

ABRASIVE MATERIALS.

Buhrstones.—The value of the millstones produced in the United States during the past five years from the well-known sources in New York, Pennsylvania, and Ohio is given in the following table:

Estimated value of buhrstones produced in the United States from 1883 to 1887.

Years.	Esopus.	Cocalico.	North Carolina grit.	Total value.
1883.....	\$120,000	\$30,000	.....	\$150,000
1884.....	110,000	40,000	.....	150,000
1885.....	90,000	10,000	.....	100,000
1886.....	100,000	10,000	(a)\$30,000	140,000
1887.....	75,000	5,000	20,000	100,000

a For 300 complete sets.

The industry is decreasing and the demand for millstones would be even less, except for their use in grinding paints and various substances other than flour, for which rollers are being introduced more and more.

The imports, principally of French buhrstones, are given below:

Buhrstones and millstones imported and entered for consumption in the United States, 1868 to 1887 inclusive.

Fiscal years ending June 30—	Rough.	Made into millstones.	Total.	Fiscal years ending June 30—	Rough.	Made into millstones.	Total.
1868.....	\$74,224	.....	\$74,224	1878.....	\$87,679	\$1,928	\$89,607
1869.....	57,942	\$2,419	60,361	1879.....	101,484	5,088	106,572
1870.....	58,601	2,297	60,898	1880.....	120,441	4,631	125,072
1871.....	35,406	3,698	39,104	1881.....	100,417	3,495	103,912
1872.....	69,062	5,967	75,029	1882.....	103,287	747	104,034
1873.....	60,463	8,115	68,578	1883.....	73,413	272	73,685
1874.....	36,540	43,170	79,710	1884.....	45,897	263	46,160
1875.....	48,068	66,991	115,059	1885.....	35,022	455	35,477
1876.....	37,759	46,328	84,087	1886.....	40,722	676	41,398
1877.....	60,857	23,068	83,925	1887.....	25,660	557	26,217

Grindstones.—The production of grindstones in the United States is largely controlled by the Cleveland Stone Company, a consolidation of more than a dozen producing companies in Ohio and Michigan. Their quarries extend to New Hampshire. The total production in 1887 is estimated at 40,000 tons, valued at the quarries at \$240,000. The production is slightly greater than in 1886, but the value is less than that recorded last year. The details of manufacture were given in the last report, to which the reader is referred for further information.

Imports.—These are chiefly from Newcastle-on-Tyne and from Nova Scotia and New Brunswick.

Grindstones imported and entered for consumption in the United States, 1868 to 1887 inclusive.

Fiscal years ending June 30—	Finished.		Unfinished or rough.		Total value.
	Quantity.	Value.	Quantity.	Value.	
	<i>Long tons.</i>		<i>Long tons.</i>		
1868		\$25,640		\$35,215	\$60,855
1869		15,878		99,715	115,593
1870		29,161		96,444	125,605
1871	385	43,781	3,957.15	60,935	104,716
1872	1,202	13,453	10,774.80	100,494	113,947
1873	1,437	17,033	8,376.84	94,900	111,933
1874	1,443	18,485	7,721.44	87,525	106,010
1875	1,373	17,642	7,656.17	90,172	107,814
1876	1,681	20,262	6,079.34	69,927	90,189
1877	1,245	18,546	4,979.75	58,575	77,121
1878	1,463	21,688	3,639.41	46,441	68,129
1879	1,603	24,904	4,584.16	52,343	77,247
1880	1,573	24,375	4,578.59	51,899	76,274
1881	2,064	30,288	5,044.71	56,840	87,128
1882	1,705	30,286	5,945.61	66,939	97,225
1883	1,755	28,055	6,945.63	77,797	105,852
1884					86,286
1885					50,579
1886					(a)45,713
1887					(a)37,549

a Classed as finished or unfinished.

Novaculite.—The production of novaculite in the Hot Springs region of Arkansas, and of whetstones and scythe stones in Indiana, New Hampshire, and Vermont, shows no marked change over 1886, the total production being estimated at 1,200,000 pounds, worth, before dressing into whetstones, \$16,000. The imports increased from a value of \$16,749 in the fiscal year 1886 to \$21,479 in 1887.

Corundum.—The production of corundum in 1887 was practically limited to the mines of the Hampden Emery Company, at Laurel Creek, in the northwestern part of Rabun county, Georgia, and at Cullasaja or Corundum Hill, about 8 miles northeast of Franklin, Macon county, North Carolina.

