Ohio, was re-elected president of the association as were vice-president C. M. Hardy, Hardy Sand Co., Evansville, Ind., and treasurer Clarence R. Wolf, New Jersey Silica Sand Co., Millville, N. J.

Due to a constitutional provision limiting members of the board of directors to a two-year term, three new members were elected at the meeting. They are Earl T. Andrews, Pennsylvania Glass Sand Corp., Hancock, W. Va.; Emery M. Durstine, The Keener Sand and Clay Co., Columbus, Ohio, and P. W. Palmer, Browntown Silica Co., Browntown, Wis. Russell G. Cronenweth, Great Lakes Foundry Sand Co., Detroit, Mich.; Lyle T. Manley, Manley Sand Co., Rockton, Ill.; and Jesse T. Morie, Jesse S. Morie & Sons, Inc., Mauricetown, N. J., complete the board of directors. Past presidents J. M. Strouss, Deckers Creek Sand Co., Morgantown, W. Va.; A. Y. Gregory, Whitehead Brothers Co., New York, N. Y.; and George A. Thornton, Ottawa Silica Co., Ottawa, Ill., are ex-officio members of the board of directors.

The fall meeting of the association

will be held at The Greenbrier, White Sulphur Springs, W. Va., October 17-19. An agreement has been concluded with The Homestead to hold the annual spring meetings at Hot Springs, Va., through 1956. The 1952 fall meeting is scheduled for Bermuda during October, dependent upon accommodations available.

Opening Session

Sterling N. Farmer, president, presided over the opening session at which were presented the financial report by executive secretary V. P. Ahearn and the report on nominations. They followed a discussion of traffic matters led by Emery M. Durstine, chairman of the traffic committee and Commerce Counsel William W. Collin, Jr. Mr. Durstine commented briefly on two cases being conducted by the association in the interests of its membership.

Mr. Collin did not have a prepared paper. He touched upon the decision handed down on March 30 in the bonded sand case which resulted in obtaining a reduction in rates for open car shipments which is substantial for long hauls but leaves the differential as it was for distances under 300 miles. The decision isn't all that was hoped for but Mr. Collin recommended that a re-hearing not be sought at this time by the association because it was unlikely that testimony could be improved. The box car case went to trial on March 14 and with the support of the Glass Container Manufacturers Institute.

Commenting generally on the subject of freight rates, Mr. Ahearn said that he believed the association should participate in freight rate cases as a matter of good customer relations

in attempting to hold their costs down, particularly during times of price controls. Furthermore, he believes that the industry has a right to oppose any cost increases that reflect in prices, in order to protect its markets.

Production Problems

Arnold Tanzer, New Jersey Pulverizing Co., New York, N. Y., reported on his experiences with new bagging machine parts supplied in an effort to reduce maintenance and to minimize the dust problem in packing operations.

Due to delays in delivery of the parts, of special high priced alloy, Mr. Tanzer could speak from only six weeks' experience with the new parts. After six weeks of experience, none of the parts had been replaced but neither had those of ordinary metal in the same service over the same period. There was indication of wear on both the ordinary and special alloy parts. While he believes the special alloy may last longer he does not believe their life will be sufficiently greater to justify the added costs. These parts are priced four times as high as conventional metal parts. Mr. Tanzer believes they would be difficult of replacement and he has not noted any improvement in the dust problem.

Norman H. Cussey, Wedron Silica Co., Chicago, Ill., reported his experiences with the Auger-Matic packing machine. His experience has been satisfactory in packing sand blast sand, using valve bags, after certain needed adjustments. This is a one-tube machine that will pack underground sand at the rate of 800 bags per day. Its use has proved satisfactory in experimental packing of ground silica, with

Left to right (in picture at left): Mr. and Mrs. T. E. Rust, Clayton Silica Co., Waterloo, Iowa, and Mr. and Mrs. H. P. Hardy, Hardy Sand Co., Evansville, Ind. Right: P. W. Palmer, Mrs. Marcus Wright, Jr., Mr. and Mrs. Arnold Tanzer and Marcus Wright, Jr.





