STONE.

By A. T. Coons.

INTRODUCTION.

As in the chapters on stone published in preceding volumes, the present statistics of the production of stone in the United States include the stone sold by the quarrymen and only such manufactured product as is turned out by the producers themselves.

For many years the cards sent by the United States Geological Survey to quarrymen requesting statistics of building and monumental stone simply asked for the building and monumental stone sold by them; but the replies were so unsatisfactory, the value per unit of measurement differed so widely, even in the same locality and for the same firm as reported for different years, that in order to get figures capable of comparison it was found advisable to separate the rough stone from the dressed stone. By this means it became possible to get statistics capable of comparison, as the average producer sells his output in the same manner each year, and a comparison of the individual reports for different years showed which producers manufacture their stone and which sell it rough. The large quantities of stone sold in the rough make it inadvisable to put a valuation on this class of stone other than the value it bears as it leaves the quarryman's hands—that is, the value free on board at point of shipment in the rough or merely rough-cut condition desired by the purchaser. On the other hand, the stone which is quarried and manufactured by the quarryman himself has no value to him until it is sold by him in its finished state. This method of valuation would appear to tend to give an unfair value to the same stone reported from different States. For example, the Georgia marble is practically all sold rough to the manufacturers, and to its output of 807,000 cubic feet in 1907 was given a value of $864,757, or $1.07 per cubic foot as rough material; on the other hand, by far the greater part of the Vermont marble is dressed by its producers, and to the 1,450,000 cubic feet produced in that State in 1907 was given a dressed-stone value of $4,596,724, or $3.10 per cubic foot. Most of the Vermont granite, however, especially the monumental stone, is sold rough to the manufacturers. In Indiana the celebrated "Bedford" stone is usually shipped direct from quarry to market in the unfinished or partly finished state.

It will thus be seen that, although the desire of the United States Geological Survey is to publish figures of production with as little

value of labor added to the value of the raw material as possible, the labor value could only be excluded from the manufactured stone quarried and sold by the quarrymen if the Survey assigned a value to the stone itself. In many cases this would not be possible. Often no unit of measurement is stated, and it is to be regretted that there is not more uniformity in the measurement of stone as sold and reported by the quarrymen. In case of building and monumental stone, rubble, riprap, etc., the quantities are reported in cubic feet, cubic yards, tons, cords, perches, rods, etc. The ton is indefinitely long or short; the cord is from 11,000 to 13,000 pounds; and in many cases where weights are given no regard is had to the specific gravity of the stone, the weight seeming to be arbitrarily fixed by the producer.

In reporting stone for flagging and curbing the lineal measurement and also the weight are used; but the stone, of course, is not of uniform thickness.

In case of crushed stone the usual measurements are the ton, long and short, and the cubic yard, which varies in weight from 2,300 pounds to 3,000 pounds. Squares of 100 square feet are also reported from some localities. It has been possible, however, for the last few years to give the quantity as well as the value of crushed stone, and this quantity has been given in short tons, on account both of the large number of producers reporting in that manner and also of the ease with which the other units may be converted into short tons. The average weight of the cubic yard, as reported by the quarrymen, is 2,500 pounds.

It is also possible to give the number of paving blocks made as well as the value of these blocks. However, the size, and therefore the weight, of these blocks vary considerably.

The quantity as well as the value of stone used for furnace flux has been published for some years.

In this report is published for the first time the quantity as well as the value of the granite produced in Vermont, and it is to be hoped that in the near future it may be possible to obtain the figures of quantity for other States as complete as are those given for Vermont.

Much consideration has been given to the proper statement of the value of the stone production by the United States Geological Survey and by the Survey in cooperation with various State surveys, as those of Illinois, North Carolina, Iowa, and Maryland, and at the office of the United States Census, and the decision has always been to give the value as herein stated, with the hope that ability to publish in the near future the quantity of material sold may do away with any appearance of inconsistency.

PRODUCTION.

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 for 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 and the fine-grained sandstones of New York and Pennsylvania, known to trade as bluestone. As the bluestone is a product of a separate industry, its production is also shown apart from that of the other sandstone. Bluestone is also quarried in New Jersey and West Virginia, but this product is small and is not separated from sandstone. 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, and also a small quantity of the so-called "onyx" marble or travertine as obtained from caves and other deposits.

The following table shows the value of the different kinds of stone produced in the United States from 1898 to 1907, inclusive:

Value of the different kinds of stone produced in the United States, 1898–1907.

Year.	Granite.	Trap rock.	Sandstone.	Bluestone.	Marble.	Limestone.	Total.
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	18,562,806	3,736,571	[b]7,147,439	2,021,898	7,582,938	27,327,142	66,378,794
1907	18,064,708	4,594,103	[b]6,753,762	2,117,916	7,837,685	31,737,631	71,105,805

[a] Estimated. [b] Does not include the value of grindstones and whetstones.

From this table it will be seen that in the last decade the value of the stone produced in the United States has increased from $28,635,175 in 1898 to $71,105,805 in 1907, the increase being $42,470,630, or 148 per cent.

There has been an increase in value of output for each year during this time, but the increase has not been regular, the years 1899 and 1900, 1903 and 1904 showing comparatively small differences in output; the trade in these years was influenced by labor strikes in the building trades and by the general financial condition of the country. It is noticeable, however, that for 1907, a year of markedly unsettled financial and trade conditions, there was an increase of $4,727,011, or

7 per cent, from $66,378,794 in 1906 to $71,105,805 in 1907. This increase was chiefly in crushed stone, the stone used directly as building stone decreasing in value. The chief increase in the years preceding 1907 was also in the crushed-stone output and, in 1905, also of the limestone used as a furnace flux. During this time the greater number of producers, especially the small quarrymen, reported increased cost of labor, scarcity of good labor, and greater cost for fuel and supplies. The selling prices have increased slightly from year to year.

There was also in 1907 a noticeable decrease in the number of producers of stone; a great many of the smaller producers were idle, and of the large producers nearly all, except the producers of crushed stone, had a decrease in production.

In 1907 trap rock, marble, and limestone increased in value of output, and granite and sandstone, including bluestone, decreased.

Granite represented 25.41 per cent of the total output and decreased in value from $18,562,806 in 1906 to $18,064,708 in 1907, a loss of $498,098. This loss was in building stone, the other products showing an increase.

Trap rock represented 6.46 per cent of the total and increased $857,532, or from $3,736,571 in 1906 to $4,594,103 in 1907. The trap-rock output is principally crushed stone.

Sandstone, including bluestone, represented 12.48 per cent of the total, and decreased in value from $9,169,337 in 1906 to $8,871,678 in 1907, a loss of $297,659. Bluestone produced in New York and Pennsylvania increased slightly in value from $2,021,898 in 1906 to $2,117,916 in 1907, a gain of $96,018. Sandstone, exclusive of bluestone, decreased $393,677, or from $7,147,439 in 1906 to $6,753,762 in 1907.

Marble, valued at $7,837,685 in 1907, represented 11.02 per cent of the total stone output; in 1906 the value of marble was $7,582,938, an increase of $254,747 for 1907.

Limestone represented 44.63 per cent of the total stone production in 1907, the value being $31,737,631; in 1906 the value was $27,327,142, a gain for 1907 of $4,410,489. This gain was in the value of crushed stone and in stone used for blast furnace flux.

The following table shows the value of the various kinds of stone produced in 1906 and 1907, by States and Territories:

Value of various kinds of stone produced in 1906 and 1907, by States and Territories.

1906.

State or Territory.	Granite.	Trap rock.	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	740,784	$688,423	642,166	103,048	80,205	2,254,626
Colorado	65,402		286,544		373,158	725,104
Connecticut	974,024	411,345	(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	3,327,416	462,795	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	101,224	856,886	215,142		221,141	1,394,393
New Mexico			42,574	500	125,493	168,567
New York	304,048	623,435	d c1,905,892	557,954	2,204,724	5,596,053
North Carolina	778,847		3,531		30,583	812,961
North Dakota			44			44
Ohio			1,426,645		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	349,453	693,687	d 2,724,874	171,632	4,865,130	8,804,776
Rhode Island	622,812				678	623,490
South Carolina	247,998					247,998
South Dakota			145,966		10,400	156,366
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	2,934,825			4,576,913	14,728	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 18,562,806	3,736,571	9,169,337	7,582,938	27,327,142	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 a small value for trap rock and other igneous rocks.

Value of various kinds of stone produced in 1906 and 1907, by States and Territories—Continued.

1907.

State or Territory.	Granite.	Trap rock.	Sandstone.	Marble.	Limestone.	Total value.
Alabama	.....	.....	$48,673	$85,475	$694,699	$828,847
Alaska	.....	.....	.....	38,110	.....	38,110
Arizona	$13,700	.....	158,435	.....	64,975	237,110
Arkansas	168,996	.....	94,275	.....	52,207	315,478
California	1,306,324	$1,029,749	437,738	183,285	177,333	3,134,429
Colorado	67,134	.....	299,443	.....	502,751	869,328
Connecticut	591,153	459,953	(a)	.....	1,476	1,052,582
Delaware	158,192	.....	.....	.....	.....	158,192
Florida	.....	.....	.....	.....	15,000	15,000
Georgia	858,603	.....	.....	$64,757	22,278	1,745,638
Hawaii	19,599	.....	.....	.....	.....	19,599
Idaho	25,942	.....	24,001	(b)	15,900	65,843
Illinois	.....	.....	14,996	.....	3,774,346	3,789,342
Indiana	.....	.....	15,425	.....	3,624,126	3,639,551
Iowa	.....	.....	3,542	.....	560,582	564,124
Kansas	.....	.....	46,831	.....	813,748	860,579
Kentucky	.....	.....	98,450	12,500	891,500	1,002,450
Maine	2,146,420	.....	.....	.....	1,350	2,147,770
Maryland	1,183,753	.....	13,859	98,918	142,825	1,430,355
Massachusetts	2,328,777	432,604	243,323	212,438	1,837	3,218,979
Michigan	.....	.....	53,003	.....	760,333	813,336
Minnesota	546,603	.....	300,204	.....	735,319	1,582,126
Missouri	136,405	.....	35,289	(c)	2,153.917	2,325,611
Montana	102,050	.....	39,216	.....	124,690	265,956
Nebraska	.....	.....	11,609	.....	312,630	324,239
New Hampshire	647,721	.....	.....	.....	.....	647,721
New Jersey	75,757	995,436	177,667	.....	274,452	1,523,312
New Mexico	167,294	.....	12,450	d 7,535	193,732	381,011
New York	289,722	915,395	e f 1,978,117	911,951	2,898,520	6,993,705
North Carolina	906,476	.....	4,105	.....	22,328	932,909
North Dakota	.....	.....	3,260	.....	.....	3,260
Ohio	.....	.....	1,591,148	.....	3,566,822	5,157,970
Oklahoma	24,550	.....	43,403	16,805	189,568	274,326
Oregon	117,625	.....	3,904	.....	5,750	127,279
Pennsylvania	366,679	760,966	f 2,064,913	118,539	5,821,275	9,132,372
Rhode Island	674,148	.....	.....	.....	750	674,898
South Carolina	129,377	.....	.....	.....	.....	129,377
South Dakota	690	.....	143,585	.....	11,600	155,875
Tennessee	.....	.....	16,523	688,148	385,450	1,090,121
Texas	122,158	.....	108,047	.....	267,757	497,962
Utah	5,240	.....	24,298	2,500	306,344	338,382
Vermont	2,693,889	.....	.....	4,596,724	23,126	7,313,739
Virginia	398,426	.....	(g)	.....	362,062	760,488
Washington	562,352	.....	295,585	(h)	62,317	920,254
West Virginia	.....	.....	i 197,926	.....	855,941	1,053,867
Wisconsin	1,228,863	.....	236,183	.....	1,027,095	2,492,141
Wyoming	90	.....	32,252	.....	18,920	51,262
Total	18,064,708	4,594,103	f 8,871,678	7,837,685	31,737,631	71,105,805

a Small value included with New York.
b Small value included with New Mexico.
c Included in Missouri limestone.
d Includes small values for Idaho and Washington.
e Includes small value for Connecticut.
f Includes bluestone.
g Small value included with West Virginia.
h Small value included with New Mexico.
i Includes small value for Virginia.

