

STONE.

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INTRODUCTION.

For simplicity of treatment the kinds of stone covered by the figures given in this report are classified as granite, trap rock, sandstone, bluestone, limestone, and marble.

Granite includes true granites and other igneous rocks, as gneiss, mica schist, andesite, syenite, trachyte, quartz porphyry, lava, tufa, diabase, trap rock, basalt, diorite, gabbro, and a small quantity of serpentine. Rocks of these kinds are as a rule quarried commercially in quantities too small to permit their being tabulated separately, but the trap rock output of California, Connecticut, Massachusetts, New York, New Jersey, and Pennsylvania represents an important industry, and it is therefore considered advisable to show the value of this stone separately. The trap rock from California includes a considerable quantity of basalt.

Sandstone includes the quartzites of South Dakota and Minnesota, but the fine-grained sandstones of New York and Pennsylvania, known to the trade as bluestone, are the product of a separate industry, and their production is shown apart from that of the other sandstone. This bluestone is also quarried in New Jersey and West Virginia. In Kentucky most of the sandstone quarried and sold is known locally as freestone. The figures given for sandstone do not include the value of the grindstones, whetstones, and pulpstones, made from sandstone quarried in Michigan, Ohio, and West Virginia. Neither does the total sandstone value include sandstone crushed into sand and used in the manufacture of glass and as molding sand.

Limestone does not include limestone burned into lime, bituminous limestone, nor limestone entering into the manufacture of Portland cement. It includes, however, a small quantity of stone sold locally as marble.

Marble includes a small quantity of serpentine quarried and sold as marble in Georgia, Washington, and Pennsylvania.

The values given in this report represent the net value of the stone to the quarrymen—that is, the selling value exclusive of any freight charges. When the stone is cut or dressed by the quarrymen and sold in this manner, the value of the dressed stone is given. This applies especially to the stone quarried for use as building and monumental stone. The value of crushed stone is the net value crushed at the point of shipment.

PRODUCTION.

The following table shows the value of the different kinds of stone produced in the United States from 1896 to 1906, inclusive:

Value of the different kinds of stone produced in the United States, 1896-1906.

Year.	Granite.	Trap rock.	Sandstone.	Bluestone.	Marble.	Limestone.	Total.
1896.....	\$7,944,994	.....	\$4,023,199	^a \$750,000	\$2,859,136	\$8,387,900	\$23,965,229
1897.....	8,905,075	.....	4,065,445	^a 900,000	3,870,584	9,135,567	26,876,671
1898.....	9,324,406	.....	4,724,412	^a 1,000,000	3,629,940	9,956,417	28,635,175
1899.....	10,343,298	\$1,275,041	^b 4,910,111	815,284	4,011,681	13,889,302	35,244,717
1900.....	10,969,417	1,706,200	^b 5,272,865	1,198,519	4,267,253	13,556,523	36,970,777
1901.....	14,266,104	1,710,857	^b 6,974,199	1,164,481	4,965,699	18,202,843	47,284,183
1902.....	16,083,475	2,181,157	^b 9,430,958	1,163,525	5,044,182	20,895,385	54,798,682
1903.....	15,703,793	2,732,294	^b 9,482,802	1,779,457	5,362,686	22,372,109	57,433,141
1904.....	17,191,479	2,823,546	^b 8,482,162	1,791,729	6,297,835	22,178,964	58,765,715
1905.....	17,563,139	3,074,554	^b 8,075,149	1,931,625	7,129,071	26,025,210	63,798,748
1906.....	18,569,705	3,736,571	^b 7,147,439	2,021,898	7,582,938	27,320,243	66,378,794

^a Estimated.

^b Does not include the value of grindstones and whetstones.

From this table it is seen that the total reported value of the stone quarried in the United States in 1906, exclusive of the products mentioned above, was \$66,378,794. The corresponding value for 1905 was \$63,798,748, an increase for 1906 of \$2,580,046. In 1905 the gain was \$5,033,033; in 1904 it was only \$1,332,574; in 1903 it was \$2,634,459, and in 1902 it was \$7,514,499. The increase for 1906 over 1896 is \$42,413,565. The production of 1902, 1903, 1904, and 1905 was affected by strikes in the building trades, but continued increase in the production of crushed stone and, in 1905, of stone for furnace flux caused increased values in the totals. In 1906 almost all the producers, and especially the small quarrymen, stated that the cost of production had increased on account of increased cost of supplies, high wages, and lack of common labor; and that less stone was produced on account of the cheaper production and increased use of concrete, cement, and concrete blocks.

Granite, trap rock, marble, bluestone, and limestone increased in value, while the value of sandstone decreased.

Granite, trap rock, etc., represented 33.60 per cent of the total output in 1906, and increased in value from \$20,637,693 in 1905 to \$22,306,276 in 1906, a gain of \$1,668,583. Trap rock increased in value from \$3,074,554 in 1905 to \$3,736,571 in 1906, or \$662,017. Granite increased from \$17,563,139 in 1905 to \$18,569,705 in 1906, a gain of \$1,006,566.

Sandstone and bluestone represented 13.80 per cent of the total stone output in 1906. Their value in 1906 was \$9,169,337, which, compared with a value of \$10,006,774 in 1905, shows a decrease of \$837,437. Bluestone increased in value from \$1,931,625 in 1905 to \$2,021,898 in 1906, a gain of \$90,273. Sandstone decreased in value from \$8,075,149 in 1905 to \$7,147,439 in 1906, a loss of \$927,710.

Marble represented 11.42 per cent of the total stone output in 1906, the total value being \$7,582,938; in 1905 the value was \$7,129,071, a gain for 1906 of \$453,867.

Limestone represented 41.16 per cent of the total stone output of the United States in 1906, and was valued at \$27,320,243; in 1905 the value was \$26,025,210, a gain for 1906 of \$1,295,033.

The following table shows the value of the various kinds of stone produced in 1905 and 1906, by States and Territories:

Value of various kinds of stone produced in 1905 and 1906, by States and Territories.

1905.

State or Territory.	Granite.	Sandstone.	Marble.	Limestone.	Total value.
Alabama.....		\$28,107		\$532,103	\$560,210
Alaska.....			\$710		710
Arizona.....	\$3,700	65,558		135	69,393
Arkansas.....	90,312	58,161	1,000	154,818	304,291
California.....	1,700,818	685,668	95,540	49,902	2,531,928
Colorado.....	73,802	453,029		289,920	816,751
Connecticut.....	949,888	62,618		1,558	1,014,064
Delaware.....	178,428				178,428
Florida.....				5,800	5,800
Georgia.....	971,207		774,550	9,030	1,754,787
Hawaii.....	33,550				33,550
Idaho.....	1,500	22,265		14,105	37,870
Illinois.....		29,115		3,511,890	3,541,005
Indiana.....		15,421		3,189,259	3,204,680
Indian Territory.....	1,800	2,198		5,512	9,510
Iowa.....		9,335		451,791	461,126
Kansas.....		79,617		923,389	1,003,006
Kentucky.....		280,579		744,465	1,025,044
Maine.....	2,713,795			7,428	2,721,223
Maryland.....	957,048	12,984	138,404	149,402	1,257,838
Massachusetts.....	2,663,329	367,461	166,360	65,908	3,263,058
Michigan.....		123,123		544,754	667,877
Minnesota.....	481,908	294,640		555,401	1,331,949
Missouri.....	180,579	27,686		2,238,164	2,446,429
Montana.....	126,430	45,116		103,123	274,669
Nebraska.....		120		225,119	225,239
Nevada.....		1,500			1,500
New Hampshire.....	838,371				838,371
New Jersey.....	834,709	294,719		147,353	1,276,781
New Mexico.....		101,522	2,200	7,200	110,922
New York.....	765,777	^a 1,831,756	795,721	1,970,968	5,364,222
North Carolina.....	564,578	4,483		16,500	585,561
North Dakota.....		1,055			1,055
Ohio.....		1,744,472		2,850,793	4,595,265
Oklahoma.....	18,920	12,914		163,412	195,246
Oregon.....	85,330	1,229		8,600	95,159
Pennsylvania.....	870,848	^a 2,487,939	97,887	4,499,503	7,956,177
Rhode Island.....	556,364			300	556,664
South Carolina.....	297,284				297,284
South Dakota.....		193,408		6,653	200,061
Tennessee.....		8,715	582,229	401,622	992,566
Texas.....	132,193	123,281		171,847	427,321
Utah.....	13,630	43,429	1,150	232,519	290,728
Vermont.....	2,571,850		4,410,820	11,095	6,993,765
Virginia.....	452,390	2,000		212,660	667,050
Washington.....	681,730	124,910	60,000	52,470	919,110
West Virginia.....		171,309		671,318	842,627
Wisconsin.....	825,625	161,741		804,081	1,791,447
Wyoming.....		33,591	2,500	23,340	59,431
Total.....	^b 20,637,693	^a 10,006,774	7,129,071	26,025,210	63,798,748

^a Includes bluestone.

^b Includes trap and other igneous rocks.

Value of various kinds of stone produced in 1905 and 1906, by States and Territories—
Continued.

1906.

State or Territory.	Granite.	Sandstone.	Marble.	Limestone.	Total value.
Alabama.....		\$40,467	\$85,000	\$579,344	\$704,811
Alaska.....			(a)		(a)
Arizona.....	\$32,042	33,149		40	65,231
Arkansas.....	118,903	55,703	16,900	48,844	240,350
California.....	1,429,207	642,166	103,048	80,205	2,254,626
Colorado.....	65,402	286,544		373,158	725,104
Connecticut.....	1,385,369	(b)		1,171	1,386,540
Delaware.....	146,346				146,346
Florida.....				1,450	1,450
Georgia.....	792,315		919,356	16,042	1,727,713
Hawaii.....	23,346				23,346
Idaho.....	400	11,969		12,600	24,969
Illinois.....		19,125		2,942,331	2,961,456
Indiana.....		30,740		3,725,565	3,756,305
Indian Territory.....		615		44,622	45,237
Iowa.....		5,601		493,815	499,416
Kansas.....		42,809		849,203	892,012
Kentucky.....		125,123		795,408	920,531
Maine.....	2,560,021			2,000	2,562,021
Maryland.....	883,881	9,533	176,495	170,046	1,239,955
Massachusetts.....	3,790,211	260,721	271,934	10,750	4,333,616
Michigan.....		65,395		656,269	721,664
Minnesota.....	626,069	285,633		632,115	1,543,817
Missouri.....	150,009	20,951	(c)	1,988,334	2,159,294
Montana.....	114,005	37,462		141,082	292,549
Nebraska.....		6,899		276,381	283,280
Nevada.....			5,000		5,000
New Hampshire.....	818,131				818,131
New Jersey.....	958,110	215,142		221,141	1,394,393
New Mexico.....		42,574	500	125,493	168,567
New York.....	927,483	d e 1,905,892	557,954	2,204,724	5,596,053
North Carolina.....	778,847	3,531		30,583	812,961
North Dakota.....		44			44
Ohio.....		1,426,045		3,025,038	4,451,683
Oklahoma.....	18,847	40,246		127,361	186,454
Oregon.....	58,961	25,950		7,480	92,391
Pennsylvania.....	1,043,140	d 2,724,874	171,632	4,865,130	8,804,776
Rhode Island.....	622,812			678	623,490
South Carolina.....	247,998			10,400	258,398
South Dakota.....		145,966			145,966
Tennessee.....		14,136	635,821	481,952	1,131,909
Texas.....	168,061	111,533		239,125	518,719
Utah.....	4,948	37,529	1,400	248,868	292,745
Vermont.....	2,941,724		4,576,913	7,829	7,526,466
Virginia.....	340,900	5,100		260,343	606,343
Washington.....	459,975	169,500	59,985	49,192	738,652
West Virginia.....		113,369		628,602	741,971
Wisconsin.....	798,213	181,986		891,746	1,871,945
Wyoming.....	600	24,715	1,000	53,783	80,098
Total.....	f 22,306,276	9,169,337	7,582,938	27,320,243	66,378,794

a Included with Washington.

b Included with New York.

c Included in limestone.

d Includes bluestone.

e Includes a small output for Connecticut.

f Includes trap rock and other igneous rocks.

The following table shows the rank of the States and Territories in 1905 and 1906, according to value of production, and the percentage of the total produced by each State or Territory:

Rank of States and Territories in 1905 and 1906, according to value of production, and percentage of total produced by each State or Territory.

1905.				1906.			
Rank of State.	State or Territory.	Total value.	Percentage of total.	Rank of State.	State or Territory.	Total value.	Percentage of total.
1	Pennsylvania.....	\$7,956,177	12.47	1	Pennsylvania.....	\$8,804,776	13.27
2	Vermont.....	6,993,765	10.96	2	Vermont.....	7,526,466	11.34
3	New York.....	5,364,222	8.41	3	New York ^a	5,596,053	8.43
4	Ohio.....	4,595,265	7.20	4	Ohio.....	4,451,683	6.71
5	Illinois.....	3,541,005	5.55	5	Massachusetts.....	4,333,616	6.53
6	Massachusetts.....	3,263,058	5.11	6	Indiana.....	3,756,305	5.66
7	Indiana.....	3,204,680	5.02	7	Illinois.....	2,961,456	4.46
8	Maine.....	2,721,223	4.27	8	Maine.....	2,562,021	3.86
9	California.....	2,531,928	3.97	9	California.....	2,254,626	3.40
10	Missouri.....	2,446,429	3.83	10	Missouri.....	2,159,294	3.25
11	Wisconsin.....	1,791,447	2.81	11	Wisconsin.....	1,871,945	2.82
12	Georgia.....	1,754,787	2.75	12	Georgia.....	1,727,713	2.60
13	Minnesota.....	1,331,949	2.09	13	Minnesota.....	1,543,817	2.33
14	New Jersey.....	1,276,781	2.00	14	New Jersey.....	1,394,393	2.10
15	Maryland.....	1,257,838	1.97	15	Connecticut.....	1,386,540	2.09
16	Kentucky.....	1,025,044	1.61	16	Maryland.....	1,239,955	1.87
17	Connecticut.....	1,014,064	1.59	17	Tennessee.....	1,131,909	1.71
18	Kansas.....	1,003,006	1.57	18	Kentucky.....	920,531	1.39
19	Tennessee.....	992,566	1.56	19	Kansas.....	892,012	1.34
20	Washington.....	919,110	1.44	20	New Hampshire.....	818,131	1.23
21	West Virginia.....	842,627	1.32	21	North Carolina.....	812,961	1.23
22	New Hampshire.....	838,371	1.31	22	West Virginia.....	741,971	1.12
23	Colorado.....	816,751	1.28	23	Washington ^b	738,652	1.11
24	Michigan.....	667,877	1.05	24	Colorado.....	725,104	1.09
25	Virginia.....	667,050	1.05	25	Michigan.....	721,664	1.09
26	North Carolina.....	585,561	.92	26	Alabama.....	704,811	1.06
27	Alabama.....	560,210	.88	27	Rhode Island.....	623,490	.94
28	Rhode Island.....	556,664	.87	28	Virginia.....	606,343	.91
29	Iowa.....	461,126	.72	29	Texas.....	518,719	.78
30	Texas.....	427,321	.67	30	Iowa.....	499,416	.75
31	Arkansas.....	304,291	.48	31	Utah.....	292,745	.44
32	South Carolina.....	297,284	.47	32	Montana.....	292,549	.44
33	Utah.....	290,728	.46	33	Nebraska.....	283,280	.43
34	Montana.....	274,669	.43	34	South Carolina.....	258,398	.39
35	Nebraska.....	225,239	.35	35	Arkansas.....	240,350	.36
36	South Dakota.....	200,061	.31	36	Oklahoma.....	186,454	.28
37	Oklahoma.....	195,246	.31	37	New Mexico.....	168,567	.25
38	Delaware.....	178,428	.28	38	Delaware.....	146,346	.22
39	New Mexico.....	110,922	.17	39	South Dakota.....	145,966	.22
40	Oregon.....	95,159	.15	40	Oregon.....	92,391	.13
41	Arizona.....	69,393	.11	41	Wyoming.....	80,098	.12
42	Wyoming.....	59,431		42	Arizona.....	65,231	.10
43	Idaho.....	37,870		43	Indian Territory.....	45,237	
44	Hawaii.....	33,550		44	Idaho.....	24,969	
45	Indian Territory.....	9,510	.23	45	Hawaii.....	23,346	.15
46	Florida.....	5,800		46	Nevada.....	5,000	
47	Nevada.....	1,500		47	Florida.....	1,450	
48	North Dakota.....	1,055		48	North Dakota.....	44	
49	Alaska.....	710					
Total.....		63,798,748	100.00	Total.....		66,378,794	100.00

^a Includes a small output of sandstone from Connecticut.