Mr. and Mrs. Jesse T. Morie, Jesse S. Morie & Son, Inc., Mauricetown, N. J.



Group of industrial sand producers at picnic



Sterling Farmer, Sand Products Corp., Cleveland, Ohio, president of N.I.S.A.

no leakage of flour, but no attempt had yet been made to pack hot silica under normal plant conditions.

As compared to the familiar Bates packing machine, the capacity is much lower, but Mr. Cussey believes the machine might be ideal for the smaller plants and others which do a limited amount of bagging. As far as dust is concerned, there is a good cut-off and no leakage and apparently it affords some hope of alleviating the dust problem.

Stanton Walker concluded the first session with a review of foundry sand problems. Mr. Walker added his observations on the subject of packing machines, he having been active in the study under way to improve packing practice. He mentioned a machine manufactured in Chicago and also the 4-tube packer developed by Brown-town Silica Co. which is now in production.

In commenting on sand research, Mr. Walker said that the Sand Research Division of the American Foundrymen's Association has not been very active in recent years. The sand testing handbook is being enlarged and revised and will be ready for distribution in six months. A new committee is being organized to consider core mixtures using binding resins. Physical properties of high temperature molds are being studied. The grinding and fineness committee

has had one meeting in two years and has developed a secondary standard for testing sand.

Mr. Walker said that there was much data available in his office on the subject of foundry sands as a result of a surprising amount of work that has been done by the association. This work, he said, has resulted in the good specifications that presently prevail.

As a result of recent questions by two industrial sand producers, Mr. Walker has been endeavoring to secure information on the relative efficiencies of steel grinding balls and flint pebbles as used in grinding mills. Steel balls have proved most efficient. According to his findings, in the portland cement industry the consumption of steel balls is 0.2-0.5 lb. per ton of cement production. For silica, the consumption would be about 1 lb. per ton of flour produced.

Business Conditions

C. M. Hardy, vice-president, presided for the second general session which considered the railroad car situation, priorities and prices.

C. R. Megee, vice-chairman, Car Service Division, Association of American Railroads, outlined the outlook for railroad cars and suggested ways in which shippers can cooperate to improve the car supply situation. He opened his talk with the statement

that production and distribution constitute a joint problem, and by saying that we can have available in the United States as much of commodities as we can transport.

The industrial sand industry, with a current annual production of 12,000,000 tons, requires 200,000 carloads per year but a total of 850,000 carloads per week are currently being loaded by the railroads.

Whereas a great number of cars were put in service over a three-year period, there still exists a great demand for new cars and the principal reason for the current shortage has been lack of materials with which to build them. The need now is for 300,000 cars at a time when 60,000 cars a year are scheduled for retirement. As of April 1, 1951, there were 156,000 cars on order from the carbuilders, of which 60,000 are box cars, and 2400 locomotives.

Mr. Megee pledged that the number of unserviceable cars will be reduced sharply. As of April 1, there were 81,000 cars waiting for repairs and 40,000 had been restored to service since August, 1950.

The program for new cars, as set up in October, 1950, calling for 10,000 cars a month over a two-year period has not yet been reached. The railroads added 8000 new cars in April, 1951, and 9000 were expected in May. Steel is the critical item and the

G. M. Mason, Clayton Silica Co., Waterloo, Iowa, left, chats with P. W. Palmer, Brown-town Silica Co., Browntown, Wis.

Marcus S. Wright, Jr., and Marcus S. Wright III, South River Sand Co., Old Bridge, N. J.

Arthur B. Schlesinger, New Jersey Pulverizing Co., New York, N. Y.





Left: Stanton Walker, left, and Lyle T. Manley, Manley Sand Co., Rockton, Ill., discuss "signals" or something. Right: Russell Cronenweth, Great Lakes Foundry Sand Co., Detroit, Mich., with Mrs. Cronenweth at picnic

disturbing element is that there is a move now to cut the quantity of available steel that has been promised. An allocation of 170,000 tons of steel per month had been provided for car building and that may be reduced. There is also a move now to cut the railroads' MRO quota about one-third.