The following table shows the rank of States and Territories in 1906 and 1907, according to value of production, and the percentage of the total produced by each State or Territory:

Rank of States and Territories in 1906 and 1907, according to value of production, and percentage of total produced by each State or Territory.

1906.				1907.			
Rank of State.	State or Territory.	Total value.	Percentage of total.	Rank of State.	State or Territory.	Total value.	Percentage of total.
1	Pennsylvania	$8,804,776	13.27	1	Pennsylvania	$9,132,372	12.84
2	Vermont	7,526,466	11.34	2	Vermont	7,313,739	10.29
3	New York [a]	5,596,053	8.43	3	New York [c]	6,993,705	9.84
4	Ohio	4,451,683	6.71	4	Ohio	5,157,970	7.25
5	Massachusetts	4,333,616	6.53	5	Illinois	3,789,342	5.33
6	Indiana	3,756,305	5.66	6	Indiana	3,639,551	5.12
7	Illinois	2,961,456	4.46	7	Massachusetts	3,218,979	4.53
8	Maine	2,562,021	3.86	8	California	3,134,429	4.41
9	California	2,254,626	3.40	9	Wisconsin	2,492,141	3.51
10	Missouri	2,159,294	3.25	10	Missouri	2,325,611	3.27
11	Wisconsin	1,871,945	2.82	11	Maine	2,147,770	3.02
12	Georgia	1,727,713	2.60	12	Georgia	1,745,638	2.46
13	Minnesota	1,543,817	2.33	13	Minnesota	1,582,126	2.23
14	New Jersey	1,394,393	2.10	14	New Jersey	1,523,312	2.14
15	Connecticut	1,386,540	2.09	15	Maryland	1,439,355	2.02
16	Maryland	1,239,955	1.87	16	Tennessee	1,090,121	1.53
17	Tennessee	1,131,909	1.71	17	West Virginia [d]	1,053,867	1.48
18	Kentucky	920,531	1.39	18	Connecticut [e]	1,052,582	1.48
19	Kansas	892,012	1.34	19	Kentucky	1,002,450	1.41
20	New Hampshire	818,131	1.23	20	North Carolina	932,909	1.31
21	North Carolina	812,961	1.23	21	Washington [f]	920,254	1.29
22	West Virginia	741,971	1.12	22	Colorado	869,328	1.22
23	Washington [b]	738,652	1.11	23	Kansas	860,579	1.21
24	Colorado	725,104	1.09	24	Alabama	828,847	1.17
25	Michigan	721,664	1.09	25	Michigan	813,336	1.14
26	Alabama	704,811	1.06	26	Virginia [g]	760,488	1.07
27	Rhode Island	623,490	.94	27	Rhode Island	674,898	.95
28	Virginia	606,343	.91	28	New Hampshire	647,721	.91
29	Texas	518,719	.78	29	Iowa	564,124	.79
30	Iowa	499,416	.75	30	Texas	497,962	.70
31	Utah	292,745	.44	31	New Mexico [h]	381,011	.54
32	Montana	292,549	.44	32	Utah	338,382	.48
33	Nebraska	283,280	.43	33	Nebraska	324,239	.46
34	South Carolina	247,998	.37	34	Arkansas	315,478	.44
35	Arkansas	240,350	.36	35	Oklahoma	274,326	.39
36	Oklahoma	186,454	.28	36	Montana	265,956	.37
37	New Mexico	168,567	.25	37	Arizona	237,110	.33
38	South Dakota	156,366	.24	38	Delaware	158,192	.22
39	Delaware	146,346	.22	39	South Dakota	155,875	.22
40	Oregon	92,391	.13	40	South Carolina	129,377	.18
41	Wyoming	80,098	.12	41	Oregon	127,279	.18
42	Arizona	65,231	.10	42	Idaho [i]	65,843	.27
43	Indian Territory	45,237	.15	43	Wyoming	51,262	
44	Idaho	24,969		44	Alaska	38,110	
45	Hawaii	23,346		45	Hawaii	19,599	
46	Nevada	5,000		46	Florida	15,000	
47	Florida	1,450		47	North Dakota	3,260	
48	North Dakota	44					
	Total	66,378,794	100.00		Total	71,105,805	100.00

[a] Includes a small output of sandstone from Connecticut.
[b] Includes Alaska marble.
[c] Includes a small value of sandstone for Connecticut.
[d] Includes a small value of sandstone for Virginia.
[e] Exclusive of a small value for sandstone included with New York.
[f] Exclusive of a small value for marble included with New Mexico.
[g] Exclusive of a small value for sandstone included with West Virginia.
[h] Includes small values of marble for Idaho and Washington.
[i] Exclusive of a small value of marble included with New Mexico.

From this table it will be seen that the four ranking States in the production of stone in the United States did not change their relative position in regard to the value of stone quarried, although the percentage of output of the first two, Pennsylvania and Vermont, decreased

somewhat, while New York and Ohio, coming next, increased in percentage of output. Massachusetts went from fifth to seventh place and Maine from eighth place to eleventh. These States produce large quantities of building granite, and the decrease was on account of the falling off in demand for this material. Illinois advanced from seventh place to fifth with a large increase in crushed stone output; Indiana remained in sixth place, although with decreased output. California, Wisconsin, and Missouri, with increased values, took eighth, ninth, and tenth places, respectively. Each of the above-mentioned States produced an output valued at over $2,000,000, while Georgia, Minnesota, New Jersey, Maryland, Tennessee, West Virginia, Connecticut, and Kentucky, in order of rank, each produced stone valued at more than $1,000,000.

The rank of States in the production of stone is influenced, especially in the States having small productions, by spasmodic demands for stone for special work—demands lasting perhaps two or three years and then followed by the abandonment of the quarry, which was possibly opened or reopened for this work. This applies especially to the building of dams, locks, and breakwaters, to the ballasting of railroads and the building of roads, to contracts for large buildings given to special quarries, to the running or closing down of iron furnaces which obtain their flux from local deposits, and to other local conditions. On the other hand, the demand upon well-known and regularly operated deposits, which receive orders for stone to be shipped all over the country, is influenced more by general conditions, particularly by the financial state of the market. The use of stone is rather a luxury than a necessity. There are other and cheaper building materials, although none perhaps so satisfactory as regards either durability or finished appearance. The prevailing taste or fashion for the variety or the color of the stone also influences sectional demand, which is at present largely confined to the light-colored stones for both building and monumental work. Hence the large amount of building and monumental work in white marbles and the use of light granites and of the light-colored limestones and light sandstones, and the consequent lack of demand for other darker stones which are equally good and durable.

The following table is given to show the total values of the stone used for various purposes in 1906 and 1907. Only those values are given which are for uses common to two or more varieties of stone:

Value of granite, trap rock, sandstone, limestone, and marble used for various purposes in 1906 and 1907.

1906.

Kind.	Building (rough and dressed).	Monumental (rough and dressed).	Flagstone.	Curbstone.	Paving stone.	Crushed stone.
Granite	$8,430,022	$4,115,665	$50,609	$785,995	$1,459,915	$2,162,464
Trap rock	94,683	.....	.....	.....	193,012	3,341,863
Sandstone	4,275,669	.....	1,097,438	1,074,369	694,995	889,894
Limestone	5,098,631	.....	109,632	289,615	531,275	11,073,265
Marble	2,782,620	2,657,813	.....	.....	.....	.....
Total	20,681,625	6,773,478	1,257,679	2,149,979	2,879,197	17,467,486

Value of granite, trap rock, sandstone, limestone, and marble used for various purposes in 1906 and 1907—Continued.

1907.

Kind.	Building (rough and dressed).	Monumental (rough and dressed).	Flagstone.	Curbstone.	Paving stone.	Crushed stone.
Granite	$6,033,362	$4,338,819	$69,854	$819,621	$1,928,308	$3,110,762
Trap rock	48,203	.....	.....	.....	182,490	4,280,554
Sandstone	3,154,783	.....	1,185,879	1,380,516	884,843	987,528
Limestone	4,580,226	.....	84,076	378,853	545,300	13,675,453
Marble	2,859,237	2,640,130	.....	.....	.....	.....
Total	16,675,811	6,978,949	1,339,809	2,578,990	3,540,941	22,054,297

This table shows that the total value of building stone decreased from $20,681,625 in 1906 to $16,675,811 in 1907, a loss of $4,005,814. In 1907 granite represented 36.18 per cent of this building stone, limestone 27.47 per cent, sandstone 18.92 per cent, and marble 17.15 per cent.

Monumental stone increased in value from $6,773,478 in 1906 to $6,978,949 in 1907, a gain of $205,471. Of the monumental stone, 62.17 per cent was granite in 1907 and 37.83 per cent marble. Small quantities of sandstone and limestone used for monuments and bases for monuments are not given separately, but are included under stone used for "Other purposes."

Flagstone increased in value $82,130, or from $1,257,679 in 1906 to $1,339,809 in 1907. Sandstone represented 88.51 per cent of the flagstone output in 1906, the quantity of granite and limestone used for this purpose being very small. Of the sandstone used as flagstone over one-half was the bluestone of New York and Pennsylvania.

Curbstone increased in value from $2,149,979 in 1906 to $2,578,990 in 1907, or $429,011. Sandstone represented 53.53 per cent of this output in 1906, granite 31.78 per cent, and limestone 14.69 per cent.

Paving stone increased in value from $2,879,197 in 1906 to $3,540,941 in 1907, a gain of $661,744. Granite represented 54.46 per cent of the total paving material, sandstone 24.99 per cent, limestone 15.40 per cent, and trap rock 5.15 per cent.

