

## SCIENTIFIC EVENTS

## THE ASPHALT INDUSTRY IN 1917

THE war has stimulated activity in the domestic markets for asphaltic material derived from crude petroleum and for imported asphalt, but the relative abundance and adaptability of those materials has lessened the demand for the native bitumens and for the various types of bituminous rock produced in this country, according to statistics just completed under the supervision of J. D. Northrop, of the United States Geological Survey, Department of the Interior.

The native bitumen, including maltha, gilsonite, elaterite and grahamite, bituminous rock and ozokerite, marketed from mines and quarries in the United States in 1917 was 80,904 short tons, a loss of 17,573 tons, or 18 per cent., compared with 1916. The market value of the output in 1917 was \$735,924, a loss of \$187,357, or 20 per cent., compared with 1916.

The production of gilsonite, bituminous sandstone, bituminous (elaterite) shale, and ozokerite was increased considerably in 1917, but the gain credited to these varieties was insufficient to offset the loss in the production of elaterite, grahamite and bituminous limestone.

The quantity of manufactured asphalt (including road oils and flux) produced in 1917 from petroleum of domestic origin increased about 2 per cent. compared with 1916, and the quantity of corresponding material manufactured in this country from Mexican petroleum increased about 13 per cent., as a consequence of which the net gain over the production in 1916 was nearly 7 per cent.

The total sales in 1917 of manufactured asphalt derived from domestic petroleum amounted to 701,809 short tons, valued at \$7,734,691. This total includes 327,142 tons, valued at \$4,011,980, of solid and semisolid products used in the paving and roofing industries, and 374,667 tons, valued at \$3,722,711, of liquid products, including road oils, flux and asphaltic paints.

California maintained its supremacy in the production of oil asphalt. Its output from 14 petroleum refineries in 1917 aggregated 220,-

294 tons, valued at \$2,100,252, and included 135,160 tons of solid and semisolid products, valued at \$1,486,609, and 85,134 tons of liquid products, valued at \$613,643. Refiners handling oil from the Oklahoma-Kansas field produced 206,223 tons of oil asphalt, valued at \$1,957,493, including 73,410 tons of solid and semisolid products, valued at \$747,651, and 132,813 tons of liquid products, valued at \$1,227,842.

The total sales in 1917 of manufactured asphalt derived from Mexican petroleum amounted to 645,613 short tons, valued at \$7,441,813, and included 338,485 tons of solid and semisolid products, valued at \$4,657,152, and 307,128 tons of liquid products, valued at \$2,784,661.

The imports of native asphalt, oil asphalt, and bituminous rock for consumption in the United States in 1916 aggregated 187,886 short tons, valued at \$993,115, a gain in quantity of 40,173 tons, or 28 per cent., over 1916. The exports of unmanufactured asphalt in 1917 amounted to 30,107 short tons, valued at \$587,256, a loss of 10,709 tons, or 35 per cent., compared with 1916. In addition asphalt products to the value of \$585,472, compared with \$494,895 in 1916, were exported in 1917.

## TRAINING CAMPS FOR INSTRUCTORS TO PREPARE COLLEGE MEN FOR MILITARY SERVICE

THE War Department authorizes the following statement from the Adjutant General's office.

Training camps to fit men to act as assistant instructors in the new Students' Training Corps will be held at Plattsburg, N. Y., Fort Sheridan and Presidio, Calif., from July 18 to September 16. Colleges have been invited to send a limited number of picked students and members of the faculties to these camps.

The camps will be conducted with a view to teaching the attendants to give military instruction to students, and it is believed that satisfactory results can be obtained from an intensive 60-day course.

Further instructions relative to the new corps have just been issued. These are being sent to all colleges that have signified their