Carbuilders have been lagging on filling orders since the first of the year and the net gains in car ownership have been slow. Box cars will be the most serious bottleneck in the months ahead and gondolas will be the number two problem.

According to Mr. Megee, armament production increases will reflect in heavy car requirements beginning about October, 1951. The shortage of water shipping facilities is another factor, with some 500 carloads of Minnesota iron ore being shipped daily. Of an estimated 87,000,000 tons of iron ore to be shipped this year from Minnesota, 4,000,000 tons will come by rail.

On the other hand, it was pointed out that some industries are cutting production during the transition to war goods manufacture which will release some cars immediately. The winter wheat crop was down so the movement of grain in box cars will not be too serious this year. With 24,000 covered hoppers on hand and 5000 on order, the situation there is an improvement over a year ago.

There are some 70,000,000 tons of coal in stockpiles now as compared to 24,000,000 tons a short time ago, which is favorable. It is Mr. Megee's belief that the use of covered hoppers to transport cement for off-shore defense construction will not prove serious because the hauls are short and the turn-around time is quick.

Mr. Megee urged that the industry cooperate in order to get most benefit from existing cars. He stressed the need for quicker turn-around time. The average turn-around time was 15 days for the month of April which, if reduced to 14 days, would theoretically mean 100,000 more available cars. He also suggested that more hoppers be used in preference to gondolas whenever they can be used.

Government Restrictions

Government regulations and the workings of restrictive measures were interpreted in detail by executive secretary V. P. Ahearn in an informal discussion with participation by the membership. Speaking on the subject of OPS and price regulation, Mr. Ahearn said that an industry advisory committee will soon be appointed to work closely with OPS. He said that the industrial sand industry must anticipate a roll-back to pre-Korea prices for its products. The industrial sand industry, in its dealings with OPS, is taking the position

that price control is not essential for the industry because of the competitive nature of the business but it is doubtful that this recommendation will be approved.

Mr. Ahearn next discussed the problems and procedures involved in securing equipment and repair and operating supplies. Defense Minerals Administration is the clearing agency for all mining operations and has under its jurisdiction the approval and allocations for access roads, housing, machinery, expansion programs, MRO items, etc. At present, a priority system order similar to the P-56 order operative during World War II is being formulated and the MF-100 serial form being issued will serialize plants, covering MRO items and minor capital additions. Emphasis will be on keeping existing plants in operation.

Industrial sand producers will secure a mining priority for MRO items which Mr. Ahearn believes will be a high one. Each plant will have a separate serial number although several plants of a company in the same area and covered by a common bookkeeping system may be covered by a single serial number.

The outlook for steel is not good and the demands for direct defense manufacturing are expected to require more than 50 percent of the total output beginning in July and

Left: Norman H. Crissey, Wedron Silica Co., Chicago, Ill. Center: Vice-president C. M. Hardy of Hardy Sand Co., Evansville, Ind., left, with executive secretary V. P. Ahearn. Right: A couple of live wires at the picnic were Ralph Lebold, Michigan Silica Co., Rockwood, Mich., left, and Arnold Tanzer, New Jersey Pulverizing Co., New York City



August. There will be a rising tempo of demands for all critical materials with the result that the supply situation will become tougher than ever known before.

Industrial Health

Association counsel Theodore C. Waters, in his annual report, covered current developments in matters of industrial health, including an analysis of legislation introduced in the various states during the last legislative year and discussion of industrial hygiene codes.

In introducing his subject, Mr. Waters pointed out that industrial hygiene is assuming new and increasing importance each day and that the industry is beginning to reap the benefits of the activities of bureaus of industrial hygiene in the various states. Compensation benefits have been materially increased, he said, and the trend is continuing upward. So, he emphasized, it is good business for every employer to consider the cost of compensation benefits and to do whatever can be done to protect employees from injuries and occupational diseases.

In discussing legislative developments in workmen's compensation during the calendar year 1951, he said that all but four state legislatures have been in session. Some are still in session and developments are not yet known.