Crushed stone increased in value from $17,467,486 in 1906 to $22,054,297 in 1907, or $4,586,811. Limestone represented 62.01 per cent of the output, trap rock 19.41 per cent, granite 14.10 per cent, and sandstone 4.48 per cent.

Notwithstanding the fact that the financial and trade conditions during the last half of 1907 caused a break in building operations and so materially affected the output of building stone that it decreased in value $4,005,814, there was a decided increase of $4,727,011 in the total value of the stone output, the principal increase being in the value of crushed stone, which gained $4,586,811 in 1907 as compared with 1906. Building stone, however, has been affected not only by the financial depression, but by the use of concrete, in which large quantities of crushed stone are consumed; also heavy building stone for foundations and for the construction of walls, bridges, etc., has been to some extent replaced by concrete. Thus the loss in one branch of the stone industry has helped to keep up the demand in another.

The crushed-stone industry has shown a remarkable increase in the past decade. The demand for this kind of stone was first established by the demand for good roads, especially in the New England and the Middle Atlantic States, and the industry has steadily grown, developing various different uses for this stone as well as increasing in quantity and value. In 1897 the crushed stone reported was chiefly trap rock from New York and New Jersey, some granite, and a small quantity of limestone. The value of crushed granite and trap rock at that time did not equal $1,000,000, and the limestone was not reported separately from stone sold for building purposes. The crushed stone was all reported as used for road making, but probably included some stone sold for railroad ballast. In 1898 the crushed-stone output, including trap rock, granite, and limestone, was valued at $4,031,445, and the increase has been steady, although not regular, ever since, reaching the highest value in 1907 and showing an increase over 1898 of $18,022,852. This makes the value for 1907 5.47 times as large as that for 1898. The price per ton has also increased slightly in the last three or four years, the average selling price in the ten years ranging from about 45 cents per ton to 63 cents per ton.

The irregularity of the building-stone production as compared with the steady and more regular increase in crushed stone is of such interest in showing the condition of these two branches of the stone industry that the following table has been made, which gives the values of these two products for the last ten years. The figures for 1898 are incomplete in that they do not include the value of sandstone used for building purposes, nor do they include some stone sold rough for building purposes.

Value of building stone and of crushed stone, 1898–1907.

Year.	Building stone (rough and dressed).	Crushed stone.	Year.	Building stone (rough and dressed).	Crushed stone.
1898	[a] $5,122,511	[b] $4,031,445	1903	$19,795,491	$13,188,938
1899	[c] 10,741,927	4,692,343	1904	18,883,455	15,530,122
1900	10,672,598	6,525,368	1905	20,240,809	16,419,614
1901	15,112,600	8,560,432	1906	20,681,625	17,467,486
1902	20,790,341	11,480,959	1907	16,675,811	22,054,297

[a] Does not include stone sold rough for building or sandstone used for building.
[b] Includes limestone used for paving.
[c] Does not include stone sold rough for building.

The following tables show the quantity and value of crushed stone produced in the United States in 1906 and 1907, by States and Territories, and uses:

Production of crushed stone in 1906 and 1907, by States and Territories and uses, in short tons.

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	426	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

Production of crushed stone in 1906 and 1907, by States and Territories and uses, in short tons—Continued.

1907.

State or Territory.	Road making.		Railroad ballast.		Concrete.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Alabama	10,000	$5,000	.....	.....	45,164	$21,287	55,164	$26,287
Arizona	.....	.....	.....	.....	25,062	41,645	25,062	41,645
Arkansas	6,537	6,983	5,000	$5,000	164,956	179,617	176,493	191,600
California	849,869	629,114	265,038	96,214	525,938	479,592	1,640,845	1,204,920
Colorado	1,000	900	23,978	21,580	41,342	20,715	66,320	43,195
Connecticut	393,842	222,206	149,321	74,660	283,110	148,435	826,273	445,301
Delaware	60,535	40,298	58,153	36,668	51,610	41,628	170,298	118,594
Florida	6,000	15,000	.....	.....	.....	.....	6,000	15,000
Georgia	39,027	25,407	310,969	152,847	82,078	61,051	432,074	239,305
Hawaii	.....	.....	.....	.....	9,850	7,599	9,850	7,599
Idaho	11,631	17,392	.....	.....	.....	.....	11,631	17,392
Illinois	1,517,425	958,032	788,894	499,204	1,576,256	1,118,919	3,882,575	2,576,155
Indiana	972,695	476,711	323,650	134,932	120,289	60,918	1,416,634	672,561
Iowa	101,696	69,817	158,651	77,571	186,636	118,682	446,983	266,070
Kansas	87,208	76,420	733,511	357,820	122,903	55,469	943,622	489,709
Kentucky	417,823	292,241	691,405	292,714	76,718	54,917	1,185,946	639,872
Maine	1,688	1,511	750	325	33,437	19,926	35,875	21,762
Maryland	366,910	348,875	164,800	103,147	429,598	499,337	961,308	951,359
Massachusetts	423,905	315,221	85,920	42,860	394,005	326,864	903,830	684,945
Michigan	225,522	131,708	90,279	46,516	191,167	97,762	506,968	275,986
Minnesota	183,021	156,026	42,592	36,398	182,224	153,937	407,837	346,361
Missouri	673,659	444,685	532,050	284,158	549,972	454,433	1,755,681	1,183,276
Nebraska	63,221	55,824	65,148	53,584	145,757	121,027	274,126	230,435
New Hampshire	5,300	3,975	.....	.....	21,887	14,349	27,187	18,324
New Jersey	735,681	578,640	323,682	210,247	304,168	235,129	1,363,531	1,024,016
New Mexico	375	300	783,961	342,546	.....	.....	784,336	342,846
New York	2,500,143	1,827,416	958,506	466,890	956,080	601,605	4,414,729	2,895,911
North Carolina	97,907	62,939	364,369	175,847	145,014	106,497	601,290	345,283
Ohio	2,367,125	1,245,296	975,735	414,653	666,757	306,277	4,009,617	1,966,226
Oklahoma	4,600	4,000	243,137	146,747	26,335	16,405	274,072	167,152
Oregon	101,484	80,205	5,888	1,744	5,110	7,450	112,482	89,399
Pennsylvania	1,236,037	785,445	1,701,152	1,075,160	1,136,540	693,354	4,073,729	2,553,959
Rhode Island	22,040	25,480	.....	.....	5,500	5,550	27,540	31,030
South Carolina	26,097	25,887	10	17	6,250	4,500	32,357	30,404
South Dakota	28,000	14,000	.....	.....	10,500	10,500	38,500	24,500
Tennessee	26,250	13,994	270,923	118,911	69,498	41,530	366,671	174,435
Texas	103,915	64,318	171,927	79,843	47,267	48,858	323,109	193,019
Vermont	8,558	7,688	.....	.....	4,050	4,850	12,608	12,538
Virginia	126,775	96,937	138,221	63,073	214,021	200,286	479,017	360,296
Washington	10,550	17,930	1,000	500	.....	.....	11,550	18,430
West Virginia	36,048	18,406	573,454	272,887	70,565	49,012	680,067	340,305
Wisconsin	763,383	506,957	73,006	36,026	417,405	233,477	1,253,794	776,460
Wyoming	100	60	.....	.....	450	375	550	435
Total	14,607,582	9,669,244	11,075,080	5,721,289	9,345,469	6,663,764	35,028,131	22,054,297

From this table it will be seen that New York, producing 13.14 per cent; Illinois, 11.68 per cent; Pennsylvania, 11.58 per cent; Ohio, 8.92 per cent; California, 5.46 per cent; Missouri, 5.37 per cent; and New Jersey, 4.64 per cent of the total crushed stone output of the United States, were the principal crushed-stone producing States in 1907. Each of these had an output valued at more than $1,000,000.

The following table shows the quantity and value of crushed stone produced in the United States in 1906 and 1907, by uses and kinds of stone:

Quantity and value of crushed stone produced in the United States in 1906 and 1907, by kinds and uses, in short tons.

1906.

Kind.	Road making.		Railroad ballast.		Concrete.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
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	3,857,500	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
Average price		.64		.49		.65		.59

1907.

Granite	1,262,069	$1,060,658	1,447,406	$714,574	1,375,973	$1,335,530	4,085,448	$3,110,762
Trap rock	3,265,249	2,435,152	1,181,260	680,897	1,626,963	1,164,505	6,073,472	4,280,554
Limestone	9,619,178	5,860.977	8,122,342	4,144,345	5,791,377	3,670,131	23,532,897	13,675,453
Sandstone	461,086	312,457	324,072	181,473	551,156	493,598	1,336,314	987,528
Total	14,607,582	9,669,244	11,075,080	5,721,289	9,345,469	6,663,764	35,028,131	22,054,297
Average price		.66		.52		.71		.63

From this table it appears that the production of crushed stone increased decidedly in 1907, the output amounting to 35,028,131 short tons, valued at $22,054,297, as compared with 29,539,852 short tons, valued at $17,467,486, in 1906—an increase in quantity of 5,488,279 short tons, and in value of $4,586,811. The total average price per ton increased from 59 cents in 1906 to 63 cents in 1907.

Crushed granite increased from 2,941,567 short tons, valued at $2,162,464, in 1906, to 4,085,448 short tons, valued at $3,110,762, in 1907, a gain of 1,143,881 tons in quantity and of $948,298 in value. The average value per ton increased from 74 cents in 1906 to 76 cents in 1907.

Crushed trap rock increased from 5,054,188 short tons, valued at $3,341,863, in 1906, to 6,073,472 short tons, valued at $4,280,544, in 1907, a gain of 1,019,284 short tons in quantity and of $938,691 in value. The average price per ton was 70 cents in 1907, and 66 cents in 1906.

Crushed limestone increased from 20,286,589 short tons, valued at $11,073,265, in 1906, to 23,532,897 short tons, valued at $13,675,453, in 1907, a gain of 3,246,308 short tons in quantity and of $2,602,188 in value. The average price per ton increased from 55 cents in 1906 to 58 cents in 1907.

Crushed sandstone increased from 1,257,508 short tons, valued at $889,894, in 1906, to 1,336,314 short tons, valued at $987,528, in 1907, a gain of 78,806 short tons in quantity and of $97,634 in value. The average price per ton was 71 cents in 1906 and 74 cents in 1907.

In tabulating the figures for crushed stone according to the uses which this stone served, it is very probable that some of the stone reported as sold for road making was in fact used for concrete, as in many cases large dealers report that they do not know the exact purpose to which the stone sold by them is to be applied, and the division is in many cases approximated.

Crushed stone for road making increased from 10,011,550 short tons, valued at $6,376,324, in 1906, to 14,607,582 short tons, valued at $9,669,244, in 1907, a gain of 4,596,032 tons, valued at $3,292,920. It is particularly noteworthy that the greatest increase in the crushed-stone production was in the stone sold for road making. The average price per ton was 64 cents in 1906 and 66 cents in 1907.

