

Mr. James F. Couch has been elected president of the Des Moines Chemical Society.

Prof. G. H. Clevenger, of Leland Stanford University, has been appointed research professor in metallurgy and will relinquish his elementary and routine teaching.

Dr. E. C. Worden is in Texas directing the development of a new oil and sulfur property near Houston.

Mr. John C. Summers has recently been appointed as head of the Baking Department of the Dunwoody Institute at Minneapolis. He will sever his connections with the Operative Miller and Baker School and Laboratories July 1st and take up his new duties at that time in Minneapolis. Mr. Summers has previously been connected with the experiment stations in the Louisiana State University, Purdue University, Colorado Agricultural College, and Kansas Agricultural College, and has also filled the position of chief chemist with the Holley Sugar Company, Denver, Colorado.

The Fourteenth Annual Meeting of the American Leather Chemists' Association, held in Atlantic City, N. J., June 7-9, 1917, was the most successful ever held, both in point of attendance and the character of the papers presented. One hundred and thirty-five of the less than four hundred members of the association were present, Westerners predominating.

The following members of the Philadelphia Section A. C. S. are chairmen of subcommittees of the Chemistry Committee of the National Research Council, of which Dr. M. T. Bogert is chairman: Mr. Arthur H. Thomas, president Arthur H. Thomas Company, Philadelphia; Dr. A. E. Taylor, Rush professor of physiological chemistry, University of Pennsylvania; Dr. Arthur M. Comey, director of the Eastern Research Laboratories, E. I. du Pont de Nemours & Company.

Mr. James J. Bajda, formerly chief dye chemist and chemical engineer for B. Heller & Company, will have charge of the dye plants, now under construction, of the Block Chemical Laboratories.

W. E. Tottingham, assistant professor of agricultural chemistry, College of Agriculture, Madison, Wis., is on leave of absence and is working at Johns Hopkins University with Prof. Livingston, on special problems in plant chemistry and physiology.

Mr. C. D. Geidel, chemist and bacteriologist in the state food laboratory, Madison, Wis., has accepted a position in the miscellaneous laboratory, Bureau of Chemistry, Washington, D. C., and assumed his new duties on June 15.

FOREST PRODUCTS LABORATORY

Mr. C. P. Winslow has been appointed director of the Forest Products Laboratory to succeed Mr. H. F. Weiss, now in charge of the Division of Forest Products of the C. F. Burgess Laboratories.

Dr. A. W. Schorger, who for seven years has been connected with the Forest Products Laboratory, has resigned to take charge of organic chemistry with the C. F. Burgess Laboratories. The Burgess Laboratories are actively engaged at present upon problems of national preparedness and defense and are represented on both national and state committees. Dr. Schorger's immediate duties will be in connection with some of these problems, especially those relating to foodstuffs.

Mr. R. C. Palmer resigned as chemist in charge of wood distillation to become chief chemist of the Newport Resin & Turpentine Co., with headquarters at Pensacola, Fla. Dr. L. F. Hawley has succeeded him.

Dr. S. F. Acree severed his connection as chief chemist at the laboratory on April 1st. He is now with the National Wood Chemical Association, with headquarters at Syracuse University.

Dr. F. W. Kressman is now manager of the Standard Lesse Co. plant at Fullerton, La.

Mr. Sidney D. Wells has left the paper and pulp division to become superintendent of the Chesapeake Pulp & Paper Co. plant at West Point, Va.

INDUSTRIAL NOTES

The Marden, Orth & Hastings Company has recently opened a new branch office in the Hoge Building, Seattle. This is the fifth American branch of the firm, which has its main office at 61 Broadway, New York City.

The Bayer Company is suing the United Drug Company for alleged infringement of the trade mark "Aspirin."

A fire in the Barrett Manufacturing Co.'s chemical plant at Philadelphia, destroyed the naphthalene building and damaged several others, loss \$40,000.

A new company has recently been organized at Stockholm, Sweden, for the manufacture of nitric acid and other chemicals. The works will be erected at Trollhattan and will be supplied with electric energy by the "Royal Waterfalls Committee." The company intends to use the Birkeland-Eyde process and will produce about 7000 tons annually of concentrated nitric acid and a large quantity of nitrates as a by-product. It is planned to commence operations this year.

Experimental laboratories of the Aetna Explosives Company, at 1387 Sedgwick Avenue, Bronx, New York City, were partially wrecked by explosion on Tuesday night, May 29, 1917.