^b Includes Alaska marble.

From this table it is seen that Pennsylvania, producing chiefly limestone and sandstone but also granite and marble, reported the greatest value of stone output for the entire United States, which was 13.27 per cent of the total; Vermont, producing granite, marble, and a small quantity of limestone, was second, with 11.34 per cent of the total; New York, producing sandstone, limestone, granite, and marble, ranked third; Ohio, producing limestone and sandstone, was fourth; Massachusetts, producing granite, marble, sandstone, and limestone, was fifth; Indiana was sixth, followed by Illinois, Maine, California, and Missouri, each producing stone valued at over \$2,000,000.

The following table is given to show the total values of the stone used for various purposes in 1905 and 1906; only those values are given which are for uses common to two or more varieties of stone:

Value of granite, sandstone, limestone, and marble used for various purposes in 1905 and 1906.

1905.

Kind.	Building (rough and dressed).	Monumental (rough and dressed).	Flagstone.	Curbstone.	Paving stone.	Crushed stone.
Granite.....	\$7,298,797	\$3,842,368	\$38,838	\$762,430	\$2,133,873	\$4,923,706
Sandstone.....	4,702,189	.....	1,221,348	1,044,983	716,682	1,008,270
Limestone.....	5,312,183	.....	127,801	283,426	231,785	10,487,638
Marble.....	2,927,640	2,270,217	.....	.....	.....	.....
Total.....	20,240,809	6,112,585	1,387,987	2,090,839	3,082,340	16,419,614

1906.

Granite.....	\$8,536,420	\$4,116,075	\$50,609	\$787,237	\$1,652,927	\$5,504,327
Sandstone.....	4,275,669	.....	1,097,438	1,074,369	694,995	889,894
Limestone.....	5,092,916	.....	109,632	289,615	531,275	11,073,265
Marble.....	2,782,620	2,657,813	.....	.....	.....	.....
Total.....	20,687,625	6,773,888	1,257,679	2,151,221	2,879,197	17,467,486

From this table it appears that the total value of building stone increased from \$20,240,809 in 1905 to \$20,687,625 in 1906, a gain of \$446,816. Granite represented in 1906 41.26 per cent of this building stone; limestone, 24.62 per cent; sandstone, 20.67 per cent; and marble, 13.45 per cent.

Monumental stone increased in value from \$6,112,585 in 1905 to \$6,773,888 in 1906, a gain of \$661,303. Of the monumental stone 60.76 per cent was granite in 1906 and 39.24 per cent marble.

Flagstone in 1906 decreased in value \$130,308, or from \$1,387,987 in 1905 to \$1,257,679 in 1906. Sandstone represented 87.26 per cent of the flagstone output in 1906. The proportion of granite and limestone was small.

Curbstone increased in value from \$2,090,839 in 1905 to \$2,151,221 in 1906, or \$60,382. Sandstone represented 49.94 per cent of this output in 1906; granite, 36.60 per cent; and limestone, 13.46 per cent.

Paving stone decreased in value from \$3,082,340 in 1905 to \$2,879,197 in 1906, a loss of \$203,143. Granite was 57.40 per cent of the total paving material; sandstone, 24.14 per cent; and limestone, 18.46 per cent.

Crushed stone increased in value from \$16,419,614 in 1905 to \$17,467,486 in 1906, or \$1,047,872. Of the total for 1906, 63.39 per cent was limestone; 31.51 per cent granite, including trap rock; and 5.10 per cent sandstone.

The following tables show the quantity and value of crushed stone produced in the United States in 1905 and 1906, by States and Territories and uses.

Production of crushed stone in 1905 and 1906, by States and Territories and uses, in short tons.

1905.

State or Territory.	Road making.		Railroad ballast.		Concrete.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Alabama.....	15,000	\$3,725	.....	.....	15,700	\$7,275	30,700	\$11,000
Arizona.....	.....	.....	.....	.....	500	229	500	229
Arkansas.....	47,350	34,325	16,524	\$12,012	87,310	72,220	151,184	118,557
California.....	624,698	391,587	87,733	48,341	386,967	305,459	1,099,398	745,387
Colorado.....	.....	.....	.....	.....	8,200	4,033	8,200	4,033
Connecticut.....	293,240	176,749	17,806	8,067	210,027	116,387	521,073	301,203
Delaware.....	61,125	36,440	74,052	39,779	45,130	27,164	180,307	103,383
Florida.....	.....	.....	.....	.....	600	300	600	300
Georgia.....	17,140	7,300	160,365	82,717	86,225	63,763	263,730	153,780
Hawaii.....	.....	.....	4,700	3,542	28,202	28,508	32,902	32,050
Illinois.....	1,184,352	793,551	1,441,707	655,276	929,995	594,293	3,556,054	2,043,120
Indiana.....	489,724	222,441	280,227	84,007	77,130	30,364	847,081	336,812
Indian Territory.....	.....	.....	9,058	3,624	3,634	1,888	12,692	5,512
Iowa.....	56,253	65,843	26,610	14,262	80,490	82,024	163,553	162,129
Kansas.....	46,210	28,913	1,389,756	618,189	38,666	25,365	1,474,632	672,467
Kentucky.....	334,198	215,032	980,597	362,035	79,392	65,427	1,394,187	642,494
Maine.....	4,935	2,605	212	96	10,070	7,615	15,217	10,316
Maryland.....	191,814	165,422	89,588	44,336	222,004	245,200	503,406	454,958
Massachusetts.....	616,170	497,207	16,788	9,436	390,314	288,227	1,023,272	794,870
Michigan.....	237,670	112,113	87,298	43,649	229,355	107,396	554,323	263,158
Minnesota.....	99,083	79,640	16,820	16,958	245,231	134,410	361,134	231,008
Missouri.....	453,254	386,894	902,433	396,872	779,753	519,469	2,135,440	1,303,235
Montana.....	.....	.....	.....	.....	6,500	8,200	6,500	8,200
Nebraska.....	31,375	24,050	51,875	29,442	92,000	79,311	175,250	132,803
New Hampshire.....	26,681	16,467	.....	.....	.....	.....	26,681	16,467
New Jersey.....	711,538	497,779	156,497	98,342	247,190	167,258	1,115,225	763,379
New Mexico.....	.....	.....	185,000	85,000	1,625	1,575	186,625	86,575
New York.....	1,463,311	909,425	844,382	418,076	758,096	451,811	3,065,789	1,779,312
North Carolina.....	52,987	44,236	118,850	56,574	55,549	34,161	227,386	134,971
Ohio.....	1,622,756	805,345	858,047	463,435	548,714	259,363	3,029,517	1,528,143
Oklahoma.....	37,700	22,850	187,500	90,000	31,870	21,370	257,070	134,220
Oregon.....	46,877	34,720	1,250	600	1,688	1,550	49,815	36,870
Pennsylvania.....	784,176	490,025	1,584,547	836,001	967,134	589,952	3,335,857	1,915,978
Rhode Island.....	33,821	27,061	2,875	2,000	16,125	15,470	52,821	44,531
South Carolina.....	1,250	900	42,804	28,876	70,866	70,392	114,920	100,168
South Dakota.....	1,000	804	.....	.....	21,000	18,205	22,000	19,009
Tennessee.....	106,850	39,227	167,850	81,693	92,400	48,930	367,100	169,850
Texas.....	11,250	7,000	32,700	16,000	48,300	34,518	92,250	57,518
Utah.....	6,907	6,605	.....	.....	350	150	7,257	6,755
Vermont.....	5,300	4,073	.....	.....	4,500	6,000	9,800	10,073
Virginia.....	15,500	26,429	142,600	78,693	154,862	177,551	312,962	282,673
Washington.....	12,040	9,000	2,047	1,638	753	602	14,840	11,240
West Virginia.....	69,048	38,084	97,000	88,823	67,790	36,938	233,838	160,845
Wisconsin.....	605,427	488,177	14,975	7,870	194,767	129,501	815,169	625,548
Wyoming.....	.....	.....	12,500	4,450	65	35	12,565	4,485
Total.....	10,418,010	6,712,044	10,105,573	4,827,711	7,337,039	4,879,859	27,860,622	16,419,614

Production of crushed stone in 1905 and 1906, by States and Territories and uses, in short tons—Continued.

1906.

State or Territory.	Road making.		Railroad ballast.		Concrete.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Alabama.....	17,040	\$9,380	.....	.....	10,192	\$7,280	27,232	\$16,660
Arizona.....	.....	.....	.....	.....	.....	.....	0	0
Arkansas.....	27,390	22,577	30,000	\$26,000	63,059	61,264	120,449	109,841
California.....	396,029	327,457	65,031	34,904	651,590	453,648	1,112,650	816,009
Colorado.....	7,210	3,832	22,000	7,600	49,697	26,139	78,907	37,571
Connecticut.....	387,288	231,001	47,803	20,750	280,731	152,448	715,822	404,199
Delaware.....	10,299	6,814	56,839	37,129	74,928	48,849	142,066	92,792
Florida.....	.....	.....	.....	.....	250	100	250	100
Georgia.....	23,862	19,400	290,450	151,365	107,700	82,450	422,012	253,215
Hawaii.....	2,796	4,476	300	150	9,184	6,645	12,280	11,271
Illinois.....	1,235,186	686,292	737,028	389,065	1,090,679	709,907	3,062,893	1,785,264
Indiana.....	658,727	321,891	477,737	169,695	243,834	119,222	1,380,298	610,808
Indian Territory.....	.....	.....	50,000	20,000	50,000	20,000	100,000	40,000
Iowa.....	59,362	38,339	60,803	26,268	251,686	142,124	371,851	206,731
Kansas.....	62,952	39,877	1,119,416	533,173	50,034	34,228	1,232,402	607,278
Kentucky.....	332,137	222,877	578,502	250,237	79,508	50,827	990,147	523,941
Maine.....	14,580	9,931	.....	.....	17,045	11,504	31,625	21,435
Maryland.....	168,191	156,245	197,126	116,306	171,944	190,993	537,261	463,544
Massachusetts.....	504,289	390,517	69,930	28,000	398,787	329,174	973,006	747,691
Michigan.....	145,155	78,437	206,375	103,442	94,536	61,852	446,066	243,731
Minnesota.....	138,380	102,246	31,509	24,741	241,563	190,027	411,452	317,014
Missouri.....	360,785	294,511	671,803	336,752	524,969	379,994	1,557,557	1,011,257
Montana.....	4,555	6,000	.....	.....	.....	.....	4,555	6,000
Nebraska.....	20,000	16,000	49,968	29,980	135,462	112,253	205,430	158,233
New Hampshire.....	14,200	10,350	1,770	425	13,660	9,918	29,630	20,694
New Jersey.....	604,010	451,174	260,044	147,191	400,804	259,964	1,264,858	858,329
New Mexico.....	.....	.....	350,167	139,217	12,500	6,000	362,667	145,217
New York.....	1,307,524	844,226	771,106	369,940	1,276,893	734,055	3,355,523	1,948,221
North Carolina.....	51,972	49,274	299,391	134,800	79,964	60,762	431,327	244,836
Ohio.....	1,728,163	931,146	951,888	426,305	632,942	300,035	3,312,993	1,657,486
Oklahoma.....	12,700	9,050	157,500	90,000	15,600	10,175	185,800	109,225
Oregon.....	59,247	34,223	15,918	7,111	17,175	8,342	92,340	49,676
Pennsylvania.....	822,774	517,751	1,757,718	1,000,044	1,221,162	782,640	3,801,654	2,300,435
Rhode Island.....	53,112	41,018	.....	.....	3,150	3,765	56,262	44,783
South Carolina.....	9,320	6,825	24,111	11,796	78,007	56,896	111,438	75,517
South Dakota.....	225	180	300	157	23,940	24,000	24,465	24,337
Tennessee.....	43,175	23,725	420,083	192,614	115,657	75,063	578,915	291,402
Texas.....	28,600	19,450	59,872	26,067	125,881	67,829	214,353	113,346
Utah.....	13,100	13,030	.....	.....	20	15	13,120	13,045
Vermont.....	5,284	4,045	2,402	1,100	2,840	2,472	10,526	7,617
Virginia.....	31,308	35,141	159,490	80,436	118,553	107,377	309,351	222,954
Washington.....	15,640	13,262	12,250	9,500	6,203	4,963	34,093	27,725
West Virginia.....	38,507	21,140	145,525	71,260	55,982	32,980	240,014	125,380
Wisconsin.....	596,476	363,214	181,067	86,575	392,605	250,870	1,170,148	700,659
Wyoming.....	.....	.....	1,800	810	2,364	1,207	4,164	2,017
Total.....	10,011,550	6,376,324	10,335,022	5,100,906	9,193,280	5,990,256	29,539,852	17,467,486

In 1906 Pennsylvania reported the largest production of crushed stone, followed by New York, Illinois, Ohio, and Missouri, in the order named. Each of these States had an output represented by more than \$1,000,000. In 1905 the rank of the States producing crushed stone was Illinois, Pennsylvania, New York, Ohio, and Missouri.