As of the end of 1950, 41 states had enacted occupational disease compensation schedules, and this year the state of Vermont has enacted a scheduled occupational disease statute making silicosis compensable. An interesting point was that for all diseases made compensable only total disability or death receives benefits. For silicosis, there is a limitation of liability of graduated benefits beginning at \$400 in the first month the act became effective and increasing at the rate of \$25 per month with an overall maximum of \$4000.

Several bills have been introduced in the state of Oklahoma to make occupational disease compensable and apparently the committee favored the

adoption of a schedule law including the disease of silicosis with special provisions limiting monetary liability, denying compensation for partial disability and including special limitations with respect to the time for filing claims.

Despite the opposition of producers, the silicosis and asbestosis compensation statute effective since January 1, 1945, was repealed, which makes dust diseases compensable without certain desired protective features. Among them are limitation of monetary liability, denial of compensation for partial disability and restrictions limiting the filing of claims.

As far as the important state of Pennsylvania is concerned, it was predicted that there would be substantial increases in compensation benefits but no changes in the occupational disease provisions of the act.

At present, there are 21 states with special limitations applicable to silicosis, of which 15 deny compensation for partial disability. In those states, rates are less than half of those in states where partial disability is compensable.

As of January 1, 1951, 24 states provided general coverage for occupational diseases while 18 provided scheduled coverage. With respect to amendments, there has been substantial increase in benefits with prospect of further increased benefits soon. The result is an increase in compensation costs with a rise in rates which will become effective next year.

With respect to the proposed state occupational health and safety bill of the U. S. Department of Labor, Mr. Waters said that the bill indicates the purpose of state labor departments to increase their activities in this field. The draft is being distributed to state departments as a guide for legislative action. Mr. Waters' criticism is the contemplated assignment of the administration of the bill to state departments of labor rather than state departments of health and that this plan constitutes another field of legislative activity designed to control and regulate business.

Speaking on industrial codes, he said that the code prepared by the United States Public Health Service is being considered by the American Standards Association and will later be submitted to state departments as a guide to the promulgation of other codes.

Mr. Waters said that, according to the National Council on Workmen's Compensation Insurance Rating, the national experience in silicosis claims has continued excellent and that there is a trend developing that will result in further decreased insurance rates as a result. Mr. Waters credited the association with playing an important part in the favorable action. However, increased benefits of 25 to 50 percent are being considered in new legislation covering workmen's compensation insurance rates generally.

Following this talk, a question was asked with reference to "products liability" claims which might be made against a producer in the event that an end product, like glass for example, might not be up to standard and the glass manufacturer might attempt to attach the blame to a defective sand. Mr. Waters does not believe such claims can be justified and he said that insurance companies do not know how to assess premiums for such coverage. It represents a new field of insurance and rates are high.

Government Regulations

The concluding session, under the chairmanship of Clarence R. Wolf, was divided into an informal round-table discussion on government regulations and other industry problems led by executive secretary V. P. Ahearn, followed by an extemporaneous speech on the Washington scene by Mr. Ahearn.

Mr. Ahearn had covered some of the industry problems generally, in the preceding session. He cautioned that serious penalties may be levied in violations of the wage stabilization laws, as drastic as disallowance of the total payroll for income tax purposes.

At present, Mr. Ahearn said that

Left: Henry Roeser, Jr., New Jersey Silica Sand Co., Millville, N. J. (left), chatting with James H. Whitehead, Whitehead Brothers Co., New York City, at picnic. Center: Mr. and Mrs. W. B. Gyger, Ottawa Silica Co., Ottawa, Ill. Right: William J. Woods, Jr., Pennsylvania Glass Sand Corp., Pittsburgh, Penn. (left), chats with John H. Miller, Mifflin Sand Co., Lewistown, Penn., as Stanton Walker approaches in background



there is a great fight for power now underway between labor and health agencies in Washington. This battle for power will continue in the states with the result that there will be pressure on the industry, there being great public opinion throughout the country to protect the workers.

The industrial sand industry likely will be exempted from renegotiation, in which case the industry will be fortunate because renegotiation applies generally to all sub-contracts.