Harrisons, Inc., who recently became affiliated with the du Pont Chemical Works, Wilmington, have purchased the plants of Cawley, Clark & Company, large paint and color manufacturers, Newark, N. J., and the lithopone plants of the Beckton Chemical Company in Newark and Philadelphia. The deal is said to involve over \$2,000,000.

Walter Birge, president of the Air Reduction Company, has confirmed previous reports that negotiations were in progress looking to a merger of his Company with the Union Carbide Company. He stated that should any basis of exchange of stock be agreed upon he would offer only the oxy-acetylene business of the Air Reduction Company. The Company has been devoting much time to the development of the nitrogen end of its business and, Mr. Birge reported, expected to be working its nitrogen plants on a commercial basis within a few days.

The American Association of Pharmaceutical Chemists at their annual convention in Atlantic City, N. J., adopted, on June 12, resolutions urging Congress to suspend the patent rights of alien enemies of the United States during the war.

The Synthetic Manufacturing Co., of North Tonawanda, N. Y., of which Mr. A. E. Summey is general manager, has recently engaged as production manager one of the production engineers of the Scoville Manufacturing Co. This was necessitated by the large demand on the Synthetic Co. for their products ortho and para nitrophenol and salicylic acid.

The American branch of The Treibacher Chemical Works of Treibach, Austria, contemplates the erection of an American plant. One of their chemists, Mr. Goldfogel, has recently returned from Austria where he spent several months familiarizing himself with the German process for the manufacture of rare earth metals. It is understood the Central Empires are using rare earth alloys in place of tungsten steel.

Contracts have been awarded by the Powers-Weightman-Rosengarten Co. for the erection of a shed at their factory, Ridge Ave. and Calumet St., Philadelphia, and for repairs to the factory. The shed will cost \$5,500 and the repairs \$9,000. The repairs are to replace the damage done in a recent fire at the plant.

The National Aniline & Chemical Company, located for more than twenty years at 100 William Street, have leased three floors in the new Heckscher Building at 244 Madison Avenue, New York City, for executive offices.

Through a cooperative agreement with Cornell University, representatives of the Bureau of Mines have been stationed at Morse Hall, where the electric furnace equipment of the department of chemistry has been utilized in some metallurgical work of the Bureau. Experiments on the electric melting of brass have indicated that a suitable electric furnace might materially reduce the metal losses from volatilization and avoid the use of costly crucibles. The Bureau is now testing a commercial-size furnace with special attention to its suitability for use on brasses for cartridges and shrapnel cases. Another electric furnace problem studied by the Bureau has been the production of ferro-uranium from the uranium oxide obtained as a by-product in the extraction of radium from its ores. Ferro-uranium is used in making uranium steel, which is said to be used by Germany for the liners of big guns which will stand up at a rate of fire so rapid that other steels fail. It is undecided whether the work on gun steel will be done at Cornell or some other university.

GOVERNMENT PUBLICATIONS

By R. S. McBRIDE, Bureau of Standards, Washington

NOTICE—Publications for which price is indicated can be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. Other publications can usually be supplied from the Bureau or Department from which they originate. Commerce Reports are received by all large libraries and may be consulted there, or single numbers can be secured by application to the Bureau of Foreign and Domestic Commerce, Department of Commerce, Washington. The regular subscription rate for these Commerce Reports mailed daily is \$2.50 per year, payable in advance, to the Superintendent of Documents.

BUREAU OF STANDARDS

Rules and Regulations for the Enforcement of the Lime-Barrel Act. ANONYMOUS. Circular No. 64, 5 pp. Issued April 20. Paper, 5 cents.

Structure of the Coating on Tinned Sheet Copper in Relation to a Specific Case of Corrosion. PAUL D. MÉRICA. Technologic Paper No. 90, 17 pp. Paper, 5 cents.

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

Annual Report. This report includes the following five supplements which contain the principal technical findings as developed by the Board during its two years' work: General specifications covering requirements of aeronautic instruments; nomenclature for aeronautics; mufflers for aeronautic engines; gasoline carburetor design; experimental researches on the resistance of air.

GEOLOGICAL SURVEY

Zinc in 1915. Production and Resources. C. E. SIEBENTHAL. From Mineral Resources of the United States, 1915, Part I, pp. 851-981. Published April 30.