The following table shows the quantity and value of crushed stone produced in the United States in 1905 and 1906, by uses and kinds of stone:

Quantity and value of crushed stone produced in the United States in 1905 and 1906, by kinds and uses, in short tons.

1905.

Kind.	Road making.		Railroad ballast.		Concrete.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Granite.....	884,934	\$756,923	733,397	\$428,567	1,037,995	\$960,110	2,656,326	\$2,145,600
Trap rock.....	2,634,290	1,762,811	435,511	230,376	1,207,240	784,919	4,277,041	2,778,106
Limestone.....	6,446,518	3,837,041	8,167,261	3,826,811	4,720,389	2,823,786	19,334,168	10,487,638
Sandstone.....	452,268	355,269	769,404	341,957	371,415	311,044	1,593,087	1,008,270
Total.....	10,418,010	6,712,044	10,105,573	4,827,711	7,337,039	4,879,859	27,860,622	16,419,614

1906.

Granite.....	858,289	\$722,807	1,066,784	\$545,771	1,016,494	\$893,886	2,941,567	\$2,162,464
Trap rock.....	2,109,404	1,496,140	799,094	477,022	2,145,690	1,368,701	5,054,188	3,341,863
Limestone.....	6,685,781	3,837,500	8,106,850	3,899,396	5,493,958	3,316,369	20,286,589	11,073,265
Sandstone.....	358,076	299,877	362,294	178,717	537,138	411,300	1,257,508	889,894
Total.....	10,011,550	6,376,324	10,335,022	5,100,906	9,193,280	5,990,256	29,539,852	17,467,486

From this table it appears that, with the exception of sandstone, which decreased in quantity and value of output, the production of crushed stone increased decidedly in 1906, amounting to 29,539,852 short tons, valued at \$17,467,486, as compared with 27,860,622 short tons in 1905, valued at \$16,419,614, an increase in quantity of 1,679,230 short tons and in value of \$1,047,872.

Crushed granite increased from 2,656,326 short tons, valued at \$2,145,600, in 1905 to 2,941,567 tons, valued at \$2,162,464, in 1906, an increase in quantity of 285,241 tons and in value of \$16,864.

Crushed trap rock increased from 4,277,041 short tons, valued at \$2,778,106, in 1905 to 5,054,188 short tons, valued at \$3,341,863, in 1906, an increase in quantity for 1906 of 777,147 tons and in value of \$563,757.

Crushed limestone increased from 19,334,168 short tons, valued at \$10,487,638, in 1905 to 20,286,589 short tons, valued at \$11,073,265, in 1906, an increase in quantity of 952,421 tons and in value of \$585,627.

Crushed sandstone decreased from 1,593,087 short tons, valued at \$1,008,270, in 1905 to 1,257,508 tons, valued at \$889,894, in 1906, a decrease of 335,579 tons, valued at \$118,376.

Crushed stone for road making decreased from 10,418,010 short tons, valued at \$6,712,044, in 1905 to 10,011,550 tons, valued at \$6,376,324, in 1906, a decrease of 406,460 tons, valued at \$335,720.

Crushed stone for railroad ballast increased from 10,105,573 tons, valued at \$4,827,711, in 1905 to 10,335,022 tons, valued at \$5,100,906, in 1906, an increase of 229,449 tons, valued at \$273,195.

Crushed stone for concrete showed the greatest increase, from 7,337,039 tons, valued at \$4,879,859, in 1905 to 9,193,280 tons, valued at \$5,990,256, in 1906, an increase in quantity of 1,856,241 and in value of \$1,110,397.

In 1906, 63.39 per cent of the total of the crushed stone output was limestone, 19.13 per cent trap rock, 12.38 per cent granite, and 5.10 per cent sandstone.

The total average value per ton for 1906 was 59 cents, the same as in 1905. In 1906 the average price per ton of granite was 74 cents; trap rock, 66 cents; limestone, 54 cents, and sandstone, 73 cents; in 1905 the average values were, granite, 81 cents; trap rock, 65 cents; limestone, 54 cents; and sandstone, 63 cents.

EXPORTS AND IMPORTS.

The following figures, compiled from statistics furnished by the Bureau of Statistics of the Department of Commerce and Labor, give the value of the exports and imports of stone for the calendar years 1905 and 1906:

Exports of stone from the United States in 1905 and 1906.

Kind.	1905.	1906.
Marble and stone, unmanufactured.....	\$265,023	\$355,343
All others.....	710,876	780,539
Total.....	975,899	1,135,882

Imports of stone into the United States in 1905 and 1906.

Kind.	1905.	1906.	Kind.	1905.	1906.
Marble:			Granite:		
In block, rough, etc....	\$817,555	\$892,717	Dressed.....	\$102,488	\$145,144
Sawed or dressed.....	103	306	Rough.....	4,940	20,931
Slabs or paving tiles....	63,942	93,760	Total.....	107,428	166,075
All other manufac-			Stone (other):		
tures.....	302,645	220,150	Dressed.....	14,711	16,354
Mosaic cubes.....	47,455	48,183	Rough.....	64,587	41,255
Total.....	1,231,700	1,255,116	Total.....	79,298	57,609
Onyx:			Grand total.....	1,478,944	1,556,667
In block, rough, etc....	54,081	76,385			
Sawed or dressed.....					
Slabs or tiles.....	176				
All other manufac-					
tures.....	6,261	1,482			
Total.....	60,518	77,867			

These tables do not include the figures for slate or lime, as they are included under their respective reports.

These tables show an increase of \$159,983 in the value of the stone exported, from \$975,899 in 1905 to \$1,135,882 in 1906.

The total imports increased from \$1,478,944 in 1905 to \$1,556,667 in 1906, a gain of \$77,723.

GRANITE.

Total production.—The figures given in this report as representing the value of granite production in the United States include also the value of small quantities of gneiss, mica schist, lava, tufa, trachyte, andesite, syenite, quartz porphyry, trap, basalt, and allied igneous rocks. The quantities of these allied stones quarried are too small to tabulate separately. Trap rock, however, as already

noted, represents an industry sufficient by itself to make it advisable to show the value of this stone separately, although its value is included in the grand total of granite.

The value of the total output of granite, trap, etc., in 1906 was \$22,306,276, as compared with a value of \$20,637,693 in 1905, an increase of \$1,668,583. The increase in 1905 over the total value for 1904 was only \$622,668; the gain in 1904 over 1903 was \$1,578,938, which nearly equals the gain for 1906. In 1905 the granite trade felt the effects of builders' strikes, of the recent demand for concrete blocks and cement work, and of the high prices and the scarcity of labor. In 1906 the effect of trade strikes was not so evident, but notwithstanding the large increase in production the quarrymen, especially the small producers, reported a decrease of trade due to the use of cement and concrete, to high wages, to high price of supplies, and to inability to secure common labor.

The increase in 1906 was due mainly to contracts taken out for large buildings and to the demand for crushed stone.

In 1905 Maine ranked first among the granite-producing States, with an output of \$2,713,795; Massachusetts second, with an output of \$2,663,329; Vermont third, with an output of \$2,571,850, and California fourth, with an output of \$1,700,818.

In 1906 the rank in output of the States producing granite to the value of \$1,000,000 or more was as follows: Massachusetts, \$3,790,211; Vermont, \$2,941,724; Maine, \$2,560,021; California, \$1,429,207; Connecticut, \$1,385,369, and Pennsylvania, \$1,043,140.

The increase in Massachusetts was caused by unusually large contracts for stone for large buildings. Vermont showed an increase in value of both building and monumental stone. Maine decreased in value of building and monumental stone and paving blocks. California increased in value of stone for concrete work and for break-water and railroad use. Connecticut increased in output of building-stone and of stone for riprap work, and Pennsylvania increased in value of crushed stone.

Of the other States, Arizona increased on account of a large quantity of granite of poor quality taken out for railroad repair work, and Arkansas, Minnesota, New Jersey, New York, North Carolina, Rhode Island, and Texas, also increased in value of output, but Colorado, Delaware, Georgia, Hawaii, Idaho, Indian Territory, Maryland, Missouri, Montana, New Hampshire, Oklahoma, Oregon, South Carolina, Utah, Virginia, and Wisconsin decreased in value of output, most of the quarrymen reporting decreased demand due to the high prices caused by high wages, scarcity of labor, and the increased cost of materials, and to the increased use of cement and concrete blocks.

The output from Arizona, Colorado, Hawaii, Idaho, Oregon, Utah, and Wyoming includes considerable volcanic rock and tufa. California's output includes basalt and trap rock; the output of Connecticut, Massachusetts, New Jersey, New York, and Pennsylvania includes a large quantity of trap rock.

The production of some of the other States includes, besides these varieties of igneous rock, gneiss, mica schist, syenite, andesite, diabase, etc., but only in small quantities, as compared with the total production.

Building stone.—Building stone, including rough and dressed granite sold by producers, was valued at \$8,536,420 in 1906, an increase of \$1,237,623 as compared with \$7,298,797 in 1905. This was 74.17 per cent of the total granite increase. The rough stone sold by the quarrymen was valued at \$1,869,316 in 1906 and at \$1,888,010 in 1905, a decrease of \$18,694 in 1906 in this class of material. The dressed stone sold by the producers was valued at \$6,667,104 in 1906 and at \$5,410,787 in 1905, an increase of \$1,256,317. Massachusetts showed the greatest increase for this class of stone, from \$824,999 in 1905 to \$1,750,695 in 1906, a gain of \$925,696. This increase is accounted for by the fact that in 1906 the stone for the new Pennsylvania Railroad station in New York City was taken out, dressed, and made ready for shipment at the Milford quarries. The building stone includes, besides stone for buildings, for their decoration, and for foundations, a large quantity of heavy masonry stone used in building bridges. In 1905 Maine reported the largest quantity of building stone, rough and dressed, valued at \$2,083,089; Vermont came second, with a value of \$1,282,079; and Massachusetts was third, with a value of \$1,026,424. In 1906, Massachusetts ranked first, with an output of \$1,987,356; Maine was second, with an output of \$1,763,154, and Vermont third, with an output of \$1,475,731. Maine showed a decrease in output, and the other States an increase. Other States prominent in the production of granite for building stone are, in the order of value for 1906: Connecticut, New Hampshire, North Carolina, Maryland, California, Pennsylvania, Rhode Island, New York, Minnesota, and Georgia. In 1905 the order was as follows: Connecticut, Maryland, California, New Hampshire, North Carolina, Pennsylvania, Georgia, and New York, each of these States producing building stone, rough and dressed, valued at over \$100,000. The output of Connecticut, ranking fourth in each year for this class of stone, increased \$203,695, or from \$394,571 in 1905 to \$598,266 in 1906. New Hampshire rose from seventh place in 1905 to fifth place in 1906, with increase of \$101,550, from \$331,537 in 1905 to \$433,087 in 1906. North Carolina rose from eighth place in 1905, with an output of \$303,851, to sixth place in 1906, with an output of \$351,764, an increase of \$47,913. Maryland fell from fifth place in 1905 to seventh place in 1906; and California, on account of conditions incident to the earthquake disturbances in the spring of 1906, fell from sixth place to eighth.

Monumental stone.—Monumental stone, including stone cut and dressed by the producers and also the rough stock sold by them to retail monumental dealers, was valued at \$4,116,075 in 1906, as compared with \$3,842,368 in 1905, an increase of \$273,707. Of the total, \$2,293,554 was the value of the rough stock and \$1,822,521 the value of the cut or dressed stones sold by producers. In 1905 the corresponding figures were rough stock valued at \$1,920,443 and cut or dressed stone valued at \$1,921,925, an increase of \$373,111 in the value of rough stock and a decrease of \$99,404 in the value of cut or dressed stone for the year 1906.

Vermont produces more rough stock and sells more dressed monumental stone than any other State. The output of this class of stone in Vermont in 1906 was \$1,444,442 and in 1905 \$1,249,774, an increase of \$194,668. Massachusetts ranks next to Vermont with

an output of \$724,614 in 1906 and \$614,075 in 1905, an increase of \$110,539. The next States in order of production of monumental stone are Rhode Island, Minnesota, Maine, Wisconsin, New Hampshire, and Connecticut, these States each producing over \$100,000 in value. In 1905 New Hampshire ranked third, followed by Rhode Island, Wisconsin, Minnesota, California, and Maine. Production of this class of stone increased in 1906 in Rhode Island, Minnesota, Maine, Wisconsin, and Connecticut, and decreased in New Hampshire and California.

Paving blocks.—The value of paving blocks decreased from \$2,133,873 in 1905 to \$1,652,927 in 1906, a decrease of \$480,946. Connecticut, Delaware, Maine, Maryland, New Hampshire, Oklahoma, South Carolina, Virginia, and Washington increased in value of output, while the other States decreased or gave the same value of output. In 1906 the five States producing highest values in paving blocks were, in order, Maine, Wisconsin, Massachusetts, California, and Georgia, each producing over \$100,000. In 1905 the order was Wisconsin, Maine, Georgia, Massachusetts, and California.

Curbstone.—Granite curbing in 1906 was produced to the value of \$787,237; in 1905 the value of the output was \$762,430, an increase for 1906 of \$24,807. Georgia and North Carolina were the chief States producing this class of stone.

Flagstone.—Granite flagstones valued at \$50,609 were reported in 1906; the value in 1905 was given as \$38,838, which shows increase of \$11,771 in 1906. South Carolina and New Hampshire reported the greatest output of this material.

Rubble.—Rubble, including a great variety of stone used for rude masonry, foundations, and walls, was valued at \$363,463 in 1906, as compared with \$383,446 in 1905, a decrease of \$19,983 for 1906. Massachusetts, Maryland, Wisconsin, and Pennsylvania reported the largest output of this material.

Riprap.—Broken and other loose stone for foundations, especially in harbors and rivers, was produced in 1906 to the value of \$329,289; in 1905 the value reported was \$256,409, an increase for 1906 of \$72,880.

Crushed stone.—The value of crushed granite, including trap, in 1905 was \$4,923,706; in 1906, the value was \$5,504,327, an increase of \$580,621. These figures represent an output of 6,933,367 tons in 1905 and of 7,995,755 tons in 1906, an increase of 1,062,388 tons. The figures given above include trap rock, basalt, etc., as well as true granite. A separation of the trap and basalt from the granite shows that the total for 1906 includes 5,054,188 tons of trap and basalt, valued at \$3,341,863, and 2,941,567 tons of granite, valued at \$2,162,464.

Of the total output for 1906, 2,967,693 tons, valued at \$2,218,947, were used for road making; 1,865,878 tons, valued at \$1,022,793, for railroad ballast, and 3,162,184 tons, valued at \$2,262,587, for concrete. In 1905, 3,519,224 tons, valued at \$2,519,734, represented the output for road making; 1,168,908 tons, valued at \$658,943, for railroad ballast, and 2,245,235 tons, valued at \$1,745,029, for concrete. These figures show a decrease in 1906 of 551,531 tons in quantity and of \$300,787 in value for road making, but an increase of 696,970 tons

in quantity and of \$363,850 in value for railroad ballast, and an increase of 916,949 tons and \$517,558 for concrete. The large increase of crushed stone for concrete is of especial interest as emphasizing the increased use of concrete in construction.