Speaking on the subject of construction limitations, it was mentioned that industrial construction has been placed under licensing for the first time. A license is required if more than 25 tons of steel are needed for such construction even if the necessary steel is on hand in advance. Accelerated depreciation is provided for in DPA regulations based on a 5-year plan. Such amortization is permissible covering the percentage of production used in actual defense and will be difficult to obtain.

The board of directors has decided that the association again conduct a wage rate survey similar to the one completed last year. These studies are considered of value in negotiations with unions. Mr. Ahearn cautioned that the sixth round of wage increases is coming, which will put heavy pressure on the industry for pay raises in the face of a growing shortage of available help.

He believes that the five percent percentage depletion allowance recently approved for the industry by the House Ways and Means Committee has a good chance of approval by Congress although there will be difficulty in getting it through the senate. Efforts will be continued to secure the 15 percent allowance originally sought. Mr. Ahearn paid tribute to Charles Brady, Lilesville, N. C., and J. Rutledge Hill, Dallas, Texas, for their fine work in presenting the case for the industry in conjunction with the sand and gravel industry.

Procurement of MRO items and capital equipment was discussed but, by the time this report is published, there may be more recent orders that have changed the picture.

The industry is subject to regulation 4 of D.M.A. for M.R.O. items and for minor capital equipment costing less than \$750, said Mr. Ahearn. He recommended that DO-97 forms not be used unless a producer is forced to use them.

While quotas for MRO items are limited, on a quarterly basis, to the amount purchased for the corresponding quarters in 1950, the trouble is that higher prices have developed at a time when more supplies are needed. If the allotted amount is insufficient, a producer should apply for a greater quota.

In the case of major capital equipment, it was suggested that producers apply directly to H. A. Montag, di-

rector, Requirements Division, Defense Minerals Administration in Washington. Through use of this procedure, Mr. Ahearn said that two concerns had been successful in securing their requirements within three weeks. He did not know of any rejections. It was suggested that a list of customers be attached to such applications and that evidence be offered that the equipment was unattainable without a priority, preferably by letters secured from manufacturers as proof.

As of the time of Mr. Ahearn's talk, rubber goods and bags were no longer covered by DO-97 ratings and must be purchased on the open market or, if unsuccessful, be obtained through use of a special rating. It was pointed out that customers of the industry constitute a "blue ribbon" list of value in gaining assistance.

The industry is under general price controls until a tailored order for the industrial sand industry is written. Such an order may be written specifically for the industry or covering the nonmetallics group of industries. A committee to be appointed for the purpose will have a great deal of influence.

The industry is subject to the rollback to pre-Korean prices but will take the stand that normal competition is effective in holding its prices down. The industry will be able to increase prices to compensate for labor increases up to March 15, 1951.

There was much discussion of regulations governing permissible 10 percent wage increases over January 15, 1950, figures. The opinion was that the annual total payroll is governing and that wage increases may be distributed in any way. If the number of men has increased in a plant since January 15, 1950, application must be made for a proportionate allowance. Vacations and paid holidays, sickness and accident benefits are all charged against the 10 percent wage rate limitation. If a new job is created, the producer should go ahead and fix a sensible wage rate covering the job. If a raise is due a worker because his status has changed to a more important job, proof of that fact will permit deviation from the ten percent limitation. Bonuses may be continued, if given before, but they may not be increased more than 10 percent.

There was so much interest in the application of wage increases that Mr. Ahearn will put out a special report on application of the 10 percent rule. In any discussion of wages, regardless of government regulations, Mr. Ahearn advised that companies continue to bargain in good faith with the unions and not base refusal of wage increases on wage stabilization regulations exclusively.

In commenting on price controls, the general price regulation limits prices to the highest prices customers of the same class paid during the De-

cember 19, 1950, to January 25, 1951, period. A company must not buy or sell at figures over those base prices. The prices that govern are the delivered prices, quoted prices governing if no deliveries were made during the base period. Customary price differentials must be maintained. Railroad freight increases must be absorbed if a company quotes delivered prices; otherwise prices may be proportionately increased. Mr. Ahearn predicted that a series of increases in railroad freight rates is coming.