Crushed stone for railroad ballast increased from 10,335,022 short tons, valued at $5,100,906, in 1906, to 11,075,080 short tons, valued at $5,721,289, in 1907, a gain of 740,058 short tons in quantity and of $620,383 in value. The average price per ton was 49 cents in 1906 and 52 cents in 1907.

Crushed stone for concrete increased from 9,193,280 short tons, valued at $5,990,256, in 1906, to 9,345,469 short tons, valued at $6,663,744, in 1907, a gain of 152,189 short tons in quantity and of $673,508 in value, a very large increase in value compared with the increase in output. The avarage value increased from 65 cents per ton in 1906 to 71 cents per ton in 1907.

An increase in the price of crushed stone was reported by almost all of the producers, the reason assigned being the cost of labor and of supplies.

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 1906 and 1907:

Exports of stone from the United States in 1906 and 1907.

Kind.	1906.	1907.
Marble and stone, unmanufactured	$355,343	$407,193
All others	780,539	681,798
Total	1,135,882	1,088,991

Imports of stone into the United States in 1906 and 1907.

Kind.	1906.	1907.
Marble:		
In block, rough, etc.	$892,717	$1,040,333
Sawed or dressed	306	1,132
Slabs or paving tiles	93,760	50,718
All other manufactures	220,150	257,456
Mosaic cubes	48,183	49,893
Total	1,255,116	1,399,532
Onyx:		
In block, rough, etc.	76,385	57,795
All other manufactures	1,482	7,678
Total	77,867	65,473
Granite:		
Dressed	$145,144	$166,524
Rough	20,931	8,779
Total	166,075	175,303
Stone (other):		
Dressed	16,354	26,003
Rough	41,255	38,761
Total	57,609	64,764
Grand total	1,556,667	1,705,072

These tables show that the stone exported decreased in value from $1,135,882 in 1906 to $1,088,991 in 1907, a loss of $46,891.

The value of the stone imported increased from $1,556,667 in 1906 to $1,705,072 in 1907, a gain of $148,405.

GRANITE.

Total production.—The figures given in this report as representing the value of the granite production in the United States include and the value of small quantities of gneiss, mica schist, lava, tuff, 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 in the States of California, Connecticut, Massachusetts, New Jersey, New York, and Pennsylvania, however, as already noted, represents an industry sufficient by itself to make it advisable to tabulate this stone separately, and its value is therefore not included in the grand total of granite, as has been done in previous years.

The value of the granite output in the United States, not including the trap rock, was $18,064,708; in 1906 this value was $18,562,806—a decrease in 1907 of $498,098. The increase in 1906 over the total for 1905, which was $17,563,139, was $999,667. In 1906, notwithstanding the large increase in output, the quarrymen, especially the small producers, reported a decrease of trade due to the use of cement and concrete in building, to high wages, to high price of supplies, and to scarcity of common labor. In 1907, in addition to these conditions, the unsettled financial situation during the latter part of the year hurt the building trade and affected the large producers, who depend on general trade, more than the small producers depending on local markets.

Granite for building stone decreased heavily in value of output; monumental stone increased slightly, as did stone sold for flagging and curbing, while stone sold for paving blocks, crushed stone, riprap, rubble, etc., increased considerably.

In 1906 the rank in output of States producing granite to the value of $500,000 or more was Massachusetts, Vermont, Maine, Connecticut, Maryland, New Hampshire, Wisconsin, Georgia, North Carolina, California, Minnesota, and Rhode Island; in 1907 the rank was Vermont, Massachusetts, Maine, California, Wisconsin, Maryland, North Carolina, Georgia, Rhode Island, New Hampshire, Connecticut, and Washington

California showed a large increase in output due to heavy demand and higher prices, contingent to the repair of the ravages made by the earthquake during the spring of 1906.

Connecticut, Maine, Massachusetts, Minnesota, New Hampshire, and Vermont decreased chiefly in the value of building stone; and Georgia, Maryland, North Carolina, Rhode Island, Washington, and Wisconsin showed increased output.

Arkansas, Colorado, Delaware, Idaho, New Mexico, Oklahoma, Oregon, Pennsylvania, South Dakota, Utah, and Virginia increased in output, and Arizona, Hawaii, Missouri, Montana, New Jersey, New York, South Carolina, Texas, and Wyoming decreased.

The output from Arizona, Colorado, Hawaii, Idaho, Oregon, Utah, and Wyoming includes considerable volcanic rock and tuff.

The production of a few of the other States (notably Maryland and Virginia) includes, besides these varieties of igneous rock, gneiss, trap, mica schist, syenite, andesite, diabase, etc., but only in small quantities as compared with the total production.

51506—M B 1907, PT 2——37

Building stone.—Building stone, including rough and dressed granite sold by producers, was valued at $6,033,362 in 1907, a decrease of $2,396,660 as compared with the total value of $8,430,022 in 1906. In 1906 the increase over 1905, when the total output was $7,243,219, was $1,186,803.

The rough building stone sold by the granite quarrymen was valued at $1,280,769 in 1907 and at $1,770,918 in 1906, a decrease of $490,149 in this class of material. Maine, Massachusetts, and Pennsylvania report the greatest values for the rough building stone sold, and while this value for Massachusetts increased somewhat in 1907, the value for the other States decreased. Connecticut also showed a decreased output of rough building stone.

The dressed stone sold for building by the quarrymen was valued at $4,752,593 in 1907 and at $6,659,104 in 1906, a decrease of $1,906,511. In 1906 Massachusetts reported $1,750,695 as the value of the dressed building stone sold, Vermont $1,422,862, and Maine $1,413,486; in 1907 these States reported values for this class of product as follows: Vermont $1,009,353, Maine $1,007,572, and Massachusetts $907,119—a decrease of $843,576 for Massachusetts, $413,509 for Vermont, and $405,914 for Maine. A large part of the decrease for Massachusetts was due to the cessation of the quarrying at Milford, Mass., of stone for the new Pennsylvania Railroad station in New York City. Most of the large producers of this class of material report decreased demand for building stone, especially for large foundation stone, due, as already stated, to the financial situation in 1907 and somewhat to the use of concrete for foundations. Although Vermont had the largest output of dressed building stone, Maine and Massachusetts both exceed Vermont in the total value of building stone, including both rough and dressed. The California figures for 1907 show, as compared with those for 1906, a notable increase in output of building stone due to local causes.

Monumental stone.—Monumental stone, including stone cut and dressed by the producers and also the rough stock sold by them, was valued at $4,338,819 in 1907, as against $4,115,665 in 1906, an increase of $223,154. Of the 1907 total, $2,239,327 was the value of rough stock and $2,099,492 the value of dressed stone sold by the producers. In 1906 the rough stock was valued at $2,293,144 and the dressed stone at $1,822,521, a decrease in 1907 of $53,817 in value of rough stock and an increase of $276,971 in value of finished stone.

Vermont produces more rough stock and sells more dressed stone than any other State. The output of this class of stone in Vermont in 1907 was valued at $1,637,922 and in 1906 at $1,444,442, an increase in 1907 of $193,480. Massachusetts ranks next to Vermont, with an output of $403,594 in 1907 and of $724,614 in 1906, a decrease in 1907 of $321,020. Other States prominent in output of monumental stone are Rhode Island, Minnesota, Maine, Wisconsin, New Hampshire, and Connecticut.

Paving blocks.—The paving-block industry increased in value from $1,459,915 in 1906 to $1,928,308 in 1907, a gain of $468,393. Wisconsin, Maine, and Massachusetts were the largest producers of this class of material.

Curbstone.—Granite curbing in 1907 was produced to the value of $819,621, against $785,995 in 1906, an increase of $33,626 for 1907.

Georgia, Maine, and California had the largest curbstone output in 1907.

Flagstone.—The value of this class of product increased from $50,609 in 1907 to $69,854 in 1906, a gain of $19,245. Maine and Maryland were the largest producers in 1907.

Rubble.—Granite reported as used for rubble was valued at $717,998 in 1907, as against $360,763 in 1906, an increase of $357,235 in 1907. California, Connecticut, and Massachusetts showed large gains in value of rubble.

Riprap.—Granite sold for riprap increased in value from $322,022 in 1906 to $620,033 in 1907, a gain of $298,011. Washington and Connecticut had the largest values in 1907.

Crushed stone.—Granite crushed and sold for the purpose of road building, as railroad ballast, and as concrete for buildings, pavements, etc., was valued at $3,110,762 in 1907, as against $2,162,464 in 1906, an increase of $948,298 in 1907. These figures represent an output of 4,085,448 short tons in 1907 and of 2,941,567 short tons in 1906, an increase in 1907 of 1,143,881 tons. Of the total 1907 output, 1,262,069 tons, valued at $1,060,658, was for road making; 1,447,406 tons, valued at $714,574, for railroad ballast, and 1,375,973 tons, valued at $1,335,530, for concrete. These figures for 1906 were as follows: 858,289 tons, valued at $722,807, for road making; 1,066,784 tons, valued at $545,771, for railroad ballast; and 1,016,494 tons, valued at $893,886, for concrete, an increase in 1907 of 403,780 tons in quantity and $337,851 in value for road making; of 380,622 tons in quantity and $168,803 in value for railroad ballast, and of 359,479 tons in quantity and $441,644 in value for concrete. The total average price per ton was 74 cents in 1906 and 76 cents in 1907. The average price per ton for road making was 84 cents in 1907 and 84 cents in 1906; for railroad ballast it was 49 cents in 1907 and 51 cents in 1906; for concrete 97 cents in 1907 and 88 cents in 1906. Maryland, North Carolina, Virginia, and Georgia had the largest values for crushed granite in 1907, Maryland reporting the greatest value for road making, North Carolina for railroad ballast, and Maryland for concrete. The output of Maryland includes some trap rock and gneiss; the output of Virginia includes gneiss.

The table following shows the value of the granite, including small values for trap and other igneous rocks, produced in the United States in 1906 and 1907, by States and Territories, and by uses in 1906 and 1907.

Value of granite and other igneous rocks produced in the United States in 1906 and 1907, by States and Territories and uses.

1906.