In 1906 New Jersey ranked first in value of output of crushed stone, followed by Pennsylvania, Massachusetts, California, New York, Connecticut, and Maryland, each State producing over \$250,000; in 1905 the order was New Jersey, California, New York, Massachusetts, Pennsylvania, Maryland, Connecticut, and Virginia. In 1906 New Jersey ranked first in value of road-making material, followed by Massachusetts, New York, Pennsylvania, and Connecticut. Pennsylvania reported the largest value for railroad ballast, followed by Georgia, New Jersey, and North Carolina. California reported the largest value for concrete, followed by New York, New Jersey, Massachusetts, Pennsylvania, Maryland, and Connecticut.

Other uses.—Stone used for "other" purposes includes a large quantity of stone used for jetty work and breakwater work, especially in the States of California, Massachusetts, New York, and Washington. Much of the stone reported as used for other purposes in California and Arizona was used in repairing the break in the Colorado River, which required a large quantity of stone, sand, gravel, and clay.

The following table shows the value of the granite, trap, etc., produced in the United States in 1905 and 1906, by States and Territories and uses:

Value of granite, trap, etc., produced in United States in 1905 and 1906, by States and Territories and uses.

1905.

State or Territory.	Sold in the rough.			Dressed for building.	Dressed for monumental work.	Made into paving blocks.	Curbing.	Flagging.
	Building.	Monu- mental.	Other.					
Arizona.....				\$200	\$3,500			
Arkansas.....	\$580	\$300	\$6,210			\$457	\$5,395	\$5
California.....	37,586	63,502	155,989	304,521	117,605	250,801	86,170	450
Colorado.....	2,495	19,016	283	9,405	23,936		18,375	80
Connecticut.....	163,835	28,238	4,004	230,736	52,125	43,931	22,091	1,383
Delaware.....	6,384	53		14,480		6,836	3,281	133
Georgia.....	89,350	50,038	2,020	101,375	25	296,750	246,543	2,310
Hawaii.....								
Idaho.....	1,500							
Indian Territory.....	1,800							
Maine.....	434,402	77,543	32,032	1,648,687	69,910	324,858	74,701	9,720
Maryland.....	233,716	38,860	6,672	125,177	4,600	38,900	21,742	7,419
Massachusetts.....	201,425	424,944	5,083	824,999	189,131	270,308	92,420	5,750
Minnesota.....	11,804	36,689	1,038	58,083	193,110	98,530	15,815	1,340
Missouri.....	8,424	20,301		9,413	10,500	69,640	2,865	
Montana.....	9,100	7,030		66,500	27,300	3,500	6,000	
New Hampshire.....	76,609	129,685	11,261	254,928	227,799	76,822	25,754	1,655
New Jersey.....	14,446	2,312	140	16,440		58,322		
New York.....	18,124	117		106,852	7,013	20,600	1,520	
North Carolina.....	75,125	5,969	800	228,726	3,142	48,234	70,535	3,773
Oklahoma.....	7,100	3,100	500	4,560	3,200		180	
Oregon.....	10,341	3,049	8,771	5,535	9,850	80	850	
Pennsylvania.....	193,462	1,810	640	71,195		35,026	9,034	
Rhode Island.....	7,050	134,063	1,592	75,688	203,267	82,641	3,660	1,092
South Carolina.....	18,989	29,740	55,957	40,670	14,250	9,604	14,197	1,178
Texas.....	22,935	15,100	20,589	24,800	30,200	250	450	
Utah.....	891	1,785	50	64	550			
Vermont.....	188,391	778,681	11,200	1,093,688	471,093	16,628	7,088	
Virginia.....	31,224	10,415		28,950	37,180	19,220	8,948	2,550
Washington.....	14,322	9,851	523,500	64,215	4,000	420	22,770	
Wisconsin.....	6,600	28,252	150	900	218,639	361,515	2,046	
Total.....	1,888,010	1,920,443	848,481	5,410,787	1,921,925	2,133,873	762,430	38,838

State or Territory.	Crushed stone.			Rubble.	Riprap.	Other.	Total.
	Road making.	Railroad ballast.	Concrete.				
Arizona.....							\$3,700
Arkansas.....	\$18,825	\$10,000	\$35,120	\$9,820	\$3,600		90,312
California.....	295,982	35,629	302,759	6,387	35,880	\$7,557	1,700,818
Colorado.....			200		12		73,802
Connecticut.....	176,749	8,067	116,387	16,921	73,609	11,812	949,888
Delaware.....	36,440	39,779	27,164	993	42,885		178,428
Georgia.....	7,300	77,717	62,763	29,314		5,702	971,207
Hawaii.....		3,542	28,508			1,500	33,550
Idaho.....							1,500
Indian Territory.....							1,800
Maine.....	2,605	96	7,615	5,223	1,675	24,728	2,713,795
Maryland.....	133,599	8,046	212,592	102,733	2,996	19,996	957,048
Massachusetts.....	339,963	9,436	172,303	90,562	18,897	18,108	2,663,329
Minnesota.....	28,501	5,118	23,231	7,579	300	770	481,908
Missouri.....	10,470	15,854	31,182			1,930	180,579
Montana.....			7,000				126,430
New Hampshire.....	16,467			9,910	3,036	4,415	838,371
New Jersey.....	488,379	98,342	147,333	1,041	3,500	4,454	834,709
New York.....	453,051	69,600	70,250	17,000	200	1,450	765,777
North Carolina.....	27,736	56,574	34,161	6,311	2,842	650	564,578
Oklahoma.....				180		100	18,920
Oregon.....	30,194	600	1,550	3,340	11,170		85,330
Pennsylvania.....	187,643	118,669	205,363	5,747	4,664	37,595	870,848
Rhode Island.....	27,061	2,000	15,470	478	30	2,272	556,364
South Carolina.....	900	28,876	70,392	10,630	1,901		297,284
Texas.....			1,000		15,869	1,000	132,193
Utah.....	5,715			4,340	235		13,630
Vermont.....	3,723				40	1,318	2,571,850
Virginia.....	21,175	69,360	166,364	28,961	27,236	807	452,390
Washington.....	9,000	1,638	602	25,580	5,832		681,730
Wisconsin.....	198,256		5,720	366		3,151	825,625
Total.....	2,519,734	658,943	1,745,029	383,446	256,409	149,345	20,637,693

Value of granite, trap, etc., produced in United States in 1905 and 1906, by States and Territories and uses—Continued.

1906.

State or Territory.	Sold in the rough.			Dressed for building.	Dressed for monumental work.	Made into paving blocks.	Curbing.	Flagging.
	Building.	Monu-mental.	Other.					
Arizona.....	\$7,800	\$3,000	\$21,042				\$50	
Arkansas.....	1,000	500	100				11,250	
California.....	67,903	50,541	119,057	\$255,189	\$34,285	\$197,425	66,217	
Colorado.....	13,450	28,508			18,000		4,000	
Connecticut.....	163,351	44,433	13,880	434,915	64,019	62,645	19,064	\$2,235
Delaware.....	9,997			7,629		7,783	7,509	734
Georgia.....	109,215	56,010	400	26,350		123,211	189,524	750
Hawaii.....								
Idaho.....	400							
Maine.....	349,668	78,802	54,179	1,413,486	192,577	336,979	66,786	5,299
Maryland.....	211,524	80,780	9,430	113,693	1,730	51,539	27,745	3,788
Massachusetts.....	236,661	435,280	117,847	1,750,695	289,334	199,457	89,469	4,080
Minnesota.....	23,686	100,086	1,300	141,171	189,319	50,000	13,587	1,850
Missouri.....	199	28,475		25,800		26,295	1,375	
Montana.....	51,020	500		18,700	13,210		13,500	
New Hampshire.....	90,751	91,044	2,337	342,336	98,622	89,878	52,939	9,690
New Jersey.....	38,679	730	500	25,795		53,916		
New York.....	19,729	623	109,750	162,766	4,368		227	
North Carolina.....	62,059	17,477	748	289,705	5,733	33,428	124,499	3,762
Oklahoma.....	5,350	4,070	100	9,500		113	600	640
Oregon.....	5,848	200	24				673	
Pennsylvania.....	216,358	3,935	13,808	20,052		22,980	3,375	74
Rhode Island.....	10,310	159,525	1,387	184,614	171,700	42,532	3,500	600
South Carolina.....	26,910	35,690	25,507	8,564		11,340	45,605	10,700
Texas.....	12,665	20,961	48,349	1,400	44,500	250	500	
Utah.....	1,273	3,500	9					116
Vermont.....	50,869	963,220	1,335	1,424,862	451,222	9,557	6,818	
Virginia.....	18,158	15,804	200		16,936	29,536	14,339	1,216
Washington.....	68,363	16,196	252,068	8,447	366	16,240	20,980	
Wisconsin.....	520	23,664		1,435	226,600	287,823	3,106	5,075
Wyoming.....	600							
Total.....	1,869,316	2,293,554	798,466	6,667,104	1,822,521	1,652,927	787,237	50,609

State or Territory.	Crushed stone.			Rubble.	Riprap.	Other.	Total.
	Road making.	Railroad ballast.	Concrete.				
Arizona.....				\$150			\$32,042
Arkansas.....	\$20,000	\$25,000	\$37,862	8,191	\$15,000		118,903
California.....	144,815	33,819	408,744	12,121	33,982		1,429,207
Colorado.....	332		1,112				65,402
Connecticut.....	231,001	20,750	152,448	6,081	170,060	\$487	1,383,369
Delaware.....	6,814	37,129	48,849	3,962	15,940		146,346
Georgia.....	19,400	150,690	81,400	27,515	7,000	850	792,315
Hawaii.....	4,476	150	6,645			12,075	23,346
Idaho.....							400
Maine.....	9,931		11,504	18,243	1,875	20,692	2,560,021
Maryland.....	125,655	5,803	171,869	52,563	4,290	23,472	883,881
Massachusetts.....	357,309	28,000	216,289	61,567	3,107	1,116	3,790,211
Minnesota.....	31,397	16,700	34,950	19,553	660	1,810	626,069
Missouri.....	300		63,858	150	3,557		150,009
Montana.....	6,000			11,075			114,005
New Hampshire.....	10,350	426	9,918	15,167	2,323	2,350	818,131
New Jersey.....	437,134	139,041	245,864	2,500	5,283	8,668	958,110
New York.....	253,365	45,000	267,076	323	112	64,144	927,483
North Carolina.....	18,691	134,800	60,762	5,688	4,140	17,355	778,847
Oklahoma.....			400	509	2,565		18,847
Oregon.....	34,223	7,111	8,342	2,070	470		58,961
Pennsylvania.....	232,551	289,525	192,638	36,631	169	11,044	1,043,140
Rhode Island.....	41,018		3,765	666	745	2,450	622,812
South Carolina.....	6,825	11,796	56,896	6,665	750	750	247,998
Texas.....	7,200	2,067	13,294		16,875		168,061
Utah.....				50			4,948
Vermont.....	1,725	1,100	472	544			2,941,724
Virginia.....	34,981	64,386	85,077	28,477	31,790		340,900
Washington.....	13,262	9,500	4,963	41,549	8,041		459,975
Wisconsin.....	170,192		77,590	1,453	555	200	798,213
Wyoming.....							600
Total.....	2,218,947	1,022,793	2,262,587	363,463	329,289	167,463	22,306,276

The following table shows the value of the production of granite, trap, etc., in the United States from 1902 to 1906, inclusive:

Value of granite, trap, etc., produced in the United States, by States and Territories, 1902-1906.

State or Territory.	1902.	1903.	1904.	1905.	1906.
Arizona.....	\$3,000	\$3,000	\$2,500	\$3,700	\$32,042
Arkansas.....	12,115	47,136	52,616	90,312	118,903
California.....	1,137,679	1,627,592	1,742,530	1,700,818	1,429,207
Colorado.....	66,023	100,791	91,132	73,802	65,402
Connecticut.....	812,141	1,101,425	854,784	949,888	1,385,369
Delaware.....	276,753	369,166	245,272	178,428	146,346
Georgia.....	803,778	672,947	942,466	971,207	792,315
Hawaii.....	6,688		22,042	33,550	23,346
Idaho.....	12,910	2,750		1,500	400
Indian Territory.....		4,030	5,152	1,800	
Kansas.....					
Maine.....	2,659,450	2,586,765	2,400,509	2,713,795	2,560,021
Maryland.....	758,203	837,787	815,471	957,048	883,881
Massachusetts.....	3,451,397	2,720,066	2,868,305	2,663,329	3,790,211
Michigan.....					
Minnesota.....	478,989	403,906	405,956	481,908	626,069
Mississippi.....			440		
Missouri.....	157,708	150,409	155,716	180,579	150,009
Montana.....	77,050	25,993	33,890	126,430	114,005
Nevada.....	2,090	7,450	1,200		
New Hampshire.....	1,147,097	854,513	927,487	838,371	818,131
New Jersey.....	948,474	943,171	833,518	834,709	958,110
New York.....	651,014	549,015	622,986	765,777	927,483
North Carolina.....	338,750	218,947	297,749	564,578	778,847
Oklahoma.....		5,000	26,930	18,920	18,847
Oregon.....	38,429	118,411	235,213	85,330	58,961
Pennsylvania.....	661,062	829,535	900,530	870,848	1,043,140
Rhode Island.....	734,623	710,291	684,952	556,364	622,812
South Carolina.....	598,848	476,863	382,428	297,284	247,998
South Dakota.....	(a)	(a)	900		
Texas.....	60,003	173,325	348,317	132,193	168,061
Utah.....	1,479	3,803	7,980	13,630	4,948
Vermont.....	1,570,423	1,810,179	2,447,979	2,571,850	2,941,724
Virginia.....	282,046	299,335	510,788	452,390	340,900
Washington.....	147,273	209,095	422,508	681,730	459,975
Wisconsin.....	369,137	573,391	724,422	825,625	798,213
Wyoming.....			557		600
Total.....	18,264,632	18,436,087	20,015,025	20,637,693	22,306,276

^a Value of quartzite included in sandstone.

The following table shows the value of the trap produced in the United States in 1905 and 1906, by States and uses:

Value of trap produced in the United States in 1905 and 1906, by States and uses.

1905.