Washington Scene

Ladies at the convention were invited to hear the concluding talk on the Washington scene, which was an unprepared speech by Mr. Ahearn in which he gave his impressions on a number of matters of interest to everyone.

At the start, he said that the Washington story still is the "great debate." Appraising this subject, he said that General MacArthur came into the picture at a time when the country needed a hero, shortly after the Kefauver committee exposed the degrading side of public officials. The most important result of the MacArthur episode is that he stimulated morale, he said, and only time will tell whether his powerful appeal to the masses might prove dangerous.

General Marshall's answer to General MacArthur was touched upon, and the risks of war that might be taken should the MacArthur program be undertaken. The popular opinion in Washington is shifting to the MacArthur point of view. Secretary of State Acheson was referred to as being politically indiscreet, but he is not responsible for the removal of MacArthur. He serves as a whipping board for the administration and his resignation has been on President Truman's desk for a long time but will not be accepted.

It is Mr. Ahearn's opinion that President Truman will probably be the 1952 presidential candidate for the Democratic party and that General Eisenhower will not accept nomination from either party in that event. Senator Taft is believed to fall short of "winning" qualities, Governor Dewey symbolizes defeat, Governor Warren is on the "liberal" side and it is to be hoped that General MacArthur does not run, in the words of Mr. Ahearn.

The two most important problems facing the world today are the shortages of natural resources and surplus population. It was pointed out that the United States is not a self-contained nation, having to import iron ore, copper, aluminum, rubber, tin, chromite, manganese, tungsten, wool, zinc and lead, etc. Because of these needs, we are committed to a united world and must build an organization of nations with prestige and author-

(Continued on page 89)

Industrial Research, State College of Washington, Pullman, in his paper "Dimensional Changes" in Unit Masonry," outlined the findings of the division during its extensive research into the problem. Pumice aggregate block, while nothing really new, came into widespread use during and immediately after World War II. Pumice block have good insulation qualities, can be sawed readily and have good availability. Acoustical properties are superior to standard sand and gravel units and fire resistance is excellent. Vast deposits of granular pumice in central Oregon, located close to both rail and highway transportation, offer the concrete masonry industry an abundance of excellent material at reasonable cost. "Cracking" of finished pumice block structures has discouraged builders from making the greatest use possible of the lightweight block, however.

The problem was attacked by making a prolonged study of the relationship between moisture and dimensional change at constant temperature. Test walls of standard 8- x 8- x 16-in. 3-core block, obtained from commercial block plants, were erected with both standard sand and gravel block and pumice aggregate units. For the long term tests the panels were placed in a room equipped with humidity and temperature control equipment. Temperature was maintained at 85 deg. F. and relative humidity ranged from 20 percent up to near saturation. Dimensional changes in the panels were checked at 12 points in each panel with a 3 $\frac{5}{16}$ -in. dial indicator graduated to .001 in. The efficacy of patented wire joint reinforcement materials was also tested in additional panels. Accelerated tests on single block were run, but on a wet vs. dry basis only.

Panels were inspected closely for signs of cracking. First cracking was detected 97 days after the panels were placed in the test room. Cracks that were readily visible during the low humidity cycles disappeared during the water spray periods. A few of the largest cracks failed to close once they had formed, however. Dimensional changes were found to take place quite rapidly with changes in humidity, particularly during humidity increases. This was probably due to the comparatively rapid rate of increase in moisture content as opposed to the slower rate of loss during the drying cycle. In the individual block used in the accelerated tests it was found that approximately 90 percent of the dimensional change occurred in a few minutes while the block were being immersed.

Conclusions reached as a result of the tests indicate that for an equal atmospheric humidity change, (1) the pumice block have greater dimensional change than the standard gravel aggregate units, (2) the pumice block seem to exhibit a more rapid rate of change than the regular units, and (3) the maximum dimension change

below the 40 percent block moisture content level for the pumice aggregate block was 0.750 in. per hundred feet contraction. One interesting fact discovered during the accelerated tests was that the permanent change had apparently all taken place within about 45 days. The use of wire reinforcement laid in the mortar joints provides considerable restraint on the horizontal dimension change of pumice aggregate panels.