State or Territory.	Sold in the rough.			Dressed for building.	Dressed for monumental work.	Made into paving blocks.	Curbing.	Flagging.
	Building.	Monumental.	Other.					
Arizona	$7,800	$3,000	$21,042	.....	.....	.....	$50	.....
Arkansas	1,000	500	100	.....	.....	.....	11,250	.....
California	21,489	50,541	119,057	$255,189	$34,285	$61,115	64,975	.....
Colorado	13,450	28,508	.....	.....	18,000	.....	4,000	.....
Connecticut	158,189	44,433	13,880	428,915	64,019	62,305	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	220,121	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	21,019	730	500	25,795	.....	1,216	.....	.....
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	350	4,070	100	9,500	.....	113	600	640
Oregon	5,848	200	24	.....	.....	.....	673	.....
Pennsylvania	207,451	3,525	13,808	20,052	.....	19,318	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	47,154	993,220	151	1,422,862	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	1,770,918	2,293,144	792,173	6,659,104	1,822,521	1,459,915	785,995	50,609

State or Territory.	Rubble.	Riprap.	Crushed stone.			Other.	Total.
			Road making.	Railroad ballast.	Concrete.		
Arizona	$150	.....	.....	.....	.....	.....	$32,042
Arkansas	8,191	$15,000	$20,000	$25,000	$37,862	.....	118,903
California	12,121	33,819	47,028	24,800	16,365	.....	740,784
Colorado	.....	.....	332	.....	1,112	.....	65,402
Connecticut	6,081	168,206	2,648	.....	4,009	$40	974,024
Delaware	3,962	15,940	6,814	37,129	48,849	.....	146,346
Georgia	27,515	7,000	19,400	150,690	81,400	850	792,315
Hawaii	.....	.....	4,476	150	6,645	12,075	23,346
Idaho	.....	.....	.....	.....	.....	.....	400
Maine	18,243	1,875	9,931	.....	11,504	20,692	2,560,021
Maryland	52,563	4,290	125,655	5,803	171,869	23,472	883,881
Massachusetts	61,367	3,107	70,897	.....	84,946	816	3,327,416
Minnesota	19,553	660	31,397	16,700	34,950	1,810	626,069
Missouri	150	3,557	300	.....	63,858	.....	150,009
Montana	11,075	.....	6,000	.....	.....	.....	114,005
New Hampshire	15,167	2,323	10,350	426	9,918	2,350	818,131
New Jersey	.....	33	5,000	46,313	300	318	101,224
New York	323	112	3,150	.....	3,000	.....	304,048
North Carolina	5,688	4,140	18,691	134,800	60,762	17,355	778,847
Oklahoma	509	2,565	.....	.....	400	.....	18,847
Oregon	2,070	470	34,223	7,111	8,342	.....	58,961
Pennsylvania	36,631	169	31,312	8,000	5,738	.....	349,453
Rhode Island	666	745	41,018	.....	3,765	2,450	622,812
South Carolina	6,665	750	6,825	11,796	56,896	750	247,998
Texas	.....	16,875	7,200	2,067	13,294	.....	168,061
Utah	50	.....	.....	.....	.....	.....	4,948
Vermont	544	.....	1,725	1,100	472	.....	2,934,825
Virginia	28,477	31,790	34,981	64,386	85,077	.....	340,900
Washington	41,549	8,041	13,202	9,500	4,963	.....	459,975
Wisconsin	1,453	555	170,192	.....	77,590	200	798,213
Wyoming	.....	.....	.....	.....	.....	.....	600
Total	360,763	322,022	722,807	545,771	893,886	83,178	18,562,806

Value of granite and other igneous rocks produced in the United States in 1906 and 1907, by States and Territories and uses—Continued.

1907.

State or Territory.	Sold in the rough.			Dressed for building.	Dressed for monumental work.	Made into paving blocks.	Curbing.	Flagging.
	Building.	Monumental.	Other.					
Arizona	$700				$3,000			
Arkansas							$10,973	
California	35,322	$49,216	$6,018	$485,778	80,397	$133,013	107,138	$2,018
Colorado	10,516	18,041		1,490	34,937		2,150	
Connecticut	31,928	26,302	838	110,600	112,393	37,666	24,551	2,357
Delaware	1,649	45		1,470		12,763	8,004	450
Georgia	89,675	31,100	17,050	76,252	1,000	151,181	215,758	5,515
Hawaii								
Idaho		1,800			5,000		1,750	
Maine	318,816	60,263	23,482	1,007,572	166,789	355,462	139,148	18,742
Maryland	107,694	13,657	240	55,781	8,928	56,585	23,279	13,406
Massachusetts	267,984	337,016	39,327	907,119	66,578	319,037	87,898	4,632
Minnesota	8,829	69,936	1,200	52,248	264,333	20,741	22,991	3,768
Missouri	342	34,530		8,550	16,675	15,966		
Montana	2,000	2,000		51,000	13,000	700	4,700	2,000
New Hampshire	49,831	90,352	36	224,269	133,601	74,978	43,944	2,865
New Jersey	4,858	105	500	8,075	300	1,456		
New Mexico								
New York	6,800	4,000		31,567	7,089		1,686	
North Carolina	50,062	16,010	50	319,821	41,120	65,379	63,061	4,236
Oklahoma	4,750	6,000	500	7,000	700		150	
Oregon	3,910	3,100	120	1,250	9,200	8,600	1,510	18
Pennsylvania	189,837	8,846	1,256	60,863		21,310	7,086	
Rhode Island	8,125	172,396	642	172,041	200,573	85,091	50	
South Carolina	9,425	50,515		900		5,253	18,491	25
South Dakota				690				
Texas	8,739	15,447		14,747	44,460	25	780	
Utah	782	1,658	2,000		800			
Vermont	29,764	1,122,063	6,334	1,009,353	515,859	5,330	2,721	
Virginia	19,350	8,039		13,275	9,787	18,072	6,000	
Washington	7,660	34,145	16,750	126,782	1,677	917	25,802	
Wisconsin	11,331	62,745	70,753	4,100	361,296	538,783		9,822
Wyoming	90							
Total	1,280,769	2,239,327	187,096	4,752,593	2,099,492	1,928,308	819,621	69,854

State or Territory.	Rubble.	Riprap.	Crushed stone.			Other.	Total.
			Road making.	Railroad ballast.	Concrete.		
Arizona	$200					$9,800	$13,700
Arkansas	25,271	$13,160	$6,000		$113,592		168,996
California	191,996	36,991	79,254	$5,220	40,713	53,250	1,306,324
Colorado							67,134
Connecticut	114,178	118,830	7,000		3,510	1,000	591,153
Delaware	3,033	12,184	40,298	36,668	41,628		158,192
Georgia	26,954	925	25,000	152,297	60,896	5,000	858,603
Hawaii					7,599	12,000	19,599
Idaho			17,392				25,942
Maine	17,025	2,998	1,511	325	19,926	14,361	2,146,420
Maryland	77,901	7,266	282,310	41,266	490,378	5,062	1,183,753
Massachusetts	118,308	43,900	70,585	1,086	63,297	2,010	2,328,777
Minnesota	15,379	16,700	8,373	14,000	48,105		546,603
Missouri		8,375	16,424	100	35,443		136,405
Montana	20,650	6,000					102,050
New Hampshire	5,572	3,949	3,975		14,349		647,721
New Jersey	500		11,890	45,880	2,193		75,757
New Mexico				167,294			167,294
New York	762	4,900	70,750	19,300	35,591	107,277	289,722
North Carolina	6,823	2,941	53,939	175,847	106,497	690	906,476
Oklahoma	650	3,600			1,200		24,550
Oregon	614		80,103	1,744	7,450	6	117,625
Pennsylvania	19,801	100	28,117	2,726	9,711	17,026	366,679
Rhode Island	448	1,002	25,480		5,550	2,750	674,148
South Carolina	13,939	25	25,887	17	4,500	400	129,377
South Dakota							690
Texas		10,600	16,000		11,360		122,158
Utah							5,240
Vermont	25	9	2,431				2,693,889
Virginia	16,350	28,852	59,937	50,804	167,960		398,426
Washington	40,818	281,936	17,930			7,935	562,352
Wisconsin	801	14,790	110,072		44,082	288	1,228,863
Wyoming							90
Total	717,998	620,033	1,060,658	714,574	1,335,530	238,855	18,064,708

The following table shows the value of the production of granite, including a small output of igneous rocks, in the United States from 1903 to 1907, inclusive:

Value of granite, etc., produced in the United States, by States and Territories, 1903–1907.

State or Territory.	1903.	1904.	1905.	1906.	1907.
Arizona	$3,000	$2,500	$3,700	$32,042	$13,700
Arkansas	47,136	52,616	90,312	118,903	168,996
California	1,161,266	1,180,415	1,161,330	740,784	1,306,324
Colorado	100,791	91,132	73,802	65,402	67,134
Connecticut	871,941	558,334	636,364	974,024	591,153
Delaware	369,166	245,272	178,428	146,346	158,192
Georgia	672,947	942,466	971,207	792,315	858,603
Hawaii	----	22,042	33,550	23,346	19,599
Idaho	2,750	----	1,500	400	25,942
Indian Territory	4,030	5,152	1,800	----	----
Maine	2,586,765	2,400,509	2,713,795	2,560,021	2,146,420
Maryland	837,787	815,471	957,048	883,881	1,183,753
Massachusetts	2,351,027	2,554,748	2,251,319	3,327,416	2,328,777
Minnesota	403,906	405,956	481,908	626,069	546,603
Mississippi	----	440	----	----	----
Missouri	150,409	155,716	180,579	150,009	136,405
Montana	25,993	33,890	126,430	114,005	102,050
Nevada	7,450	1,200	----	----	----
New Hampshire	854,513	927,487	838,371	818,131	647,721
New Jersey	124,135	37,197	76,758	101,224	75,757
New Mexico	----	----	----	----	167,294
New York	159,590	196,685	134,425	304,048	289,722
North Carolina	218,947	297,749	564,578	778,847	889,976
Oklahoma	5,000	26,930	18,920	18,847	24,550
Oregon	118,411	235,213	85,330	58,961	117,625
Pennsylvania	370,551	471,528	450,619	349,453	366,679
Rhode Island	710,291	684,952	556,364	622,812	674,148
South Carolina	476,863	382,428	297,284	247,998	129,377
South Dakota	(a)	900	----	----	690
Texas	173,325	348,317	132,193	168,061	122,158
Utah	3,803	7,980	13,630	4,948	5,240
Vermont	1,810,179	2,447,979	2,571,850	2,934,825	2,693,889
Virginia	299,335	510,788	452,390	340,900	398,426
Washington	209,095	422,508	681,730	459,975	562,352
Wisconsin	573,391	724,422	825,625	798,213	1,228,863
Wyoming	----	557	----	600	90
Total	15,703,793	17,191,479	17,563,139	18,562,806	18,064,708

a Value of quartzite included in sandstone.

The following table shows the quantity and value of granite paving blocks produced in the United States in 1906 and 1907, by States:

Number and value of granite paving blocks produced in 1906 and 1907, by States and Territories.