State.	Building.	Paving.	Crushed stone.			Other.	Total.
			Road mak- ing.	Railroad ballast.	Concrete.		
California.....	\$2,051	\$51,538	\$226,489	\$29,243	\$197,249	\$32,918	\$539,488
Connecticut.....	5,709	948	173,823	8,067	113,977	11,000	313,524
Massachusetts.....	18,080		272,306	905	117,800	2,919	412,010
New Jersey.....	9,496	57,301	483,529	53,892	147,333	6,400	757,951
New York.....	14,400	37,000	444,552	69,600	65,800		631,352
Pennsylvania.....	5,842	3,461	162,112	68,669	142,760	37,385	420,220
Total.....	55,578	150,248	1,762,811	230,376	784,919	90,622	2,074,554

1906.

California.....	\$46,414	\$136,310	\$97,787	\$9,019	\$392,379	\$6,514	\$688,423
Connecticut.....	5,162	340	228,353	20,750	148,439	8,301	411,345
Massachusetts.....	16,540		286,412	28,000	131,343	500	462,795
New Jersey.....	17,660	52,700	432,134	92,728	245,564	16,100	856,886
New York.....			250,215	45,000	264,076	64,144	623,435
Pennsylvania.....	8,907	3,662	201,239	281,525	186,900	11,454	693,687
Total.....	94,683	193,012	1,496,140	477,022	1,368,701	107,013	3,736,571

From this table it appears that the value of trap increased from \$3,074,554 in 1905 to \$3,736,571 in 1906, an increase of \$662,017.

California, Connecticut, Massachusetts, New Jersey, and Pennsylvania increased in value of output, and New York decreased.

Of the crushed stone, the stone for road making decreased from \$1,762,811 in 1905 to \$1,496,140 in 1906, a loss of \$266,671. Railroad ballast increased from \$230,376 in 1905 to \$477,022 in 1906, a gain of \$246,646. Concrete showed the large increase of \$583,782, from \$784,919 in 1905 to \$1,368,701 in 1906.

The following table shows the number and value of paving blocks produced in 1905 and 1906, by States:

Number and value of paving blocks produced in 1905 and 1906, by States and Territories.

State or Territory.	Paving blocks.			
	1905.		1906.	
	Number.	Value.	Number.	Value.
Arkansas.....	11,425	\$457		
California.....	6,504,735	250,801	4,495,391	\$197,425
Connecticut.....	1,045,215	43,931	823,878	62,645
Delaware.....	183,150	6,836	162,281	7,783
Georgia.....	7,946,000	296,750	3,927,500	123,211
Maine.....	8,188,596	324,858	8,658,437	336,979
Maryland.....	869,000	38,900	1,126,082	51,539
Massachusetts.....	6,594,650	270,308	4,936,078	199,457
Minnesota.....	1,487,496	98,530	744,150	50,000
Missouri.....	1,529,364	69,640	624,453	26,295
Montana.....	50,000	3,500		
New Hampshire.....	2,084,202	76,822	2,298,145	89,878
New Jersey.....	1,935,607	58,322	1,752,767	53,916
New York.....	420,800	20,600		
North Carolina.....	1,139,675	48,234	974,330	33,428
Oklahoma.....			2,250	113
Oregon.....	2,000	80		
Pennsylvania.....	820,982	35,026	543,485	22,980
Rhode Island.....	1,503,794	82,641	834,001	42,532
South Carolina.....	348,500	9,604	348,615	11,340
Texas.....	5,000	250	10,000	250
Vermont.....	413,898	16,628	282,930	9,557
Virginia.....	913,440	19,220	1,385,000	29,536
Washington.....	14,000	420	230,000	16,240
Wisconsin.....	6,395,236	361,515	5,110,586	287,823
Total.....	50,406,765	2,133,873	39,270,359	1,652,927

From this table it will be seen that the number and value of paving blocks decreased from 50,406,765 blocks, valued at \$2,133,873, in 1905, to 39,270,359 blocks, valued at \$1,652,927, in 1906, a decrease of 11,136,406 in number and of \$480,946 in value. The average value per thousand was \$42.33 in 1905 and \$42.09 in 1906. Paving blocks vary in price from \$15 per thousand to about \$80 per thousand, according to size and regularity of shape. Quarrymen generally reported that at the prices obtained for the paving blocks it did not pay for making them at the present cost of labor.

In many localities, especially in the New England States, paving blocks are cut from the refuse stone of the larger quarries, the cutter paying a small price for the rough stone, or paying a certain amount for every thousand cut. Some men go around the country and blast and trim up boulders and sell the blocks if there is a demand for them. Many of these men are foreigners, and it is almost impossible to get a record of either the number or the value of the blocks they make except through the firms to which they sell, which are often the large quarrymen.

SANDSTONE.

Sandstone showed more than any other variety of stone the effect of the use of cement for foundations, building material, paving, flagging, and curbing, and the use of concrete blocks for buildings, and this effect was not offset, as in granite and limestone, by any other great increase in output, gneiss rock being the only product showing a decided increase in value of production. As with the other kinds of stone, scarcity and high price of labor and cost of fuel and supplies lessened the activity of the trade.

The total value of the output of sandstone in 1906 was reported as \$9,169,337; in 1905 the value of the output was \$10,006,774, a decrease of \$837,437 for 1906. The total value for 1906 is the smallest since 1901, when the value of the total output was \$8,138,680.

Pennsylvania, New York, and Ohio, with values, respectively, of \$2,724,874, \$1,905,892, and \$1,426,645, contributed the largest quantity of sandstone to the total output of the United States, these three States producing 66.06 per cent of the total in 1906. In 1905 the rank of the States was the same, Pennsylvania's production being valued at \$2,487,939, New York's at \$1,831,756, and Ohio's at \$1,744,472, an increase in 1906 of \$236,935 for Pennsylvania, an increase of \$74,136 for New York, and a decrease of \$317,827 for Ohio. The production of these three States in 1905 was 60.6 per cent of the total.

In New York and Pennsylvania part of the sandstone output is known to the trade as bluestone, the production of which is given in a separate table. A small part of New York's output in 1906 is really the value of the Connecticut output, Connecticut's production being included in that for New York in order to conceal individual figures.

Of the other States producing sandstone, California, Colorado, Minnesota, Massachusetts, and New Jersey report the largest output, each, however, showing a decrease for 1906. An increase for 1906 is shown by Alabama, Indiana, Nebraska, New York, Oklahoma, Oregon, Pennsylvania, Tennessee, Utah, Virginia, Washington, and Wisconsin; a decrease is shown in the other States.

Building stone.—The chief use of sandstone is for building purposes, the output for which, including both the rough and the cut or sawed stone sold by the producers, was valued at \$4,275,669 in 1906 and at \$4,702,189 in 1905, a decrease of \$426,520. These figures for 1906 included rough stone valued at \$1,765,649 and cut or sawed stone valued at \$2,510,020, and for 1905 rough stone valued at \$2,114,270 and cut or sawed stone valued at \$2,587,919, a decrease of \$348,621 for rough building stone and of \$77,899 for the dressed stone. Pennsylvania, Ohio, California, and New York, with values of \$1,317,290, \$867,111, \$514,173, and \$472,284, respectively, were the ranking States in the building-sandstone output in 1905; in 1906 the order was Pennsylvania, New York, Ohio, and California, with values of \$1,346,140, \$724,164, \$659,611, \$400,083, respectively, Ohio and New York changing places, with increases in 1906 of \$28,850 for Pennsylvania and \$251,880 for New York and with decreases of \$207,500 for Ohio and \$114,090 for California. The Pennsylvania output includes a considerable quantity of fine-grained sandstone known locally as bluestone, which, besides the common use for construction work, is

employed extensively for the trimming of buildings, such as sills, lintels, copings, and steps. The value of this stone for 1906 was \$268,290, as compared with \$292,062 in 1905, a decrease of \$23,772. The rest of the Pennsylvania building-stone output is largely for railroad bridges, being used by the Pennsylvania Railroad and other railroads in renewing bridges and elevating the tracks. It is also used in the construction and the ornamentation of buildings.

The building stone from Ohio is used chiefly in the construction of buildings; some is used for heavy bridge masonry.

The California building stone is used chiefly for regular construction work, but some is used for bridges. The decrease for 1906 is due to the demoralized condition of trade incident to the earthquake and the fire.

The New York sandstone output, like that of Pennsylvania, includes a quantity of bluestone. In 1906 the value of this bluestone from New York was \$492,552, an increase of \$141,547, as compared with \$351,005 in 1905.

Rubble.—Rubble used in all kinds of rough building of walls and foundations decreased from \$527,918 in 1905 to \$525,108 in 1906, a loss of \$2,810. The greater part of this sandstone is from Pennsylvania.

Paving.—Paving blocks to the value of \$694,995 was produced in 1906, a decrease of \$46,687 from the 1905 output, which was \$741,682. New York and Pennsylvania furnished the greater part of this material.

Flagstone.—Flagging to the value of \$1,097,438 was produced in 1906, a decrease of \$123,910, as compared with \$1,221,348, reported in 1905. Ohio, New York, and Pennsylvania, with outputs, respectively, of \$383,457, \$366,423, and \$277,623, furnished most of this class of stone, practically all of the New York and Pennsylvania stone of this class being bluestone.

Curbstone.—Curbing to the value of \$1,074,369 was reported in 1906, an increase of \$29,386 over \$1,044,983 in 1905. New York, Pennsylvania, and Ohio, with outputs, respectively, of \$375,539, \$305,470, and \$251,509, were the chief States producing this class of stone. About half of the New York and Pennsylvania output for curbing was bluestone.

Crushed stone.—In 1906 1,257,508 tons of crushed sandstone, valued at \$889,894, were reported, as compared with 1,593,087 tons in 1905, valued at \$1,008,270, a decrease in 1906 of 335,579 tons in quantity and of \$118,376 in value. The greater part of the crushed stone was for concrete, a use which increased from 371,415 tons, valued at \$311,044, in 1905 to 537,138 tons, valued at \$411,300, in 1906, a gain of 165,723 tons and of \$100,256. Crushed sandstone for road making decreased from 452,268 tons, valued at \$355,269, in 1905, to 358,076 tons, valued at \$299,877, in 1906, a decrease of 94,192 tons and of \$55,392. Sandstone for railroad ballast decreased from 769,404 tons, valued at \$341,957, in 1905, to 362,294 tons, valued at \$178,717, in 1906, a decrease of 407,110 tons and of \$163,240. Pennsylvania, California, and Massachusetts produce the most of this class of stone.

Ganister.—Ganister rock is reported in 1906 from but six States, Pennsylvania, Colorado, Wisconsin, Ohio, Maryland, and Illinois, in the order of value of output. In 1905 seven States reported output

of this material, Pennsylvania, Colorado, Wisconsin, Ohio, Maryland, Illinois, and Kansas, in the order of value of output. In 1906 the production increased \$97,943, from \$186,123 in 1905 to \$284,066 in 1906.

Riprap.—Riprap valued at \$290,952 was reported in 1905, and at \$231,654 in 1906, a decrease of \$59,298. Pennsylvania, Texas, and Ohio reported the greater part of this output.

Other purposes.—Sandstone for other purposes, valued at \$96,144, was reported in 1906, as against \$283,309 in 1905, a decrease of \$187,165 in 1906. This includes stone for monumental work and for posts and coverings.

The total output does not include sandstone made into abrasives, such as grindstones, whetstones, oilstones, and pulpstones, nor does it include sandstone ground into sand and used for glass sand, molding sand, and polishing sand.

The following table shows the value of the sandstone production of the United States in 1905 and 1906, by States and Territories and uses:

Value of sandstone produced in the United States in 1905 and 1906, by States and Territories and uses.

1905.

State or Territory.	Rough building.	Dressed building.	Crushed stone.			Ganister.	Riprap.
			Road making.	Railroad ballast.	Concrete.		
Alabama.....	\$100						\$24,507
Arizona.....		\$16,083			\$229		41,334
Arkansas.....	6,372	6,229	\$900		27,600		540
California.....	57,823	456,350	92,605	\$12,202			
Colorado.....	209,891	20,590			3,833	\$32,000	1,850
Connecticut.....	51,382	5,789					45
Idaho.....	12,940	4,300					200
Illinois.....	15,324	7,875	150			480	408
Indiana.....	5,575	6,200					1,500
Indian Territory.....	300	1,250					
Iowa.....	7,165	422	300		50		113
Kansas.....	30,868	4,838				100	35
Kentucky.....	77,117	28,225	12,500	111,920			1,047
Maryland.....	4,904			80		8,000	
Massachusetts.....	55,964	35,269	157,244		115,924		
Michigan.....	64,056	36,035					
Minnesota.....	24,610	58,853	4,000	140	12,800		4,236
Missouri.....	15,890	4,039	75		35		1,568
Montana.....	9,882	30,072			1,200		612
Nebraska.....	108						
Nevada.....	1,500						
New Jersey.....	161,200	27,868	7,650		9,100		375
New Mexico.....	1,820	3,500		85,000	1,575		
New York.....	210,760	261,524	5,259	3,500	28,934		23,875
North Carolina.....	150	3,858					
North Dakota.....	955	100					
Ohio.....	405,976	461,135	15,207	2,200	10,785	9,020	37,880
Oklahoma.....	9,074	1,950	175		185		200
Oregon.....	520	389	26				100
Pennsylvania.....	444,768	872,522	46,911	119,392	62,371	122,909	81,455
South Dakota.....	39,491	65,780	804		12,000		14,701
Tennessee.....	1,035	5,000	100				
Texas.....	7,858	18,425		1,500	19,375		46,485
Utah.....	10,360	1,058					
Virginia.....	2,000						
Washington.....	55,695	15,000					3,100
West Virginia.....	48,887	50,091	5,525	4,273	4,638		395
Wisconsin.....	42,864	76,160	5,838		375	13,614	4,391
Wyoming.....	19,086	540		1,750	35		
Total.....	2,114,270	2,587,919	355,269	341,957	311,044	186,123	290,952

Value of sandstone produced in the United States in 1905 and 1906, by States and Territories and uses—Continued.

1905—Continued.

