any myths about it, and this is the more remarkable because primitive races, as a rule, retain some shadowy recollection or myths of antecedent peoples for a great many centuries. Nowhere else in South America has there been the slightest trace discovered of a culture resembling this, or of several cultures, and it is very unfortunate that just now there does not seem to be any material at hand to solve the mystery. These colossal funeral jars are the most important features of this part of the exhibit. Some of them are large enough to admit two entire bodies seated side by side.

On the other side of the room in which this ancient pottery is shown Dr. Farabee has installed a great collection of several hundred pieces of the Conebo pottery. This is entirely modern and is the most striking pottery of the kind to be found anywhere in the world, and in fact only a few specimens of the smaller kind are to be found in any museum. About half a dozen of these jars are four feet high and about the same diameter, but resting on a very small base and having the general appearance of an inverted, truncated cone. They will hold several barrels each and are used by the natives to hold the beer, which they greatly enjoy.

THE CHEMICAL INDUSTRIES OF THE UNITED STATES

THE annual report of Franklin K. Lane, Secretary of the Interior, gives the data on the growth of the chemical industries in the United States since 1914. Not only have factories sprung up to manufacture products formerly imported but great expansion has taken place to supply the increased demand for all chemical products. The country now manufactures practically everything required along chemical lines.

The increase in capital invested in chemical industries was, in 1915, $65,565,000; in 1916, $99,244,000; and up to September, 1917, $65,861,000 over the preceding year. New chemical industries are now being opened up at an unprecedented rate, owing to war needs and the energy of American chemists and physicists.

Before the war 90 per cent. of the artificial colors and dyes were imported, five or six concerns with 400 operatives producing 3,300 short tons per year. Now there are over 90 enterprises, each making special colors, and 100 concerns making crudes and intermediates.

Sulphuric acid, the chemical barometer, has doubled in production. In 1916, 6,250,000 tons of 50° Bé. were produced. The estimate for 1917 is much greater, and the production for 1918 will again greatly increase.

By-product coking doubled its capacity in the last three years, yet in 1918 the United States will make half her coke in beehive ovens. Light oil, which contains the benzene and toluene needed for explosives, jumped from 7,500,000 gallons in 1914 to 60,000,000 gallons in 1917, and is again being largely increased. Ammonia production has increased 100 per cent. in three years and the visible supply is insufficient to meet demands.

Gasoline production has increased from 35,000,000 to 70,000,000 barrels per annum since 1914.

Potash importation from Germany was stopped by the war, which has stimulated production in this country. The production from January to June, 1917, was 14,023 short tons of potash. This is a small production, but sodium salts have been substituted for almost all purposes except agriculture. Shortage of labor and coal is seriously interfering with the potash-brine evaporation in Nebraska, which was yielding about 90 tons per day.

The production of explosives and consequent consumption of nitric acid has increased enormously. The nitric acid is still almost entirely made from Chili saltpeter, but synthetic nitrogen plants are under process of construction, and we have large quantities of coal-tar ammonia which can be used for munitions if necessary.

Before the war 40,000 tons of barite were imported from Germany for the manufacture of lithopone. Now five companies are producing this article from deposits in Tennessee, Kentucky, Virginia, and Missouri.

The smelting of all metals, iron, zinc, copper, antimony, tin, mercury, etc., and their

alloys has increased to meet the country's needs.

Domestic supplies of manganese and pyrite have been augmented.

These are but a few instances of our chemical progress. The matter can be summarized by saying that American chemists have met the country's needs as ably and completely as did the chemists of Germany. We can go forward with every confidence of no serious shortage of the many chemical products required for domestic consumption.

THE AMERICAN METRIC ASSOCIATION

The association will meet in Pittsburgh on December 28 and 29 under the presidency of Dr. George F. Kunz, of New York. The first two sessions are to be held in conjunction with the Section on Social and Economic Science of the American Association for the Advancement of Science. The program will be as follows:

FRIDAY, DECEMBER 28

2 P.M. Mr. George W. Perkins, of New York, and Mr. J. W. McEachren, of the Crane Company, Chicago, will present papers for discussion.

Friday evening will be free for the opening session and reception of the American Association for the Advancement of Science, with which the American Metric Association is affiliated.

SATURDAY, DECEMBER 29

10 A.M. The officers will render their annual reports. These will be followed by Dr. William C. Wells, chief statistician of the Pan-American Union; Mr. Henry D. Hubbard, of the United States Bureau of Standards, and others dealing with the general problem of international standards and their application to important industries in the United States and Canada.

2 P.M. Dr. John A. Brashear, past president of the American Society of Mechanical Engineers, will introduce the speakers who have prepared papers for the Standards Committee of the American Metric Association. Engineers and business men are especially requested to attend this session. Technical problems in connection with the general use of metric weights and measures will be given special attention at this time.

6.30 P.M. An informal "Metric Dinner" will be served at the Hotel Schenley. The charge will be two dollars per cover, and those who desire to attend are asked to leave their names at the hotel office.

8 P.M. The final session in the Hotel Schenley, at which time officers for the ensuing year will be elected, and necessary business disposed of. The present rapid metric progress and the best methods for final success will be discussed by leaders in the metric movement.

SCIENTIFIC NOTES AND NEWS

The secretary of agriculture has announced the appointment of Dr. John Robbins Mohler as chief of the Bureau of Animal Industry of the United States Department of Agriculture. Dr. Mohler succeeds the late Dr. Alonzo D. Melvin, who died on December 7. Dr. Mohler has been in the service of the Bureau of Animal Industry since 1897, and has been assistant chief of the bureau since July 1, 1914. During the long illness of Dr. Melvin, Dr. Mohler performed the duties of acting chief as well as those of chief pathologist.

A portrait of Professor Thomas C. Chamberlin, head of the department of geology and paleontology at the University of Chicago, has been presented to the university by graduates and former students of the department.

Dr. Lightner Witmer, professor of psychology in the University of Pennsylvania and director of the psychological laboratory and clinic, sailed last week for Europe. He expects to have the direction of social service work in a foreign country under a commissioner appointed by the War Council of the American Red Cross, and has been granted leave of absence by the university for the remainder of this year. During Dr. Witmer's absence, Dr. Edwin B. Twitmyer will be acting director of the psychological laboratory and clinic.