State or Territory.	Paving blocks.			
	1906.		1907.	
	Number	Value.	Number.	Value.
California	1,415,000	$61,115	2,674,307	$133,013
Connecticut	806,863	62,305	854,134	37,666
Delaware	162,281	7,783	298,073	12,763
Georgia	3,927,500	123,211	5,410,000	151,181
Maine	8,658,437	336,979	6,292,753	355,462
Maryland	1,126,082	51,539	901,225	56,585
Massachusetts	4,936,078	199,457	5,995,040	319,037
Minnesota	744,150	50,000	315,000	20,741
Missouri	624,453	26,295	336,007	15,966
Montana	----	----	10,000	700
New Hampshire	2,298,145	89,878	1,782,406	74,978
New Jersey	38,567	1,216	43,426	1,456
New York	----	----	----	----
North Carolina	974,330	33,428	1,115,859	65,379
Oklahoma	2,250	113	----	----
Oregon	----	----	200,000	8,600
Pennsylvania	455,401	19,318	442,500	21,310
Rhode Island	834,001	42,532	1,643,360	85,091
South Carolina	348,615	11,340	239,086	5,253
Texas	10,000	250	800	25
Vermont	282,930	9,557	171,000	5,330
Virginia	1,385,000	29,536	685,100	18,072
Washington	230,000	16,240	13,921	917
Wisconsin	5,110,586	287,823	9,136,584	538,783
Total	34,370,669	1,459,915	38,560,581	1,928,308
Average value per thousand	----	42.48	----	50.00

From this table it appears that there was a considerable increase in the granite paving-block industry in 1907 as compared with 1906. In 1906 the output was 34,370,669 blocks, valued at $1,459,915; in 1907 it was 38,560,581 blocks, valued at $1,928,308, an increase of 4,189,912 blocks in quantity and $468,393 in value. These figures are exclusive of the trap-rock blocks from California, Connecticut, New York, New Jersey, and Pennsylvania.

The average price increased from $42.48 per thousand blocks in 1906 to $50 per thousand in 1907, a gain of $7.52 per thousand. Paving blocks vary in price from $20 per thousand to over $80 per thousand, according to size and regularity of shape.

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 bowlders 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.

Granite production of Vermont.—The following table made out for the forthcoming report of T. Nelson Dale of the United States Geological Survey on the granites of Vermont gives the granite output of Vermont by counties, and also shows the quantity of stone quarried and sold by the producers for building and monumental work during the years 1906 and 1907. This represents practically all the granite quarried and sold in Vermont in these two years, the quantity used for paving blocks and other purposes being practically negligible:

Production of granite in Vermont in 1906 and 1907, by counties.

1906.

County.	Number of firms reporting.	Building.			
		Rough.		Dressed.	
		Quantity (cubic feet).	Value.	Quantity (cubic feet).	Value.
Washington and Orange	32	66,762	$42,138	234,946	$771,169
Windsor	4	.....	.....	191,793	651,693
Caledonia, Essex, and Orleans	14	2,000	1,000	.....	.....
Windham	3	11,300	4,016	.....	.....
Total	53	80,062	47,154	426,739	1,422,862
Average value per cu. ft	.....	.....	.59	.....	3.33

County.	Monumental.				Paving.		Other purposes.	Total value.
	Rough.		Dressed.					
	Quantity (cubic feet).	Value.	Quantity (cubic feet).	Value.	Quantity (number of blocks).	Value.	Value.	
Washington and Orange	1,006,436	$879,745	110,277	$428,035	112,930	$3,647	$9,688	$2,134,422
Windsor	2,200	3,200	14,534	22,447	.....	.....	.....	677,340
Caledonia, Essex, and Orleans	206,947	110,275	1,850	740	.....	.....	700	112,715
Windham	.....	.....	.....	.....	170,000	5,910	422	10,348
Total	1,215,583	993,220	126,661	451,222	282,930	9,557	10,810	2,934,825
Average value per cu. ft	.....	.82	.....	3.56	.....	.....	.....	.....

Production of granite in Vermont in 1906 and 1907, by counties—Continued.

1907.

County.	Number of firms reporting.	Building.			
		Rough.		Dressed.	
		Quantity (cubic feet).	Value.	Quantity (cubic feet).	Value.
Washington and Orange	39	35,543	$25,239	100,081	$234,583
Windsor	4	.....	.....	204,076	774,460
Caledonia and Orleans	9	3,300	1,400	.....	.....
Windham	3	4,450	3,125	325	310
Total	55	43,293	29,764	304,482	1,009,353
Average value per cu. ft	.....	.....	.68	.....	3.31

County.	Monumental.				Paving.		Other purposes.	Total value.
	Rough.		Dressed.					
	Quantity (cubic feet).	Value.	Quantity (cubic feet).	Value.	Quantity (number of blocks).	Value.	Value.	
Washington and Orange	1,144,263	$1,037,933	136,103	$503,759	5,000	$150	3,645	$1,805,369
Windsor	1,847	3,254	3,000	12,000	.....	.....	.....	789,714
Caledonia and Orleans	143,427	77,816	.....	.....	.....	.....	1,751	80,967
Windham	3,371	3,000	40	100	166,000	5,180	6,124	17,839
Total	1,202,908	1,122,063	139,143	515,859	171,000	5,330	11,520	2,693,889
Average value per cu. ft	.....	.93	.....	3.70	.....	.....	.....	.....

It appears that in 1907 there were sold in Vermont 347,775 cubic feet of granite building stone, valued at $1,039,117, and in 1906, 506,801 cubic feet, valued at $1,470,016, a decrease in 1907 of 159,026 cubic feet in quantity and of $430,899 in value.

The figures for monumental stone for the two years were 1,342,051 cubic feet, valued at $1,637,922 in 1907, and 1,342,244 cubic feet, valued at $1,444,442, in 1906, a decrease in 1907 of 193 cubic feet in quantity but an increase of $193,480 in value.

From these figures it will be seen that although the quantity of stone sold for monumental work in 1907 was about four times as great as the quantity sold for building stone, the total value to the quarrymen of the monumental stone increased only one and one-half times. As the table indicates, this is on account of the large quantity of monumental stone sold to the manufacturer in the rough state and the large quantity of building stone sold as dressed stone.

By using the average price per cubic foot of dressed building and dressed monumental stone, it may be calculated that the total value of all the building stone as dressed stone in 1907 was $1,152,653, while the total value of all the monumental stone as dressed or manufactured stone was $4,966,619.

TRAP ROCK.

In former years the figures of trap rock production in the States of California, Connecticut, Massachusetts, New Jersey, New York, and Pennsylvania, where trap rock has formed a considerable industry, have been included in the totals with granite, although a table has

been given showing this production by itself. In this report, however, the trap rock figures for the States named have been segregated, only such trap rock values being left in the granite figures as are included in States where the quantity produced is inappreciable. The California output of trap rock includes a considerable quantity of basalt.

The total output of trap rock in 1907 was valued at $4,594,103; in 1906 it was $3,736,571, an increase of $857,532 for 1907.

The chief gain was in crushed stone, which forms the basis of the trap rock industry and which increased in value from $3,341,863 in 1906 to $4,280,554 in 1907, or $938,691. The quantities corresponding to these values were 5,054,188 short tons in 1906 and 6,073,472 short tons in 1907, an increase in 1907 of 1,019,284 tons. The average value per ton was 66 cents in 1906 and 70 cents in 1907.

In the different crushed stone products the increase was in the value of stone used for road building, particularly in California, due to rebuilding of roads destroyed in 1906 by the earthquake. Crushed stone for railroad ballast also increased in value, but crushed stone for concrete decreased.

For many years New Jersey led in value of trap rock production, and in 1906 was followed by Pennsylvania, New York, California, Massachusetts, and Connecticut, in the order named. In 1907, however, California, for reasons above noted, took first place, followed by New Jersey, New York, Pennsylvania, Connecticut, and Massachusetts.

The following table shows the value of the trap rock output in the United States in 1906 and 1907, by States and uses:

Value of trap produced in the United States in 1906 and 1907, by States and uses.

1906.

State.	Building.	Paving.	Crushed stone.			Other.	Total.
			Road making.	Railroad ballast.	Concrete.		
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

1907.

California	$4,600	$132,345	$435,241	$89,031	$356,427	$12,105	$1,029,749
Connecticut	6,052	15,110	215,206	74,660	144,825	4,100	459,953
Massachusetts	20,947	.....	225,983	41,774	141,370	2,530	432,604
New Jersey	5,369	31,126	557,655	161,367	224,587	10,332	995,436
New York	.....	1,500	764,582	7,367	107,090	34,856	915,395
Pennsylvania	11,235	2,409	236,485	306,698	190,206	13,933	760,966
Total	48,203	182,490	2,435,152	680,897	1,164,505	82,856	4,594,103

The following table shows the quantity and value of trap paving blocks produced in the United States in 1906 and 1907, by States:

Number and value of trap paving blocks produced in the United States, 1906–7, by States.

State.	Paving blocks.			
	1906.		1907.	
	Number.	Value.	Number.	Value.
California	3,080,391	$136,310	2,494,989	$132,345
Connecticut	17,015	340	474,580	15,110
New Jersey	1,714,200	52,700	1,107,000	31,126
New York	.....	.....	50,000	1,500
Pennsylvania	88,084	3,662	55,900	2,409
Total	4,899,690	193,012	4,182,469	182,490
Average price per thousand	.....	39	.....	41

SANDSTONE.

Since 1903 sandstone has shown more perhaps than any other kind of stone the effect of the use of cement and concrete for foundations, buildings, paving, flagging, and curbing, and the use of concrete blocks for buildings; and in 1907 it was particularly affected by the general financial depression. The chief use of sandstone is as building stone, and the decrease in this use was so great that it was not offset, as in limestone and to some extent in granite, by any large increase in output for some other purpose. Sandstone, however, for all other uses increased in value in 1907 as compared with 1906.

The total value of the sandstone production was $8,871,678 in 1907 and $9,169,337 in 1906, a decrease of $297,659 in 1907. The total value for 1907 is the smallest since 1901, when the value of the output was $8,138,680. Pennsylvania, New York, and Ohio with total values, respectively, of $2,064,913, $1,978,117, and $1,591,148 in 1907, were the principal sandstone-producing States. The next States in order of value of output were California, Minnesota, Colorado, Washington, and Massachusetts, with values ranging from $437,738 to $243,323. In 1906 the production of the three ranking States, Pennsylvania, New York, and Ohio, was valued at $2,724,874, $1,905,892, and $1,426,645, respectively, showing an increase for 1907 of $72,225 for New York and of $164,503 for Ohio, and a decrease of $659,961 for Pennsylvania. The next States in rank in 1906 were California, Colorado, Minnesota, Massachusetts, and New Jersey, with values of production ranging from $642,166 to $215,142.

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. The output of New York also includes in 1906 and 1907 a small value for Connecticut.

Building stone.—Building stone, rough and dressed, was valued at $3,154,783 in 1907 and at $4,275,669 in 1906, a decrease in 1907 of $1,120,886. The decrease was general for all States producing any quantity of this class of material, with the exception of Washington, West Virginia, and Wisconsin, which States showed increase. The decrease in Pennsylvania is especially noticeable. A large quantity of the Pennsylvania stone is ordinarily used by railroad companies

in building bridges, and in 1907 this work was either practically stopped or cement or concrete was substituted for stone. California sandstone also showed a decided decrease instead of the recovery noticed for the other varieties of stone.