State or Territory.	Rubble.	Paving.	Flagging.	Curbing.	Other.	Total.
Alabama.....	\$3,500					\$28,107
Arizona.....	7,912					65,558
Arkansas.....	7,950	\$300	\$1,550	\$6,720		58,161
California.....	37,437		1,350		\$27,901	685,668
Colorado.....	24,712	16,169	91,750	46,352	5,882	453,029
Connecticut.....	5,402					62,618
Idaho.....	4,825					22,265
Illinois.....	2,360	2,100	118	300		20,115
Indiana.....	1,555		279	312		15,421
Indian Territory.....	648					2,198
Iowa.....	640		250	75	320	9,335
Kansas.....	1,159	40	25,139	3,655	13,783	79,617
Kentucky.....	9,330	40	34,650	2,750	3,000	280,579
Maryland.....						12,984
Massachusetts.....	2,660	400				367,461
Michigan.....	10,332				12,700	123,123
Minnesota.....	35,569	131,883	7,200	14,812	537	294,640
Missouri.....	3,013	30	288	128	2,620	27,686
Montana.....	3,218				132	45,116
Nebraska.....					12	120
Nevada.....						1,500
New Jersey.....	50,000		13,000	12,200	13,326	294,719
New Mexico.....	2,327		300		7,000	101,522
New York.....	15,347	378,455	354,216	395,124	154,762	1,831,756
North Carolina.....	475					4,483
North Dakota.....						1,055
Ohio.....	60,672	1,600	463,757	270,489	5,751	1,744,472
Oklahoma.....	780	175	100	215		12,914
Oregon.....					194	1,229
Pennsylvania.....	117,733	107,854	227,181	269,848	14,995	2,487,939
South Dakota.....	15,262	43,440	270	1,660		193,408
Tennessee.....	2,500			50	30	8,715
Texas.....	5,788	4,000		3,360	16,490	123,281
Utah.....	13,900	10,316	740	6,480	575	43,429
Virginia.....						2,000
Washington.....	6,435	44,680				124,910
West Virginia.....	46,565			7,475	2,860	171,309
Wisconsin.....	17,061			1,248	190	161,741
Wyoming.....	10,851	200	500	380	249	33,591
Total.....	527,918	741,682	1,221,348	1,044,983	283,309	10,006,774

1906.

State or Territory.	Rough building.	Dressed building.	Crushed stone.			Ganister.	Riprap.
			Road making.	Railroad ballast.	Concrete.		
Alabama.....							\$25,492
Arizona.....	\$4,358						1,625
Arkansas.....	2,879	\$1,746	\$977		\$22,952		350
California.....	100,483	299,600	178,548	\$585	33,942		63
Colorado.....	67,139	15,301		7,600	25,027	\$40,522	1,314
Connecticut.....							
Idaho.....	5,088	756					
Illinois.....	7,735	4,885	200			1,500	705
Indiana.....	4,550	19,240					1,200
Indian Territory.....	467						
Iowa.....	4,184	30	150				32
Kansas.....	23,496	700					
Kentucky.....	64,161	41,762		7,500	500		2,875
Maryland.....	3,661		8		100	5,760	
Massachusetts.....	53,016	52,402	33,208		112,885		
Michigan.....	35,272	18,950					770
Minnesota.....	13,112	58,789	11,619		37,918		7,531
Missouri.....	6,802	7,298					1,400
Montana.....	4,257	30,477					465
Nebraska.....	374				18		6,500
New Jersey.....	119,413	21,250	9,400	200	3,150		1,000
New Mexico.....	4,040	3,225		30,324			
New York.....	230,102	494,062	6,600		2,365		2,040
North Carolina.....		2,000					
North Dakota.....	10						
Ohio.....	310,256	349,355	6,800	19,300	13,575	6,760	38,350
Oklahoma.....	22,908	8,650	50		2,075		50

Value of sandstone produced in the United States in 1905 and 1906, by States and Territories and uses—Continued.

1906—Continued.

State or Territory.	Rough building.	Dressed building.	Crushed stone.			Ganister.	Riprap.
			Road making.	Railroad ballast.	Concrete.		
Oregon.....	\$25,845	\$105					
Pennsylvania.....	510,299	835,841	\$34,000	\$108,391	\$103,120	\$196,804	\$66,626
South Dakota.....	26,101	30,356	180	157	14,000		13,964
Tennessee.....	250	10,531		100			
Texas.....	8,713	21,302	9,000	1,000	23,850		40,983
Utah.....	600	2,014					
Virginia.....	1,250	250			3,600		
Washington.....	41,982	59,700					1,923
West Virginia.....	27,169	32,186	3,734	3,500	12,105		1,076
Wisconsin.....	21,071	82,357	5,403		43	32,730	15,320
Wyoming.....	14,606	4,900			75		
Total.....	1,765,649	2,510,020	299,877	178,717	411,300	284,066	231,654

State or Territory.	Rubble.	Paving.	Flagging.	Curbing.	Other.	Total.
Alabama.....	\$14,975					\$40,467
Arizona.....	1,036				\$26,130	33,149
Arkansas.....	2,225	\$25	\$4,636	\$19,873	40	55,703
California.....	18,050			8,642	2,253	642,166
Colorado.....	29,655	16,225	33,703	44,543	5,515	286,544
Connecticut.....						(a)
Idaho.....	6,125					11,969
Illinois.....	1,500	2,500	50	50		19,125
Indiana.....	1,350		150	4,250		30,740
Indian Territory.....	140	8				615
Iowa.....	460		30	113	602	5,601
Kansas.....	1,975	2,450	6,546	6,297	1,345	42,809
Kentucky.....	3,450	1,200	1,875	1,800		125,123
Maryland.....				4		9,533
Massachusetts.....	6,860				2,350	260,721
Michigan.....	10,403					65,395
Minnesota.....	31,209	72,012	2,708	42,193	8,542	285,633
Missouri.....	3,115	100	418	318	1,500	20,951
Montana.....	2,110				153	37,462
Nebraska.....		7				6,899
New Jersey.....	45,000	500	5,650	2,950	6,629	215,142
New Mexico.....	3,010			375	1,600	42,574
New York.....	48,362	374,278	366,423	375,539	6,121	^b 1,905,892
North Carolina.....	895				636	3,531
North Dakota.....	4	20			10	44
Ohio.....	36,696	350	383,457	251,509	10,247	1,426,645
Oklahoma.....	6,263		115	60	75	40,246
Oregon.....						25,950
Pennsylvania.....	152,971	112,456	277,623	305,470	21,273	2,724,874
South Dakota.....	27,875	32,300	654	320	59	145,966
Tennessee.....	3,000		75	150	30	14,136
Texas.....	5,903			630	152	111,533
Utah.....	17,645	16,750	20	400	100	37,529
Virginia.....						5,100
Washington.....	2,410	62,922			563	169,500
West Virginia.....	14,418	592	10,185	8,125	219	113,369
Wisconsin.....	23,084	100	1,120	758		181,986
Wyoming.....	2,934	200	2,000			24,715
Total.....	525,108	694,995	1,097,438	1,074,369	96,144	9,169,337

^a Included in New York.

^b Includes Connecticut.

The following table shows the value of the sandstone production in the United States from 1902 to 1906, inclusive, by States and Territories:

Value of sandstone production in the United States, 1902-1906, by States and Territories.

State or Territory.	1902.	1903.	1904.	1905.	1906.
Alabama.....	\$42,706	\$42,933	\$12,788	\$28,107	\$40,467
Arizona.....	107,910	526,875	91,960	65,558	33,149
Arkansas.....	85,917	61,172	63,950	58,161	55,703
California.....	462,328	762,327	735,662	685,668	642,166
Colorado.....	366,161	389,132	281,142	453,029	286,544
Connecticut.....	128,579	119,417	117,696	62,618	(a)
Georgia.....	1,250				
Idaho.....	13,777	11,856	9,320	22,265	11,969
Illinois.....	32,200	26,293	47,377	29,115	19,125
Indiana.....	37,593	32,651	22,681	15,421	30,740
Indian Territory.....				2,198	615
Iowa.....	15,061	19,011	9,300	9,335	5,600
Kansas.....	105,509	102,128	130,516	79,617	42,809
Kentucky.....	128,470	93,742	93,622	280,579	125,123
Louisiana.....			8,315		
Maryland.....	15,405	2,170	8,998	12,984	9,533
Massachusetts.....	487,366	372,478	320,861	367,461	260,721
Michigan.....	188,073	121,350	74,868	123,123	65,395
Minnesota.....	347,472	363,262	319,209	294,640	285,433
Missouri.....	56,990	49,402	44,455	27,686	20,951
Montana.....	85,152	68,036	64,232	45,116	37,462
Nebraska.....	168	1,067	142	120	6,899
Nevada.....	6,115	2,370	10,558	1,500	
New Jersey.....	406,726	364,337	236,426	294,719	215,142
New Mexico.....	12,291	7,510	133,390	101,522	42,574
New York.....	^b 1,408,699	^b 1,756,501	^b 1,755,524	^b 1,831,756	^{b c} 1,905,892
North Carolina.....	4,825	600	250	4,483	3,531
North Dakota.....				1,055	44
Ohio.....	2,078,754	1,793,379	1,808,062	1,744,472	1,426,645
Oklahoma.....		6,500	2,995	12,914	40,246
Oregon.....	25,309	2,912	6,186	1,229	25,950
Pennsylvania.....	^b 2,800,108	^b 3,255,073	^b 2,641,510	^b 2,487,939	^b 2,724,874
South Dakota.....	110,789	163,067	338,970	193,408	145,966
Tennessee.....	7,670	20,649	24,868	8,715	14,136
Texas.....	165,565	114,381	209,313	123,281	111,533
Utah.....	105,911	71,279	70,168	43,429	137,529
Virginia.....	2,500	4,471	13,522	2,000	5,190
Washington.....	30,725	47,430	88,185	124,910	169,500
West Virginia.....	423,532	252,204	287,381	171,309	113,369
Wisconsin.....	207,086	142,445	158,503	161,741	181,986
Wyoming.....	90,691	91,849	30,986	33,591	24,715
Total.....	10,594,483	11,262,259	10,273,891	10,006,774	9,169,337

^a Included in New York.

^b Includes bluestone.

^c Includes Connecticut.

The following table shows the value and uses of the bluestone produced in New York and Pennsylvania in 1905 and 1906:

Value and uses of bluestone produced in New York and Pennsylvania in 1905 and 1906.

1905.

State.	Building purposes.	Flagging.	Curbing.	Crushed stone.	Other purposes.	Total value.
New York.....	\$351,005	\$330,566	\$273,534		\$150,359	\$1,105,464
Pennsylvania.....	292,062	216,435	157,391	\$38,877	121,396	826,161
Total.....	643,067	547,001	430,925	38,877	271,755	1,931,625

1906.

State.	Building purposes.	Flagging.	Curbing.	Crushed stone.	Other purposes.	Total value.
New York.....	\$492,552	\$365,483	\$235,791	\$600	\$44,508	\$1,138,934
Pennsylvania.....	268,290	265,481	170,103	54,994	124,096	882,964
Total.....	760,842	630,964	405,894	55,594	168,604	2,021,898

From this table it appears that the variety of sandstone known as bluestone in New York and Pennsylvania increased somewhat in value, from \$1,931,625 in 1905 to \$2,021,898 in 1906, a gain of \$90,273. This increase was in the value of building stone and flagging, which with curbing are the chief uses of this class of stone. Both New York and Pennsylvania increased in value of output in 1906, New York from \$1,105,464 in 1905 to \$1,138,934 in 1906, or \$33,470, and Pennsylvania from \$826,161 in 1905 to \$882,964 in 1906, or \$56,803. The bluestone output of these two States in 1906 represented 22.05 per cent of the total sandstone output of the United States. New Jersey and West Virginia also produced sandstone known to the trade as bluestone.

MARBLE.

The marble output in the United States in 1906 was valued at \$7,582,938, as compared with \$7,129,071 in 1905, an increase of \$453,867.

Vermont produces the greater part of the marble of the United States, the value reported by this State being \$4,576,913 in 1906 as compared with \$4,410,820 in 1905, an increase of \$166,093. The increase in 1906 was smaller than in 1905, a loss due to the fact that considerably less rough stone was sold for building in 1906 than in 1905. The increase in value of Vermont marble from 1902, when the value was \$2,628,164, to 1906 has been \$1,948,749. The increase in 1905 over 1904, when the figures were \$4,004,669, was \$406,151. The output of this State represented 60.36 per cent of the total marble output of the United States in 1906 and 61.87 per cent in 1905. The marble from this State as sold by the producers is principally dressed stone for monumental, building, and interior work, and for electrical work, mosaic work, etc., and represented, in 1906, about 1,400,000 cubic feet.

Georgia ranks second in the marble-producing States, its value of output, \$919,356 in 1906, representing 12.12 per cent of the total of the United States; in 1905 the output was \$774,550, or 10.86 per cent, a gain of \$144,806. The greater part of this stone is sold rough to the manufacturers and contractors for building and monumental work, and represented about 875,000 cubic feet in 1906.

The next States in order of output in 1906 were Tennessee, with an output of \$635,821, representing about 375,000 cubic feet; New York with \$557,954, and Massachusetts with \$271,934; in 1905 New York, with an output of \$795,721, exceeded Tennessee, whose output was \$582,229; and the output of Massachusetts in 1905 was but \$166,360, an increase for 1906 of \$53,592 for Tennessee, a decrease for New York of \$237,767, and an increase for Massachusetts of \$105,574. In 1906 Alabama, Alaska, Arkansas, California, Maryland, Nevada, Pennsylvania, and Utah increased in value of output of marble, while New Mexico, Washington, and Wyoming decreased. The output from Alabama, Alaska, Arkansas, and Nevada represented either new or renewed operations. As to Alaska only the figures for rough stone are included.

Missouri produced some marble in 1906, but the figures are included in those for limestone to avoid disclosure of individual production.

Pennsylvania's output includes a production of serpentine from Northampton County, and small quantities of serpentine are also included in the report from Georgia.

The outputs of California, New Mexico, Utah, and Wyoming include small quantities of onyx.

The greater part of the marble output is for building and monumental work, the values for the two being nearly equal in 1906.

Building stone.—The figures for 1906 were, for building stone, rough and dressed, \$2,782,620, a decrease of \$145,020 from the figures for 1905, which were \$2,927,640. The total includes \$1,222,695 for rough building and \$1,559,925 for dressed building; in 1905 the rough building marble sold was valued at \$1,759,190 and the dressed building at \$1,168,450, showing for 1906 a decrease of \$536,495 for rough stock and an increase of \$391,475 in dressed marble. The value of Vermont's building marble, \$1,163,945, represented 41.83 per cent of the total; the Georgia output, valued at \$487,856, represented 17.53 per cent, and the New York output, valued at \$363,713, 13.07 per cent of the total.

Monumental stone.—In 1906 the total monumental marble was valued at \$2,657,813 and in 1905 at \$2,270,217, an increase of \$387,596. In 1906 the total includes \$442,941 as the value of rough monumental stock and \$2,214,872 the value of dressed monumental stone; the corresponding figures for 1905 are \$1,099,938 for rough monumental stone and \$1,170,279 for dressed stone, a decrease of \$656,997 for rough stock and an increase of \$1,044,593 for dressed stone. Vermont, with a value of \$2,060,533 for this class of stone, produced 77.53 per cent of the total; Georgia and New York ranked next in production of monumental stone.

Ornamental stone.—The greater part of the small quantity of ornamental marble was produced in Vermont, and this stone increased in value from \$13,643 in 1905 to \$44,523 in 1906.

Interior stone.—Vermont, Tennessee, and Massachusetts produced most of the marble for interior work, the total value for 1906 being \$1,722,445, as against \$1,682,651 for 1905, an increase of \$39,794 in 1906.

Other marble.—Rough stone for other purposes includes chiefly waste stone sold to lime burners, carbonic-acid factories, pulp mills, and for road material. The dressed stone for other purposes includes considerable stone for electrical work and mosaics.

