

TALC AND SOAPSTONE.

By J. S. DILLER.

TALC.

The commercial deposits of talc are those of the relatively pure mineral. The massive rock composed chiefly of talc is considered under "Soapstone."

The United States is by far the largest producer and consumer of talc in the world. The softness, absorptive capacity, difficult fusibility and solubility, and electric resistance of talc make it one of the most generally useful of all minerals in the arts and industries. Its principal military use is in the ground form as an aid to the prevention of sore feet in marching under service conditions. For this purpose it should be pure.

Talc sold in the producing States in 1915 and 1916.

State.	1915		1916	
	Quantity (short tons).	Value.	Quantity (short tons).	Value.
1. New York.....	88, 214	\$864, 843	93, 236	\$961, 510
2. Vermont.....	61, 997	406, 652	73, 215	501, 175
3. Pennsylvania and New Jersey.....	7, 989	56, 466	8, 222	59, 331
4. Virginia.....	3, 036	18, 579	8, 798	73, 622
5. Georgia and Massachusetts.....	2, 934	25, 971	6, 921	111, 686
6. North Carolina.....	1, 454	21, 501	1, 787	41, 824
7. California and Maryland.....	712	7, 185	1, 130	13, 694
	166, 336	1, 401, 197	193, 309	1, 762, 842

Ground or manufactured talc imported into the United States, 1915 and 1916.

[Figures furnished by the United States Department of Commerce.]

Country.	1915		1916	
	Quantity (short tons).	Value.	Quantity (short tons).	Value.
Austria-Hungary.....	138	\$3, 019		
British South Africa.....			10	\$124
Canada.....	4, 797	57, 961	5, 964	75, 029
England.....			1	38
France.....	3, 734	19, 253	3, 570	20, 791
Germany.....	8	1, 888		
Italy.....	7, 268	104, 403	7, 105	121, 254
Spain.....			11	400
Sweden.....			22	544
	15, 945	186, 524	16, 683	213, 180

The total domestic production is nearly twelve times the total imports, over one-third of which came from Canada. The talc of New York is an especially good paper filler and is largely used for that purpose, although much goes into paints. The output of Vermont is used for the same purpose and also for foundry facing, rubber goods, and coating walls. A small amount is used for crayons. Talc for pencils, crayons, burners, and insulators comes almost wholly from North Carolina and Georgia and is cut in Chattanooga. The demand for talc of the highest grade is greater than the supply. Much of the material for toilet powders is imported. With the exception of compact material for pencils, burners, and insulators and the best grade for toilet powders the United States has a large reserve in nearly all the producing States. It is believed that by more searching field investigations the domestic output even of pencil and gas-burner talc as well as the best toilet-powder grades may be greatly increased. The "foot-ease" grade of ground talc, now so extensively used in the Army, may be fully supplied in this country. Although the war has greatly stimulated production it has not greatly increased the price except in emergencies.

Some good specimens of more or less schistose white talc have been sent from Brazil to the United States Department of Commerce. The best grade appears to be suitable for making toilet powder and is said to come from a locality near Rezende, 75 miles by rail northwest of Rio de Janeiro.

SOAPSTONE.

Soapstone is a massive rock so rich in talc as to have a soapy feel. It is more extensively quarried and used in the United States than in any other country. Its principal use, which is due to its resistance to heat, acids, and electric conductivity, is in the manufacture of laundry tubs, laboratory table tops, tanks, sinks, fume hoods, switchboards, and general insulation. It also has many smaller uses growing out of its slow radiation of heat. In 1916 there was a small production of soapstone in California, but almost the entire output of the United States came from Virginia, where there were four producing quarries. The total yield, including that of California, was 19,652 short tons.

The rock from which the soapstone in Virginia is obtained forms a large belt of intrusive rocks extending northeastward through Nelson, Albemarle, and Orange counties. This large intrusive mass will afford an abundant supply for many years to come. It is near several railroads and James River and within easy reach of Chesapeake Bay and therefore has the advantage of adequate facilities for transportation.

The United States has large reserves of soapstone and can, if necessary, greatly increase its output.