SOAPSTONE.

The amount of soapstone produced in the United States in 1893 was 21,071 short tons, valued at \$255,067. In amount this was not materially different from that of 1892, when the product was 23,208 short tons, and considering the tendency to decreased production in 1893, this is a fairly favorable showing. But in the value of the product there was a very notable falling off, decreasing from \$423,449 in 1892 to \$255,067, a loss of \$168,382, or nearly 40 per cent. This loss, however, was not entirely due to a great reduction in prices, though they were considerably depressed, particularly during the latter half of the year. The greater part of the decrease in value was due to a larger amount of the product being sold in its rough state as quarried. In 1892 the amount sold rough was 1,560 tons, whereas in 1893 5,760 tons were sold in that condition.

Following is a statement of the production of soapstone in 1893, showing the amount and value of the different conditions in which it was marketed.

Production of soapstone in 1893.

Condition in which marketed.	Short tons.	Value.
Rough		\$51,600
Manufactured articles (a) Ground (b)	7,070	4, 400 123, 600 75, 467
Total (c)	21,071	255, 067

- α Includes bath and laundry tubs; fire brick for stoves, heaters, etc.; hearthstones, mantles, sinks, griddles, slate pencils, and numerous other articles of everyday use.
- b For foundry facings, paper-making, lubricators, dressing skins and leather, etc.
- c Exclusive of the amount used for pigment, which is included among mineral paints.

In the following table is shown the amount and value of soapstone produced in the United States since 1880:

Annual product of soapstone since 1880.

Years.	Quantity.	Value.	Years.	Quantity.	Value.
1880	Short tons. 8, 441 7, 000 6, 000 8, 000 10, 000 10, 000 12, 000	\$66, 665 75, 009 90, 000 150, 000 200, 000 200, 000 225, 000	1887. 1888. 1889. 1890. 1891. 1892. 1893.	Short tons. 12, 000 15, 000 12, 715 13, 670 16, 514 23, 208 21, 071	\$225,000 250,000 231,708 252,309 243,981 423,449 255,067

Soapstone in North Carolina.—The talc or soapstone belt of western North Carolina extends from near Hewitts, along the line of the Murphy branch of the Richmond and Danville railroad to Kinsey and beyond. The talc is almost always overlaid by a capstone of itacolumite or sandstone and underlaid by marble or limestone. The deposits are inclined to be "pockety." One deposit at Valley river, 4 miles from Murphy, is 30 feet wide at one place, but is stained with iron and gritty; that is, intermixed with quartz grains and therefore not utilized. Mr. Titus Ulke, in a recent visit to this neighborhood for the Geological Survey, made the following observations regarding the mine of Mr. F. R. Hewitt, at Hewitts. They may be taken as fairly illustrative of the business in that locality.

The mine is located on a hillside, from which the crude talc is lowered in a chute to a grinding mill having a capacity of from 8 to 10 tons per day of ten and a half hours. Most of the product is ground, but some block and pencil talc cut to order is also shipped. The blocks are usually 6 by 4 by 1 inch in size; the pencil talc is cut to about 4 by $\frac{3}{4}$ by $\frac{1}{4}$ inch sizes. During 1893 the mill was running continuously for about three months only. The pencil and block talc is shipped in cases according to the amounts ordered; the ground talc is packed in sacks of 220 pounds each.

At the mill the crude tale is first passed through a "rumble," i. e., a rotary screen, 6 feet long by 4 feet in diameter, which removes the dirt from the tale, and the dirt thus removed passes through longitudinal slits into a water spout which carries it away. The good tale remaining in the rumble is dumped into a car, from which it is fed into a buhrstone grinding mill. The ground material is then hoisted to the floor above and emptied into a silk bolting cylinder. The bolted tale is caught in a dust-collecting chamber, into which it is drawn by an interposed centrifugal fan. The fine white ground tale is finally sent to an automatic packer and filled into sacks, each holding 220 pounds.

Other occurrences.—Soapstone occurs in almost every State along the Atlantic slope; also in South Dakota, Arizona, and Texas, and along the coast of California. It does not always occur, however, in deposits that can be profitably worked. In addition to North Carolina the States producing soapstone in 1893 were: Georgia, Maryland, New Hampshire, New Jersey, Pennsylvania, Vermont, and Virginia. This does not include the fibrous variety from Saint Lawrence county, New York, which is treated separately.

Fibrous tale.—Gouverneur, Saint Lawrence county, New York, continues to furnish the entire product of the fibrous variety of soapstone. This mineral is used almost exclusively as a filler in the manufacture of medium grades of paper, a small amount being used in making dynamite. The product in 1893 was 35,861 short tons, valued at \$403,436, against 41,925 short tons, worth \$472,485, in 1892. The year of largest production was in 1891, when an output of 53,925 short tons, valued at

\$493,068, was reported. At the beginning of 1893 prospects were bright for a good year's business, and until the first of June the production was about equal to that of the first five months of 1892. After the first of June, however, the demand fell off, and while prices were fairly well maintained, the amount of business for the rest of the year was about 75 per cent. of that of the preceding year.

Annual production of fibrous talc since 1880.

Years.	Quantity.	Value.	Years.	Quantity.	Value.
1880	4 600	\$54,730 60,000 75,000 75,000 110,000 110,000 125,000	1887. 1888. 1889. 1890. 1891. 1891. 1892.	Short tons, a 15, 000 a 20, 000 23, 746 41, 354 53, 054 41, 925 35, 861	\$160,000 210,000 244,170 389,196 493,068 472,485 403,436

a Estimated.

Talc imported into the United States from 1880 to 1893, inclusive.

Years.	Quantity.	Value.	Years.	Quantity.	Value.
1880		\$22, 807 7, 331 25, 641 14, 607 41, 165 24, 356 24, 514	1887. 1888. 1889. 1890. 1891. 1891. 1892.	Short tons. (a) 24, 165 19, 229 1, 044 81 531 1, 360	\$49, 250 22, 446 30, 993 1, 560 1, 121 5, 546 12, 825

a Quantity not reported previous to 1888.