Flotation

James A. Barr, Jr., research chemist, Armour & Co., in his talk "Recent Advances in Minerals Beneficiation," revealed how radioactive atoms are now aiding industry. "Tagged" atoms, obtained from the Atomic Energy Commission, are used to trace the paths of various components in flotation feed. Formerly this was a very difficult task but with radiation detecting equipment it has become relatively simple and rapid. Another interesting feature in flotation research is the occasional accidental discovery of a suitable reagent which works perfectly but for no readily apparent reason. It often requires painstaking "Edisonian" research to discover the reasons why one reagent works while another closely similar one does not. Mr. Barr supplemented his talk with a high-speed motion picture showing the flotation process in action.

Minerals Uses

At the noon luncheon, held in the Mirror Room of the Portland Hotel, Richard J. Anderson of Battelle Memorial Institute briefly enumerated some of the newest uses for the important industrial minerals. Following this the guests were taken on a Kodachrome tour through the numerous laboratories of Battelle, an industry-sponsored research organization located at Columbus, Ohio.

Asbestos

With the technical sessions cleared away, delegates relaxed at a cocktail party which blended eventually into the evening banquet. Dr. A. B. Cummins, research director, Johns-Manville Co., and chairman of the Industrial Minerals Division of A.I.M.E., gave the principal address of the evening on "Asbestos—a General Review." Dr. Cummins described the various types of commercially used asbestos, emphasizing that the amphibole type of material is steadily assuming a more important place in the industry which has relied largely upon chrysotile fibers in the past. Although the United States leads the world in the consumption of asbestos it must depend almost entirely on material imported from Canada. The eastern Canadian asbestos deposits extend in a southwesterly belt of considerable length which stops almost exactly at the U. S. border. The one domestic deposit of any economic importance in this country is located at the very southernmost tip of this belt

in northern Vermont. A color film which traced the various stages in the processing of asbestos, produced by Johns-Manville, rounded out Dr. Cummins' talk.

Plant Inspections

No conference would be complete without plant tours, so on Saturday 35 rain-repellent delegates visited Smithwick Concrete Products' Haydite plant. The plant features the largest rotary kiln, measuring 100 feet in length by 8 feet in diameter, used in the industry. Fossiliferous shale brought in 40 miles by rail is expanded to produce lightweight aggregate. At the Mixermobile Manufacturing Co., guests were shown through the large plant where various types of earthmoving and concrete-mixing equipment are manufactured. Of particular interest was the radial three-cylinder steam engine being built to power a large earthmoving unit. Estimates by the group of the time required to "fire-up" the radical departure from standard motive power ranged from several hours to 10 min., but the designers believe that 40 sec. will be sufficient. Last stop for the day was at the Oswego plant of the Oregon Portland Cement Co. Raw material is obtained from two sources, widely separated. High grade limestone is shipped from Lime, Oregon in the eastern part of the state while a low grade limestone is quarried at Dallas in the Willamette valley.

Industrial Sand Meeting

(Continued from page 64)

ity. The opinion was expressed that we should not withdraw from the United Nations but that we would if Red China gains admittance. The world cannot stand another war.

In conclusion, Mr. Ahearn said that the most important asset of this country is the individual character of the American people.

Entertainment

There being some 35 ladies present, a delightful program of entertainment was provided. A bridge-tea was conducted on the opening afternoon and golf tournaments, with appropriate prizes, were conducted for both men and women. As per custom, cocktail parties and bingo games comprised the evening entertainment and a special feature was a picnic for all in attendance as guests of the association.

Cement Plant Expansion

ALPHA PORTLAND CEMENT CO., Easton, Penn., recently announced plans to expand facilities at its Jamesville, N. Y., plant. Plans call for increasing the plant's capacity to 1,000,000 bbl. of cement annually. MacDonald Engineering Co., Chicago, Ill., has been awarded a general contract for the construction. The new facilities are expected to be in operation by 1952.