The leading States in production of building stone were Pennsylvania, Ohio, New York, and California, with values respectively of $651,147, $602,001, $546,415, and $229,771. In 1906 the values were: Pennsylvania, $1,346,140; New York, $724,164; Ohio, $659,611; California, $400,083; a decrease of $694,993 for Pennsylvania, of $57,610 for Ohio, of $177,749 for New York, and of $170,312 for California.

Ganister.—Ganister reported from Pennsylvania, Wisconsin, Colorado, Maryland, Ohio, and Illinois, according to rank of value of output, was valued at $308,520 in 1907, as against $284,066 in 1906, a gain of $24,454.

Paving.—Sandstone for paving increased in value from $694,995 in 1906 to $884,843 in 1907, a gain of $189,848. This class of stone consists chiefly of the bluestone of New York and Pennsylvania with a considerable output from Minnesota, Washington, and South Dakota.

Curbing.—Curbing was valued at $1,380,516 in 1907, as against $1,074,369 in 1906, an increase of $306,147. New York, Ohio, and Pennsylvania, the principal producers of this material, showed marked increases in value. The New York and Pennsylvania production was chiefly bluestone.

Flagging.—There was a small increase in the output of flagging from $1,097,438 in 1906 to $1,185,879 in 1907, a gain of $88,441. Ohio, New York, and Pennsylvania were the largest producers, New York and Pennsylvania decreasing in output, and Ohio increasing.

Rubble.—Rubble increased in value $31,332, from $525,108 in 1906 to $556,440 in 1907.

Riprap.—The value of the sandstone used for riprap increased from $231,654 in 1906 to $289,419 in 1907, an increase of $57,765.

Crushed stone.—Sandstone for crushed stone increased in value in 1907 only to a small extent in comparison with the other varieties of stone. In 1907, the production was 1,336,314 short tons, valued at $987,528, as against 1,257,508 short tons, valued at $889,894 in 1906, an increase of 78,806 tons in quantity and of $97,634 in value. The average price per ton was 71 cents in 1906 and 74 cents in 1907. The largest part of the output is used for concrete and roadmaking. Pennsylvania, California, and Massachusetts were the largest producers.

The total output dues 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, or polishing sand.

The following table shows the value of the sandstone production in the United States from 1903 to 1907, inclusive, by States and Territories:

Value of sandstone production in the United States, 1903–1907, by States and Territories.

State or Territory.	1903.	1904.	1905.	1906.	1907.
Alabama	$42,933	$12,788	$28,107	$40,467	$48,673
Arizona	526,875	91,960	65,558	33,149	158,435
Arkansas	61,172	63,950	58,161	55,703	94,275
California	762,327	735,662	685,668	642,166	437,738
Colorado	389,132	281,142	453,029	286,544	299,443
Connecticut	119,417	117,696	62,618	(a)	(a)
Idaho	11,856	9,320	22,265	11,969	24,001
Illinois	26,293	47,377	29,115	19,125	14,996
Indiana	32,651	22,681	15,421	30,740	15,425
Indian Territory	.....	.....	2,198	615	.....
Iowa	19,011	9,300	9,335	5,600	3,542
Kansas	102,128	130,516	79,617	42,809	46,831
Kentucky	93,742	93,622	280,579	125,123	98,450
Louisiana	.....	8,315	.....	.....	.....
Maryland	2,170	8,998	12,984	9,533	13,859
Massachusetts	372,478	320,861	367,461	260,721	243,323
Michigan	121,350	74,868	123,123	65,395	53,003
Minnesota	363,262	319,209	294,640	285,433	300,204
Missouri	49,402	44,455	27,686	20,951	35,289
Montana	68,036	64,232	45,116	37,462	39,216
Nebraska	1,067	142	120	6,899	11,609
Nevada	2,370	10,558	1,500	.....	.....
New Jersey	364,337	236,426	294,719	215,142	177,667
New Mexico	7,510	133,390	101,522	42,574	12,450
New York	b1,756,501	b1,755,524	b1,831,756	bc1,905,892	bc1,978,117
North Carolina	600	250	4,483	3,531	4,105
North Dakota	.....	.....	1,055	44	3,260
Ohio	1,793,379	1,808,062	1,744,472	1,426,645	1,591,148
Oklahoma	6,500	2,995	12,914	40,246	43,403
Oregon	2,912	6,186	1,229	25,950	3,904
Pennsylvania	b3,255,073	b2,641,510	b2,487,939	b2,724,874	b2,064,913
South Dakota	163,967	338,970	193,408	145,966	143,585
Tennessee	20,649	24,868	8,715	14,136	16,523
Texas	114,381	209,313	123,281	111,533	108,047
Utah	71,279	70,168	43,429	137,529	24,298
Virginia	4,471	13,522	2,000	5,100	(d)
Washington	47,430	88,185	124,910	169,500	295,585
West Virginia	252,204	287,381	171,309	113,369	e197,926
Wisconsin	142,445	158,503	161,741	181,986	236,183
Wyoming	91,849	30,986	33,591	24,715	32,252
Total	11,262,259	10,273,891	10,006,774	9,169,337	8,871,678

a Included in New York.
b Includes bluestone.
c Includes Connecticut.
d Included in West Virginia.
e Includes a small value for Virginia.

The following table shows the value of the sandstone production of the United States in 1906 and 1907, by States and Territories and uses:

Value of sandstone production in the United States in 1906 and 1907, by States and Territories and uses.

1906.

State or Territory.	Rough building.	Dressed building.	Ganister.	Paving.	Curbing.	Flagging.	Rubble.
Alabama							$14,975
Arizona	$4,358						1,036
Arkansas	2,879	$1,746		$25	$19,873	$4,636	2,225
California	100,483	299,600			8,642		18,050
Colorado	67,139	15,301	$40,522	16,225	44,543	33,703	29,655
Connecticut							
Idaho	5,088	756					6,125
Illinois	7,735	4,885	1,500	2,500	50	50	1,500
Indiana	4,550	19,240			4,250	150	1,350
Indian Territory	467			8			140
Iowa	4,184	30			113	30	460
Kansas	23,496	700		2,450	6,297	6,546	1,975
Kentucky	64,161	41,762		1,200	1,800	1,875	3,450
Maryland	3,661		5,760		4		
Massachusetts	53,016	52,402					6,860
Michigan	35,272	18,950					10,403
Minnesota	13,112	58,789		72,012	42,193	2,708	31,209
Missouri	6,802	7,298		100	318	418	3,115
Montana	4,257	30,477					2,110
Nebraska	374			7			
New Jersey	119,413	21,250		500	2,950	5,650	45,000
New Mexico	4,040	3,225			375		3,010
New York	230,102	494,062		374,278	375,539	366,423	48,362
North Carolina		2,000					895
North Dakota	10			20			4
Ohio	310,256	349,355	6,750	350	251,509	383,457	36,696
Oklahoma	22,908	8,650			60	115	6,263
Oregon	25,845	105					
Pennsylvania	510,299	835,841	196,804	112,456	305,470	277,623	152,971
South Dakota	26,101	30,356		32,300	320	654	27,875
Tennessee	250	10,531			150	75	3,000
Texas	8,713	21,302			630		5,903
Utah	600	2,014		16,750	400	20	17,645
Virginia	1,250	250					
Washington	41,982	59,700		62,922			2,410
West Virginia	27,169	32,186		592	8,125	10,185	14,418
Wisconsin	21,071	82,357	32,730	100	758	1,120	23,084
Wyoming	14,606	4,900		200		2,000	2,934
Total	1,765,649	2,510,020	284,066	694,995	1,074,369	1,097,438	525,108

Value of sandstone production in the United States in 1906 and 1907, by States and Territories and uses—Continued.

1906—Continued.

State or Territory.	Riprap.	Crushed stone.			Other.	Total.
		Road making.	Railroad ballast.	Concrete.		
Alabama	$25,492					$40,467
Arizona	1,625				$26,130	33,149
Arkansas	350	$977		$22,952	40	55,708
California	63	178,548	$585	33,942	2,253	642,166
Colorado	1,314		7,600	25,027	5,515	286,544
Connecticut						(a)
Idaho						11,969
Illinois	705	200				19,125
Indiana	1,200					30,740
Indian Territory						615
Iowa	32	150			602	5,601
Kansas					1,345	42,809
Kentucky	2,875		7,500	500		125,123
Maryland		8		100		9,533
Massachusetts		33,208		112,885	2,350	260,721
Michigan	770					65,395
Minnesota	7,531	11,619		37,918	8,542	285,633
Missouri	1,400				1,500	20,951
Montana	465				153	37,462
Nebraska	6,500			18		6,899
New Jersey	1,000	9,400	200	3,150	6,629	215,142
New Mexico			30,324		1,600	42,574
New York	2,040	6,600		2,365	6,121	b 1,905,892
North Carolina					636	3,531
North Dakota					10	44
Ohio	38,350	6,800	19,300	13,575	10,247	1,426,645
Oklahoma	50	50		2,075	75	40,246
Oregon						25,950
Pennsylvania	66,626	34,000	108,391	103,120	21,273	2,724,874
South Dakota	13,964	180	157	14,000	59	145,966
Tennessee			100		30	14,136
Texas	40,983	9,000	1,000	23,850	152	111,533
Utah					100	37,529
Virginia				3,600		5,100
Washington	1,923				563	169,500
West Virginia	1,076	3,734	3,560	12,105	219	113,369
Wisconsin	15,320	5,403		43		181,986
Wyoming				75		24,715
Total	231,654	299,877	178,717	411,300	96,144	9,169,337

a Included in New York. b Includes Connecticut.

Value of sandstone produced in the United States in 1906 and 1907, by States and Territories, and uses—Continued.

1907.