SPELTER PRODUCED AND CONSUMED IN THE UNITED STATES IN 1915	
Production of primary spelter (a)	(Short tons)
From domestic ore.....	458,135
From foreign ore.....	31,384
	489,519
Production of secondary spelter (a).....	
Redistilled.....	29,764
Remelted.....	23,136
	52,900
Apparent consumption of primary spelter.....	542,419
	364,494

(a) "Primary spelter," which is produced directly from ore, is here distinguished from "secondary spelter," which is obtained by refining zinc ashes, skimmings, drosses, and old metals. The statistics of secondary spelter are given on page 856.

Fuel Briquetting in 1916. C. E. LESHER. From Mineral Resources of the United States, 1916, Part II, pp. 1-4. Published May 4. "The production of fuel briquets in 1916 was 295,155 net tons, valued at \$1,445,662, an increase, compared with 1915, of 73,618 tons, or 33 per cent, in quantity and \$409,946, or 40 per cent, in value. The production in 1916 was the greatest recorded and exceeded that of 1914, the previous high record, by 44,520 tons."

Gypsum. R. W. STONE. Bulletin 666-E. 3 pp. "The three years 1913-1915 saw no marked fluctuation in the gypsum industry. For some time the annual output has been near 2,500,000 tons of raw material.

"This particular industry could not suffer from restraint of ocean traffic, because the imports, which come wholly from New Brunswick and Nova Scotia, are normally only about one-fifteenth as much as the domestic production, and gypsum is so abundant and widespread in the United States that the nation is easily industrially independent in this respect.

"In 1915 there were 77 active mines or quarries which supplied 69 gypsum plants. A number of plants are standing idle. In case of greatly increased demand for gypsum products

the idle plants could quickly be put into commission, and the active plants that are working only one or two shifts could be put on a 24-hour schedule, thus making a large increase in the output. The production of gypsum boards probably could not be so quickly increased as that of other products, because they are made on machines which are not on the market.

"As the deposits of high-grade gypsum in the United States are widespread, practically inexhaustible, and in many places close to present lines of transportation, and as the milling part of the industry can easily be made to increase its output, the outlook for this popular structural material is fair even in times of world-wide unrest.

"The principal uses of gypsum are as structural material and as ingredient in Portland cement. Gypsum wall plaster is in common use, and gypsum boards, blocks, and tile are fast making a market because of their light weight, convenience, and fire-resistant qualities. Because of the rapidity with which the plaster sets, permitting carpenters to follow the plasterers within a few hours, and because of the size and shape of the gypsum block, tile, and board units, which favor quick construction, these materials are especially adapted to the hurried emergency building operations occasioned by great industrial activity."

Grinding and Polishing Materials. F. J. KATZ. Bulletin 666-K. 3 pp. "The American industries requiring millstones, grindstones, pulpstones, oilstones, whetstones, scythestones, corundum, garnet, silica, feldspar, diatomaceous earth, and tripoli, have long been independent of foreign supplies, and the developed domestic sources of supply are capable of greatly increased production. The imports of these materials have been small in comparison with domestic production and have very probably been fostered only by a natural preference and conservatism in favor of articles that had long been used before the American supplies came into the market.

"American emery seems to be inferior to and unable to supplant the emery from Naxos, Greece, imports of which have been very largely shut out. Artificial carbide and aluminum oxide abrasives can be substituted, but some manufacturers, particularly lens grinders, seem to be reluctant to make a change, probably because it would involve changes in technique. Necessity must overcome such reluctance.

"Corundum for a number of years has been supplanted by the artificial abrasives. Very recently, however, there has been a small revival in corundum mining.

"No domestic source of satisfactory lump pumice has been exploited commercially.

"The country remains dependent on foreign sources for diamond dust and bort, imports of which in the last three years have been about 25 per cent less than the average during the previous three years.

"The pottery industry, however, is in need of siliceous pebbles for grinding quartz and feldspar in tube mills. Substitutes that contain even small quantities of iron cannot be used.

"Metallurgic plants and cement mills have used a far larger quantity of flint pebbles than the pottery industry. The pure silica pebble is not required for them, the only essentials being toughness and hardness. For these purposes there are large quantities of suitable granite and porphyry pebbles in many localities along the New England coast which have not yet been drawn upon.

"Dimension blocks cut from quartzites in Florida, Tennessee, and Iowa, have appeared on the market during the last two years and seem to be satisfactorily supplanting foreign flint lining."