The following table shows the value of the marble produced in the United States in 1905 and 1906, by States and Territories and uses:

Value of the marble product, 1905 and 1906, by States and Territories and uses.

State or Territory.	Rough.			Dressed.					Total.
	Build- ing.	Monu- mental.	Other pur- poses.	Build- ing.	Monu- mental.	Orna- men- tal.	Interior decora- tion.	Other pur- poses.	
Alaska.....					\$700	\$10			\$710
Arkansas.....	\$750	\$250							1,000
California.....	4,390	2,075	\$1,300	\$5,000	7,575	200	\$75,000		95,540
Georgia.....	370,047	275,000	72,500	45,421	11,582				774,550
Maryland.....	7,168		3,930	90,782			36,524		138,404
Massachusetts.....	11,622		6,828	15,915			131,995		166,360
New Mexico.....	300			1,500	400				2,200
New York.....	214,023	80,916	13,677	391,037	96,068				795,721
Pennsylvania.....	8,986	750	4,200	59,951	24,000				97,887
Tennessee.....	237,399	830	500	4,000	11,000		323,500	\$5,000	582,229
Utah.....	600				550				1,150
Vermont.....	903,905	740,117	25,479	554,844	1,015,904	13,433	1,055,632	101,506	4,410,820
Washington.....							60,000		60,000
Wyoming.....					2,500				2,500
Total.....	1,759,190	1,099,938	128,414	1,168,450	1,170,279	13,643	1,682,651	106,506	7,129,071

Value of the marble product, 1905 and 1906, by States and Territories and uses—Cont'd.

1906.

State or Territory.	Rough.			Dressed.					Total.
	Build- ing.	Monu- mental.	Other pur- poses.	Build- ing.	Monu- mental.	Orna- men- tal.	Interior decora- tion.	Other pur- poses.	
Alabama.....	\$26,500			\$48,500	\$10,000				\$85,000
Alaska.....									(a)
Arkansas.....	7,000	\$2,400		7,500					16,900
California.....	10,638	5,210		2,400	8,300	\$2,000	\$73,000	\$1,500	103,048
Georgia.....	425,356	332,500	\$75,000	62,500	24,000				919,356
Maryland.....	91,000	16,400	9,495	59,600					176,495
Massachusetts.....	1,995	15	10,600	113,380	100		140,844	5,000	271,934
Missouri.....									(b)
Nevada.....	5,000								5,000
New Mexico.....		500							500
New York.....	240,853	30,200	21,846	122,860	140,195		2,000		557,954
Pennsylvania.....	16,306	560	4,000	125,766	13,500	5,000	6,500		171,632
Tennessee.....	210,421			40,100	6,000		358,100	21,200	635,821
Utah.....		1,400							1,400
Vermont.....	186,626	52,756	4,007	977,319	2,007,777	32,523	1,097,001	218,304	4,576,913
Washington.....		1,000	3,985		5,000	5,000	45,000		^c 59,985
Wyoming.....	1,000								1,000
Total.....	1,222,695	442,941	129,533	1,559,925	2,214,872	44,523	1,722,445	246,004	7,582,938

^a Included in Washington.

^b Included in limestone to prevent disclosure of individual figures.

^c Includes Alaska.

The following table shows the value of the marble produced in the United States from 1902 to 1906, inclusive, by States and Territories:

Value of marble produced in the United States, 1902-1906, by States and Territories.

State or Territory.	1902.	1903.	1904.	1905.	1906.
Alabama.....	(a)	(a)	(a)		\$85,000
Alaska.....			(a)	\$710	(b)
Arizona.....		(a)	(a)		
Arkansas.....	(a)		(a)	1,000	16,900
California.....	\$92,298	\$78,329	\$87,659	95,540	103,048
Connecticut.....	(a)	(a)	(a)		
Georgia.....	660,517	565,605	690,714	774,550	919,356
Maryland.....	(a)	83,672	73,814	138,404	176,495
Massachusetts.....	165,489	154,228	183,388	166,360	271,934
Missouri.....		(a)	(a)		(c)
Montana.....	(a)				
Nevada.....					5,000
New Mexico.....	(a)	(a)	4,250	2,200	500
New York.....	577,298	748,160	565,987	795,721	557,954
North Carolina.....		4,365	2,741		
Pennsylvania.....	160,423	93,200	90,390	97,887	171,632
Tennessee.....	518,256	485,905	505,259	582,229	635,821
Utah.....	(a)	3,200	3,950	1,150	1,400
Vermont.....	2,628,164	3,011,505	4,004,669	4,410,820	4,576,913
Washington.....	61,176	40,117	23,098	60,000	59,985
Wyoming.....		3,100	2,000	2,500	1,000
Other States.....	^d 180,561	^e 91,300	^f 59,916		
Total.....	5,044,182	5,362,686	6,297,835	7,129,071	7,582,938

^a Included in "Other States."

^b Included in Washington.

^c Included in limestone.

^d Includes Alabama, Arkansas, Connecticut, Maryland, Montana, New Mexico, and Utah.

^e Includes Alabama, Arizona, Connecticut, Missouri, and New Mexico.

^f Includes Alabama, Alaska, Arizona, Arkansas, Connecticut, and Missouri.

The following table shows the various uses to which the marble quarried in 1902, 1903, 1904, 1905, and 1906 was put:

Distribution and value of output of marble, 1902-1906, among various uses.

Use.	1902.	1903.	1904.	1905.	1906.
Sold by producers in rough state.....	\$2,275,429	\$2,454,263	\$2,599,052	\$2,987,542	\$1,795,169
Dressed for building.....	1,038,302	1,111,072	988,671	1,168,450	1,559,925
Ornamental purposes.....	7,300	51,359	21,554	13,643	44,523
Dressed for monumental work.....	956,870	1,032,339	1,211,389	1,170,279	2,214,872
Interior decoration in buildings.....	679,913	663,553	1,257,963	1,682,651	1,722,445
Other uses.....	86,368	20,100	219,206	106,506	246,004
Total.....	5,044,182	5,362,686	6,297,835	7,129,071	7,582,938

From this table it appears that while the rough marble sold to manufacturers, dealers, and contractors, decreased in value, the dressed stone of all kinds sold by the quarrymen increased.

LIMESTONE.

The value of the limestone in this report does not include the value of stone burned into lime or the value of the lime burned from the stone, this being in a special report on lime. However, a considerable quantity of limestone, valued at \$822,330, is included, more or less of which was eventually burned into lime and used by alkali works, sugar refineries, glass factories, paper mills, carbonic-acid plants, or burned for use as fertilizer on land. A large quantity of limestone used in the manufacture of Portland cement is also not included in this report, as its value enters into and is included in the value of the cement.

The total limestone output increased in value from \$26,025,210 in 1905 to \$27,320,243 in 1906, an increase of \$1,295,033.

Limestone crushed for concrete, railroad ballast, and macadam increased in value, as did limestone for furnace flux, paving, curbing, and for use in the manufacture of sugar, paper, carbonic acid, and alkalies; limestone for building, flagstone, rubble, and riprap, decreased in value. Limestone producers, especially those selling stone for building, rubble, curbing, and flagstones, report the increased use of cement and concrete, and the increased cost of production on account of high price of supplies and wages. The producers of limestone for flux, crushed stone, and stone for use in the arts report increased demand at higher prices.

The chief States producing limestone in 1906 were, in order, Pennsylvania, Indiana, Ohio, Illinois, New York, and Missouri, each reporting over \$1,900,000. The total output of these six States amounted to \$18,751,122, or 68.63 per cent of the total. In 1905 the rank of these six principal producing States was Pennsylvania, Illinois, Indiana, Ohio, Missouri, and New York, their combined output being \$18,260,577, or 70.16 per cent of the total. The other States reporting a value over \$450,000 in 1906 were, in order of output, Wisconsin, Kansas, Kentucky, Michigan, Minnesota, West Virginia, Alabama, Iowa, and Tennessee. In 1905 these States ranked as follows: Kansas, Wisconsin, Kentucky, West Virginia, Minnesota, Michigan, Alabama, and Iowa.

In 1906 twenty-seven States and Territories—Alabama, California, Colorado, Georgia, Indiana, Indian Territory, Iowa, Kentucky, Maryland, Michigan, Minnesota, Montana, Nebraska, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Dakota, Tennessee, Texas, Utah, Virginia, Wisconsin, Wyoming—increased in the value of their limestone output; the remaining States—Arizona, Arkansas, Connecticut, Florida, Idaho, Illinois, Kansas, Maine, Massachusetts, Missouri, Oklahoma, Oregon, Vermont, Washington, and West Virginia—showed decreases.

Crushed stone.—The greatest item in value of the limestone production is for stone crushed and used for road making, railroad ballast, and concrete, which was valued at \$11,073,265, representing 20,286,589 short tons of crushed stone; in 1905 these figures were 19,334,168 short tons, valued at \$10,487,638, an increase of 952,421 tons in quantity and of \$585,627 in value. In 1906 the total was divided into 6,685,781 tons, valued at \$3,857,500, for road making and macadam; 8,106,850 tons, valued at \$3,899,396, for railroad ballast; and 5,493,958 tons, valued at \$3,316,369, for concrete, which, compared with the itemized output for 1905—road making, 6,446,518 tons, valued at \$3,837,041; railroad ballast, 8,167,261 tons, valued at \$3,826,811; and concrete, 4,720,389 tons, valued at \$2,823,786—shows an increase of 239,263 tons and of \$20,459 for road making; a decrease of 60,411 tons in quantity, with an increase of \$72,585 in value for railroad ballast; and the very significant increase of 773,569 tons and of \$492,583 for concrete.

Illinois ranked first in 1906 in the production of crushed limestone, followed by Ohio, New York, Pennsylvania, Missouri, Indiana, Kansas, Kentucky, and Wisconsin, each reporting values varying from \$1,785,064 to \$447,431, the nine States representing 83.83 per cent of the total quantity and 83.49 per cent of the total value of crushed limestone.

Ohio produced the most crushed limestone for road making, followed by Illinois and New York; Pennsylvania the most railroad ballast, followed by Kansas and Ohio; and Illinois, the most crushed stone for concrete, followed by Pennsylvania and New York.

Furnace flux.—The next greatest value shown by the figures representing the production of limestone is that for furnace flux, which was \$7,612,692 in 1906, as compared with \$7,004,265 in 1905, an increase for 1906 of \$608,427. These figures represent outputs of 16,077,202 long tons in 1906, and 15,387,891 long tons in 1905, an increase in 1906 of 689,311 tons. Pennsylvania, Ohio, West Virginia, and Alabama are the ranking States in this class of material, Pennsylvania in 1906 producing 41.62 per cent of the total value of the flux. The average value of flux per long ton for 1906 was 47 cents.

Building stone.—Limestone for building purposes, including rough and dressed stone sold by producers, was valued at \$5,092,916 in 1906, compared with \$5,312,183 in 1905, a decrease of \$219,267. The rough building stone sold by the quarrymen in 1906 was valued at \$2,726,897, the dressed stone at \$2,366,019; the figures for 1905 were, rough stone, \$3,114,446; cut or sawed stone, \$2,197,737, a decrease in value of rough building stone sold in 1906 of \$387,549 and an increase in the value of sawed or cut stone of \$168,282.

Indiana, with a total output of building stone valued at \$2,636,421, produced 51.77 per cent of the total building limestone in 1906; in 1905 the building limestone from this State was valued at \$2,492,960, or 46.93 per cent of the total, an increase of \$143,461 for the State. This building stone is quarried chiefly in Lawrence and Monroe counties, and is universally known as "Bedford limestone," from Bedford, Lawrence County, from which place the greatest shipments have been made. A comparatively small quantity of this Bedford stone is used for flagstone, curbstone, monumental stone, crushed stone, and some, not included in this report, for making cement and lime. The total value of the output from Lawrence County in 1906 was \$1,460,743; from Monroe County, \$1,162,062, a total of \$2,622,805 for the two counties; in 1905 the total for the two counties was \$2,393,475, with a value of \$1,550,076 for Lawrence County and of \$843,399 for Monroe County, an increase of \$229,330 in the total for 1906, an increase of \$318,663 for Monroe County, and a decrease of \$89,333 for Lawrence County. The total of these counties in 1906 represented 9,282,004 cubic feet of stone, of which 5,586,282 cubic feet were sold rough and 3,695,722 cubic feet were sawed or cut stone.

Missouri ranks next to Indiana in the production of building limestone with an output, including rough and dressed stone, of \$690,625, an increase of \$101,790 over 1905, when the value was \$588,835. This stone is chiefly from Carthage, Jasper County.

Riprap.—Limestone for riprap valued at \$550,385 was taken out in 1906 as against an output valued at \$573,181 in 1905, a decrease of \$22,796 in 1906. Material of this class was quarried chiefly in Missouri and Ohio.

Rubble.—Limestone for rubble was valued at \$924,275 in 1906 and at \$945,717 in 1905, a decrease of \$21,442. The greater part of this was reported from Illinois.

Chemical industries.—About three-eighths of the value of \$822,330 shown as the value of the limestone sold to chemical industries includes stone quarried and used by alkali works in New York and Michigan in the manufacture of all kinds of alkaline salts. Nearly one-fourth is stone quarried in Michigan, Wyoming, Utah, California, Colorado, Idaho, and Nevada and sold to sugar factories for use in the process of refining sugar. A little more than one-fourth represents the value of limestone from Pennsylvania, Ohio, Missouri, Indiana, Illinois, and New York sold to glass factories. Other stone included under this heading is stone used by paper mills and by farmers who buy the stone to burn into lime for use as fertilizer on their land. In 1905 this stone was classed under stone used for other purposes.

The following table shows the value of limestone in the United States in 1905 and 1906 by States and Territories and uses:

Value of the production of limestone in the United States in 1905 and 1906, by States and Territories and uses.

1905.