The production from these mines during the past three years is given below:

Production of corundum in 1886 and 1887.

	1886.		1887.	
	Short tons.	Value.	Short tons.	Value.
Corundum Hill.....	290	\$52,200	250	\$45,000
Laurel Creek.....	355	63,990	386	69,480
Total.....	645	116,190	636	114,480

There are many other localities in western North Carolina, Georgia, and Alabama which contain corundum in sufficient quantity and pure enough to be sold profitably. Several specimens have been examined in this office which were very satisfactory, and without doubt efforts will be made to open other deposits in 1888 and 1889. It may be said that Iredell county, North Carolina, will probably furnish corundum in the future.

Emery imported and entered for consumption in the United States, 1867 to 1887 inclusive.

Fiscal years ending June 30—	Grains.		Ore or rock.		Pulverized or ground.		Other manufactures.	Total.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.		
	<i>Pounds.</i>		<i>Tons.</i>		<i>Pounds.</i>			
1867.....			428	\$14,373	924,431	\$38,131		\$52,504
1868.....			85	4,531	834,286	33,549		38,080
1869.....			964	35,205	924,161	42,711		77,916
1870.....			742	25,335	644,080	29,531		54,866
1871.....			615	15,870	613,624	28,941		44,811
1872.....			1,641	41,321	804,977	36,103		77,424
1873.....	610,117	\$29,706	755	26,065	343,828	15,041	\$107	70,919
1874.....	331,580	16,216	1,281	43,886	69,890	2,167	97	62,366
1875.....	487,725	23,345	961	31,972	85,853	2,990	20	58,327
1876.....	385,246	18,999	1,395	40,027	77,382	2,533	94	61,653
1877.....	343,697	16,615	852	21,964	96,351	3,603		42,182
1878.....	324,291	16,359	1,475	38,454	65,068	1,751	34	56,601
1879.....	496,633	24,456	2,478	58,065	133,556	4,985		87,506
1880.....	411,340	20,066	3,400	76,481	223,855	9,202	145	105,894
1881.....	454,790	22,101	2,884	67,781	177,174	7,497	53	97,432
1882.....	520,214	25,314	2,765	69,432	117,008	3,708	241	98,695
1883.....	474,105	22,767	2,447	59,282	93,010	3,172	269	85,490
1884.....	143,267	5,802	4,145	121,719	513,161	21,181	188	148,890
1885.....	228,329	9,886	2,445	55,368	194,314	8,789	757	74,800
1886.....	184,366	7,751	3,430	83,868	335,161	14,877	212	166,708
1887.....	143,317	5,830	2,987	66,601	530,957	24,003	1,191	97,625

Exports of manufactured emery.

Fiscal years ending June 30—	Value.	Fiscal years ending June 30—	Value.
1878.....	\$813	1883.....	\$1,857
1879.....	1,608	1884.....	3,565
1880.....	1,265	1885.....	99,232
1881.....	1,312	1886.....	38,820
1882.....	1,242	1887.....	39,668

Infusorial earth.—Mr. William M. Newman, manager of the Infusorial Earth and Silica Mining Company of New York, states that a new deposit of infusorial earth has been opened at Pope's Creek, Maryland, and that it was actively worked in 1887. Below will be found an analysis of this material by Mr. P. de P. Ricketts, of New York. This, together with the deposit at Dunkirk, Maryland, described in the last report, and the output of a fine quality in Nevada, gives a total of about 3,000 tons as the total production of the country, valued at \$15,000.

Analysis of infusorial earth from Pope's Creek, Maryland.

	Per cent.
Moisture.....	3.47
Silica.....	81.53
Alumina.....	3.43
Protoxide of iron.....	3.33
Lime.....	2.61
Magnesia.....	Trace.
Soda.....	1.43
Potash.....	1.16
Sulphur.....	.47
Organic matter, oxygen, etc.....	2.57
Total.....	100.00

A deposit apparently of great purity occurs near Linkville, Klamath county, Oregon. The beds have been deposited in an extinct lake, as in the case of the occurrences reported by Mr. J. S. Diller in northern California. A thickness of 40 feet is exposed on Lost River, and the deposit has been traced 10 miles. The distance to Willow creek, on the California and Oregon railroad, is 60 miles.