State or Territory.	Rough building.	Dressed building.	Paving.	Curbing.	Flagging.	Rubble.	Riprap.
Alabama.....	\$100	\$35,000					\$89,063
Arizona.....	135						
Arkansas.....	22,710	63,971	\$300	\$946	\$731	\$39,850	198
California.....	1,000						
Colorado.....							
Connecticut.....							
Florida.....		5,000				500	
Georgia.....						960	100
Idaho.....	105						
Illinois.....	123,140	73,246	53,410	10,373	16,204	388,845	35,000
Indiana.....	1,155,728	1,337,232	5,421	134,898	29,699	33,438	9,984
Indian Territory.....							
Iowa.....	137,805	35,387	7,576	3,366	12,337	48,341	39,004
Kansas.....	98,571	41,525	13,338	9,190	5,095	37,500	13,645
Kentucky.....	91,987	80,098	3,675	25,112	1,917	6,022	5,340
Maine.....							
Maryland.....	42,691	75	100	15	131		500
Massachusetts.....	58,175	3,000					
Michigan.....	17,071			100		744	1,568
Minnesota.....	161,292	102,464	544	6,939	14,524	75,845	29,885
Missouri.....	319,822	269,013	6,546	12,704	12,244	190,934	153,512
Montana.....	4,066				150		
Nebraska.....	19,957	100	65	42	16	22,447	21,496
New Jersey.....	845	30					
New Mexico.....	600					600	6,000
New York.....	183,833	80,692	500	29,660	15,792	21,638	14,679
North Carolina.....							
Ohio.....	218,364	13,107	5,474	2,390	3,972	22,487	68,094
Oklahoma.....	17,194	2,510	175	415	3,260	4,068	200
Oregon.....	3,000	800					300
Pennsylvania.....	158,875	1,485	110,208	24,367	5,689	7,265	16,487
Rhode Island.....							
South Dakota.....	448						
Tennessee.....	37,653	14,400	250	4,652	400	1,868	6,895
Texas.....	36,840	7,438		1,825	747	9,533	20,649
Utah.....	8,960						
Vermont.....	205					2,700	
Virginia.....	5,390	700					120
Washington.....	3,400						
West Virginia.....	71						
Wisconsin.....	183,263	30,434	24,203	16,326	4,893	28,482	40,262
Wyoming.....	1,150			40		1,750	
Total.....	3,114,446	2,197,737	231,785	283,426	127,801	945,717	573,181

State or Territory.	Crushed stone.			Flux.	Other.	Total.
	Road making.	Railroad ballast.	Concrete.			
Alabama.....	\$3,725		\$7,275	\$305,935	\$1,005	\$532,103
Arizona.....						135
Arkansas.....	14,600	\$2,012	9,500			154,818
California.....	3,000	510	2,700	3,677	39,015	49,902
Colorado.....				265,493	24,427	289,920
Connecticut.....				1,558		1,558
Florida.....			300			5,800
Georgia.....		5,000	1,000	1,270	700	9,030
Idaho.....					14,000	14,105
Illinois.....	793,401	655,276	594,293	582,873	185,829	3,511,890
Indiana.....	222,441	84,007	30,364	117,790	28,257	3,189,259
Indian Territory.....		3,624	1,888			5,512
Iowa.....	65,543	14,262	81,974		6,196	451,791
Kansas.....	28,913	618,189	25,365	2,000	30,052	923,389
Kentucky.....	202,532	250,115	65,427	7,733	4,507	744,465
Maine.....					7,428	7,428
Maryland.....	31,823	36,210	32,608		5,249	149,402
Massachusetts.....				4,733		65,908
Michigan.....	112,113	43,649	107,396	109,883	152,170	544,754
Minnesota.....	47,139	11,700	98,379		6,690	555,401
Missouri.....	376,349	381,018	488,252	16,624	11,146	2,238,164
Montana.....				98,907		103,123
Nebraska.....	24,050	29,442	79,311	16,000	12,193	225,119
New Jersey.....	1,750		10,825	133,889	14	147,353
New Mexico.....						7,200
New York.....	451,115	344,976	352,627	300,441	175,115	1,970,968
North Carolina.....	16,500					16,500

Value of the production of limestone in the United States in 1905 and 1906, by States and Territories and uses—Continued.

1905—Continued.

State or Territory.	Crushed stone.			Flux.	Other.	Total.
	Road making.	Railroad ballast.	Concrete.			
Ohio.....	\$790,138	\$461,235	\$248,578	\$872,353	\$144,001	\$2,850,793
Oklahoma.....	22,675	90,000	21,185		1,700	163,412
Oregon.....	4,500					8,600
Pennsylvania.....	255,471	597,940	322,218	2,842,202	157,296	4,499,503
Rhode Island.....				300		300
South Dakota.....			6,205			6,653
Tennessee.....	39,127	81,693	48,930	165,754		401,622
Texas.....	7,000	14,500	14,143	57,599	1,573	171,847
Utah.....	890		150	203,644	18,875	232,519
Vermont.....	350		6,000	1,794	46	11,095
Virginia.....	5,254	9,333	11,187	180,676		212,660
Washington.....				43,450	5,620	52,470
West Virginia.....	32,559	81,550	32,300	516,250	8,388	671,318
Wisconsin.....	284,083	7,870	123,406	53,337	7,522	804,081
Wyoming.....		2,700		8,100	9,600	23,340
Total.....	3,837,041	3,826,811	2,823,786	7,004,265	1,059,214	26,025,210

1906.

State or Territory.	Rough building.	Dressed building.	Paving.	Curbing.	Flagging.	Rubble.	Riprap.
Alabama.....	\$200	\$22,394					\$67,028
Arizona.....	40						
Arkansas.....	7,561	37,612				\$621	
California.....	8,985		\$200	\$5,000		2,500	
Colorado.....						3,153	
Connecticut.....							
Florida.....	300	1,050					
Georgia.....	2,840		350			670	
Idaho.....							
Illinois.....	105,410	25,341	176,646	3,556	\$7,775	378,582	48,823
Indiana.....	1,169,762	1,466,659	6,731	174,135	24,798	24,254	10,780
Indian Territory.....	500					3,622	
Iowa.....	105,203	31,350	6,527	8,030	7,632	84,553	35,810
Kansas.....	95,009	26,528	17,492	14,081	4,878	34,351	18,494
Kentucky.....	116,164	93,675	760	15,387	1,123	6,864	22,353
Maine.....							
Maryland.....	8,393		44	20	715		
Massachusetts.....	775						
Michigan.....	9,368	641	90,723	75		4,654	1,204
Minnesota.....	124,651	132,385	4,629	4,867	11,696	112,565	51,476
Missouri.....	302,627	387,998	9,100	8,516	24,732	128,430	101,755
Montana.....	5,117		150			875	
Nebraska.....	30,685	1,230	7,500	10,200		11,878	20,140
New Jersey.....	2,106						
New Mexico.....	1,800					2,400	2,400
New York.....	180,627	64,595	4,100	10,648	11,229	12,692	13,453
North Carolina.....							
Ohio.....	155,905	7,894	1,480	1,100	478	6,395	86,215
Oklahoma.....	2,350	900			741	2,440	11,000
Oregon.....	3,000			180			200
Pennsylvania.....	74,625	8,728	139,643	1,453	2,309	8,480	4,029
Rhode Island.....							
South Dakota.....	400						
Tennessee.....	18,597	7,400		4,212	62	11,135	7,422
Texas.....	38,705	10,949	32,929	407		6,604	12,842
Utah.....	11,192	500				1,300	
Vermont.....	2,619					600	
Virginia.....	3,448	1,680		275			323
Washington.....	1,200						
West Virginia.....	461						745
Wisconsin.....	136,272	26,010	32,271	27,473	11,464	74,307	33,893
Wyoming.....						350	
Total.....	2,726,897	2,366,019	531,275	289,615	109,632	924,275	550,385

Value of the production of limestone in the United States in 1905 and 1906, by States and Territories and uses—Continued.

1906—Continued.

State or Territory.	Crushed stone.			Flux.	Sugar factories, etc.	Other.	Total.
	Road making.	Railroad ballast.	Concrete.				
Alabama.....	\$9,380		\$7,280	\$473,062			\$579,344
Arizona.....							40
Arkansas.....	1,600	\$1,000	450				48,844
California.....	4,094	500	10,962	25,000	\$22,964		80,205
Colorado.....	3,500			301,913	39,592	\$25,000	373,158
Connecticut.....				1,171			1,171
Florida.....			100				1,450
Georgia.....		675	1,050	10,417	40		16,042
Idaho.....					12,600		12,600
Illinois.....	686,092	389,065	709,907	384,282	17,433	9,419	2,942,331
Indiana.....	321,891	169,695	119,222	210,124	9,455	18,059	3,725,565
Indian Territory.....		20,000	20,000				44,622
Iowa.....	38,189	26,268	142,124			8,129	493,815
Kansas.....	39,877	533,173	34,228		5	21,087	849,203
Kentucky.....	222,877	242,737	50,327	15,170		7,971	795,408
Maine.....					2,000		2,000
Maryland.....	30,582	110,503	19,024		40	725	170,046
Massachusetts.....				9,875	100		10,750
Michigan.....	78,437	103,442	61,852	81,517	224,356		656,269
Minnesota.....	59,230	8,041	117,159	150	3,625	1,641	632,115
Missouri.....	294,211	336,752	316,136	28,381	11,591	38,105	1,988,334
Montana.....				134,940			141,082
Nebraska.....	16,000	29,980	112,235	6,600	29,891	42	276,381
New Jersey.....	4,640	7,950	10,950	195,235		260	221,141
New Mexico.....		108,893	6,000			4,000	125,493
New York.....	584,261	324,940	464,614	294,659	221,192	17,714	2,204,724
North Carolina.....	30,583						30,583
Ohio.....	924,346	407,005	286,460	1,013,497	48,806	85,457	3,025,038
Oklahoma.....	9,000	90,000	7,700			3,230	127,361
Oregon.....					3,600	500	7,480
Pennsylvania.....	251,200	602,128	486,882	3,168,186	76,073	41,394	4,865,130
Rhode Island.....				678			678
South Dakota.....			10,000				10,400
Tennessee.....	23,725	192,514	75,063	139,227		2,595	481,952
Texas.....	3,250	23,000	30,685	75,764		3,990	239,125
Utah.....	13,030		15	198,671	23,910	250	248,868
Vermont.....	2,320		2,000	250		40	7,829
Virginia.....	160	16,050	18,700	219,707			260,343
Washington.....				38,831	8,761	400	49,192
West Virginia.....	17,406	67,700	20,875	513,413	6,865	1,137	628,602
Wisconsin.....	187,619	86,575	173,237	71,972	7,940	22,713	891,746
Wyoming.....		810	1,132		51,491		53,783
Total.....	3,857,500	3,899,396	3,316,369	7,612,692	822,330	313,858	27,320,243

The following table shows the value of limestone, by States, from 1902 to 1906, inclusive:

Value of limestone, 1902-1906, by States and Territories.

State or Territory.	1902.	1903.	1904.	1905.	1906.
Alabama.....	\$524,049	\$502,510	\$498,723	\$532,103	\$579,344
Arizona.....			250	135	40
Arkansas.....	30,310	153,291	106,147	154,818	48,844
California.....	100,848	229,376	74,670	49,902	80,205
Colorado.....	157,355	175,078	124,600	289,920	373,158
Connecticut.....	1,472	1,968	830	1,558	1,171
Florida.....	25,608	20,756	34,278	5,800	1,450
Georgia.....	39,865	10,450	15,200	9,030	16,042
Idaho.....	2,025	752	5,900	14,105	12,600
Illinois.....	2,736,964	2,726,470	2,690,822	3,511,890	2,942,331
Indiana.....	2,553,502	2,621,068	2,789,500	3,189,259	3,725,565
Indian Territory.....		650	6,076	5,512	44,622
Iowa.....	535,933	536,906	442,585	451,791	493,815
Kansas.....	663,178	480,609	799,286	923,389	849,203
Kentucky.....	577,854	695,602	692,417	744,465	795,408
Maine.....	3,000	1,863	2,955	7,428	2,000
Maryland.....	126,613	65,732	128,421	149,402	170,046
Massachusetts.....	14,869	9,656	7,566	65,908	10,750
Michigan.....	413,148	390,473	501,708	544,754	656,269
Minnesota.....	754,987	609,471	517,940	555,401	632,115
Missouri.....	1,181,359	1,874,740	2,277,909	2,238,164	1,988,334
Montana.....	95,950	131,594	109,765	103,123	141,082
Nebraska.....	145,323	187,718	236,780	225,119	276,381
New Jersey.....	58,172	66,915	76,710	147,353	221,141
New Mexico.....				7,200	125,493
New York.....	1,857,893	2,007,911	1,636,255	1,970,968	2,204,724
North Carolina.....	21,063		12,088	16,500	30,583
Ohio.....	2,119,441	2,349,661	2,406,355	2,850,793	3,025,038
Oklahoma.....	50,516	50,690	92,246	163,412	127,361
Oregon.....		3,000	5,390	8,600	7,480
Pennsylvania.....	3,990,644	4,343,643	3,708,750	4,499,503	4,865,130
Rhode Island.....	1,190	883	312	300	678
South Carolina.....	350	950	225		
South Dakota.....	65,305	26,215	3,954	6,653	10,400
Tennessee.....	246,418	356,961	288,053	401,622	481,952
Texas.....	146,162	188,015	252,745	171,847	239,125
Utah.....	87,200	125,610	170,447	232,519	248,868
Vermont.....	6,397	9,955	9,653	11,095	7,829
Virginia.....	292,129	232,744	165,459	212,660	260,343
Washington.....	27,744	75,649	71,857	52,470	49,192
West Virginia.....	434,758	405,077	400,303	671,318	628,602
Wisconsin.....	801,701	701,347	738,684	804,081	891,746
Wyoming.....	4,090	150	15,090	23,340	53,783
Total.....	20,895,385	22,372,109	22,178,964	26,025,210	27,320,243

Production of blast-furnace flux in 1905 and 1906, by States, in long tons.

State.	1905.		1906.	
	Quantity.	Value.	Quantity.	Value.
Alabama.....	764,173	\$395,935	803,643	\$473,062
California.....	3,677	3,677	28,758	25,000
Colorado.....	544,984	265,493	552,651	301,913
Connecticut.....	4,235	1,558	3,455	1,171
Georgia.....	2,850	1,270	17,793	10,417
Illinois.....	1,576,081	582,873	909,375	384,282
Indiana.....	243,822	117,790	500,702	210,124
Kansas.....	4,000	2,000		
Kentucky.....	20,497	7,733	33,987	15,170
Massachusetts.....	11,722	4,733	16,528	9,875
Michigan.....	294,895	109,883	162,603	81,517
Minnesota.....			200	150
Missouri.....	29,922	16,624	43,574	28,381
Montana.....	238,563	98,907	304,600	134,940
Nebraska.....	20,000	16,000	12,000	6,600
New Jersey.....	265,042	133,889	363,508	195,235
New York.....	574,047	300,441	513,452	294,659
Ohio.....	2,163,554	872,353	3,098,346	1,013,497
Pennsylvania.....	6,325,503	2,842,202	6,396,765	3,168,186
Rhode Island.....	200	300	542	678
Tennessee.....	340,342	165,754	250,835	139,227
Texas.....	88,274	57,599	122,804	75,764
Utah.....	260,016	203,644	262,808	198,671
Vermont.....	3,589	1,794	500	250
Virginia.....	393,662	180,676	467,341	219,707
Washington.....	65,500	43,450	41,171	38,831
West Virginia.....	1,028,622	516,250	1,019,931	513,413
Wisconsin.....	106,640	53,337	149,330	71,972
Wyoming.....	13,478	8,100		
Total.....	15,387,891	7,004,265	16,077,202	7,612,692