State or Territory.	Rough building.	Dressed building.	Ganister	Paving.	Curbing.	Flagging.	Rubble.
Alabama	.....	.....	.....	.....	.....	.....	$4,095
Arizona	$3,113	.....	.....	.....	.....	.....	60,427
Arkansas	3,680	$800	.....	$525	$16,095	$950	4,325
California	14,318	215,453	.....	4,761	3,950	3,600	20,207
Colorado	67,020	10,283	$35,100	25,638	36,987	46,974	32,792
Connecticut	.....	.....	.....	.....	.....	.....	.....
Idaho	12,739	5,525	.....	.....	.....	.....	5,737
Illinois	6,464	4,120	1,900	375	.....	50	1,639
Indiana	5,600	2,000	.....	977	325	73	4,850
Iowa	2,765	.....	.....	.....	.....	.....	606
Kansas	11,037	600	.....	28	13,112	20,027	1,204
Kentucky	37,210	38,170	.....	2,700	1,120	3,000	8,601
Maryland	1,769	30	10,200	.....	1,643	.....	100
Massachusetts	38,779	52,729	.....	750	.....	.....	10,215
Michigan	33,561	10,918	.....	.....	.....	528	7,900
Minnesota	9,438	109,270	.....	78,211	19,440	1,968	32,450
Missouri	17,292	7,911	.....	50	150	325	2,940
Montana	8,550	26,357	.....	.....	.....	.....	2,829
Nebraska	1,409	.....	.....	.....	.....	.....	400
New Jersey	83,513	30,750	455	840	240	4,800	47,000
New Mexico	2,640	1,460	.....	.....	50	100	7,900
New York	144,673	401,742	.....	368,697	621,934	361,383	22,454
North Carolina	.....	2,650	.....	.....	.....	.....	455
North Dakota	3,200	.....	.....	60	.....	.....	.....
Ohio	228,777	373,224	5,500	1,408	336,974	469,072	45,041
Oklahoma	8,758	160	.....	16	85	210	5,354
Oregon	3,306	48	.....	.....	21	.....	.....
Pennsylvania	181,914	469,233	206,661	145,629	315,307	270,227	116,109
South Dakota	17,288	14,745	.....	60,015	335	584	19,458
Tennessee	795	13,000	.....	.....	90	.....	2,240
Texas	12,680	12,562	.....	.....	450	.....	11,200
Utah	5,353	1,002	.....	15,660	.....	.....	583
Virginia	.....	.....	.....	.....	.....	.....	.....
Washington	16,680	95,640	.....	175,285	.....	.....	750
West Virginia	46,263	59,609	.....	3,085	12,038	.....	42,021
Wisconsin	56,566	86,267	48,704	333	.....	1,408	25,156
Wyoming	18,850	2,525	.....	.....	170	600	9,402
Total	1,106,000	2,048,783	308,520	884,843	1,380,516	1,185,879	556,440

Value of sandstone produced in the United States in 1906 and 1907, by States and Territories, and uses—Continued.

1907—Continued.

State or Territory.	Riprap.	Crushed stone.			Other.	Total.
		Road making.	Railroad ballast.	Concrete.		
Alabama	$44,578					$48,673
Arizona	250			$41,645	$53,000	158,435
Arkansas	1,350	$375		66,025	150	94,275
California	2,880	108,244	$163	64,162		437,738
Colorado	4,064	900	21,580	18,095	10	299,443
Connecticut						(a)
Idaho						24,001
Illinois	418				30	14,996
Indiana	1,600					15,425
Iowa	171					3,542
Kansas					823	46,831
Kentucky	2,022	1,572		1,130	2,925	98,450
Maryland				117		13,859
Massachusetts		18,653		122,197		243,323
Michigan	96					53,003
Minnesota	8,364	31,510		1,978	7,575	300,204
Missouri	3,600				3,021	35,289
Montana	1,246				234	39,216
Nebraska	9,750			50		11,609
New Jersey		5,550		4,519		177,667
New Mexico		300				12,450
New York	1,933	35,549		8,225	11,527	b c1,978,117
North Carolina					1,000	4,105
North Dakota						3,260
Ohio	54,222	12,357	21,200	21,118	22,255	1,591,148
Oklahoma	2,700		26,000		120	43,403
Oregon	427	102				3,904
Pennsylvania	99,518	75,496	88,960	80,986	14,873	c2,064,913
South Dakota	15,360	14,000			1,800	143,585
Tennessee		94			304	16,523
Texas	15,555		21,850	33,750		108,047
Utah					1,700	24,298
Virginia						(d)
Washington	6,730		500			295,585
West Virginia	4,901	240	1,220	27,845	704	e 197,926
Wisconsin	7,534	7,455		1,381	1,379	236,183
Wyoming	150	60		375	120	32,252
Total	289,419	312,457	181,473	493,598	123,750	8,871,678

a Included in New York.
b Includes Connecticut.
c Includes bluestone.
d Included in West Virginia.
e Includes small output for Virginia.

BLUESTONE.

Bluestone as quarried in New York and Pennsylvania increased somewhat in value in 1907, although producers and dealers generally reported lack of demand, and therefore of production, on account of financial conditions.

Bluestone forms a prominent industry in northeastern Pennsylvania and eastern New York. This stone is quarried by a large number of small quarrymen, who, at unoccupied intervals, get out this stone and sell it to large dealers. These large buyers of stone also quarry for themselves, and the best figures of production are obtained from them. Besides this a considerable quantity is sold for local use, especially for flagging and curbing, and difficulty is experienced in getting reports for this stone, as very few of the small producers keep records of the sales made by them.

The bluestone output of New York and Pennsylvania in 1906 represented 22.05 per cent of the total sandstone output in the United States; in 1907 it was 23.87 per cent. New Jersey also produced sandstone known to the trade as bluestone, but this output is included in sandstone.

The total value for 1907 was $2,117,916, as against $2,021,898 for 1906, an increase for 1907 of $96,018. The output from New York increased in value from $1,138,934 in 1906 to $1,356,555 in 1907, or $217,621; the output of Pennsylvania decreased from $882,964 in 1906 to $761,361 in 1907, a decrease of $121,603.

Bluestone for building purposes decreased in value from $760,842 in 1906 to $585,341 in 1907, or $175,501. Both States decreased in value of production.

Flagging increased in value from $630,964 in 1906 to $721,568 in 1907, an increase of $90,604. New York increased in value of output and Pennsylvania decreased.

Curbing increased in value from $405,894 in 1906 to $560,403 in 1907, a gain of $154,509, New York increasing and Pennsylvania decreasing in value of output. Bluestone for crushed stone and for other minor purposes increased slightly in 1907.

The following table shows the value and uses of the bluestone produced in New York and Pennsylvania in 1906 and 1907:

Value and uses of bluestone produced in New York and Pennsylvania in 1906 and 1907.

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

1907.

New York	$374,369	$468,045	$431,663	$2,675	$79,803	$1,356,555
Pennsylvania	210,972	253,523	128,740	54,552	113,574	761,361
Total	585,341	721,568	560,403	57,227	193,377	2,117,916

MARBLE.

The marble output in the United States was valued at $7,837,685 in 1907, as against $7,582,938 in 1906, a gain of $254,747.

The commercial output of marble in the United States is from Vermont, New York, Georgia, Tennessee, Massachusetts, California, Pennsylvania, Maryland, Alabama, Alaska, Oklahoma, Kentucky, New Mexico, Utah, Washington, and Idaho, named in order of value of output.

Vermont in 1907 produced 58.65 per cent of the marble output of the United States. The Vermont output was valued at $4,596,724, representing about 1,450,000 cubic feet; in 1906 the value of the production was $4,576,913, or 60.36 per cent of the total, and represented approximately 1,400,000 cubic feet. Vermont marble is used largely both for outside building and monumental work and also for interior decorations in buildings, for electrical work, mosaic work, etc., and is sold by the producers principally as dressed stone.

New York, exceeding Georgia, ranked second in 1907, with a value of $911,951 as compared with $557,954 in 1906, an increase of $353,997. The output for 1907 represented 11.64 per cent of the total.

51506—M R 1907, PT 2——38

Georgia, which ranked second in 1906, ranked third in 1907, with an output valued at $864,757 as against $919,356 in 1906—a decrease in 1907 of $54,599. In 1906 the value represented about 875,000 cubic feet and in 1907 about 807,000 cubic feet. Most of the marble of this State is sold rough by the quarrymen to the manufacturers. The demand for building marble was reported as very light after the first of September, the output thus remaining practically as in 1906.

Of the other States, Alabama, Alaska, California, New Mexico, Tennessee, and Utah increased in value of output, while Maryland, Massachusetts, Nevada, Pennsylvania, and Wyoming decreased.

Alabama marble, which has recently entered the market, has found favor both as a building and as a monumental stone. Alaska showed a healthy increase in value of output, a description of the quarries being given by Chas. W. Wright [a] in Bulletin 345 of the United States Geological Survey.

From Colorado development work and installation of machinery was reported on marble and onyx property in Gunnison County, but there has been as yet no commercial output.

The Idaho output was very small and only used locally for building and for burning into lime.

The Kentucky output was "onyx" marble from Cave City, Barren County.

Development work was done on deposits of marble in Nevada in 1907 and some marble will probably be shipped in 1908. A description of a Nevada marble deposit is given in Bulletin 340 of the United States Geological Survey.[b]

The output from Oklahoma is from Marble City, Sequoyah County.

Building stone.—The value of building marble, rough and dressed, was $2,859,237 in 1907, an increase of $76,617 over the value for 1906, which was $2,782,620. The total for 1907 includes $954,092 for rough building and $1,905,145 for dressed building; in 1906 the rough building marble sold was valued at $1,222,695 and the dressed building stone at $1,559,925, a decrease in 1907 of $268,603 for rough stock, and an increase of $345,220 for dressed marble. The value of Vermont's production of marble for building was $1,204,212, or 42.12 per cent of the total. This was chiefly dressed stone. New York, whose output is represented principally by dressed building marble, produced 25.80 per cent of the total building stone, with a value of $737,634. The Georgia output was valued at $433,457, or 15.16 per cent of the total. This was almost entirely for rough stone.

Monumental stone.—Monumental marble was valued at $2,640,130 in 1907, and at $2,657,813 in 1906, a decrease of $17,683 for 1907. In 1907 the value of rough stock was $596,130 and of dressed monumental stone $2,044,000; the corresponding figures for 1906 were $442,941 for rough monumental stock and $2,214,872 for dressed monumental stone, an increase in 1907 of $153,189 in value of rough stock and a decrease of $170,872 for dressed stone.

Vermont, with a value of $2,044,029, produced 77.42 per cent of the total monumental marble; Georgia produced 13.36 per cent; and New York, with 5.11 per cent, ranked third.

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[a] Mineral Resources of Alaska, 1907, Report on Progress of Investigations in 1907, by A. H. Brooks and others: Bull. U. S. Geol. Survey, No. 345, 1908.

[b] Darton, N. H., Investigations relating to building stones by the United States Geological Survey in 1907: Contributions to Economic Geology, pt. 1, Bull. U. S. Geol. Survey, No. 340, 1908.

Interior work.—Vermont, Tennessee, California, and Massachusetts produced most of the marble for interior work, the total value for 1907 being $1,900,952, as against $1,722,445 for 1906, an increase of $178,507 for 1907.

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

The following table shows the value of the marble production in 1906 and 1907 by States and Territories and uses:

Value of the marble product, 1906 and 1907, by States and Territories and uses.

1906.

State or Territory.	Rough.			Dressed.					Total.
	Building.	Monumental.	Other purposes.	Building.	Monumental.	Ornamental.	Interior decoration.	Other purposes.	
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	4,607	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

1907.

State or Territory.	Rough.			Dressed.					Total.
	Building.	Monumental.	Other purposes.	Building.	Monumental.	Ornamental.	Interior decoration.	Other purposes.	
Alabama	$67,780		$1,226	$4,537	$8,900		$2,500	$532	$85,475
Alaska	35,250				2,660		200		38,110
California	20,054	$3,100	1,500	429	4,500		153,702		183,285
Georgia	385,704	334,600	76,700	47,753	18,000		2,000		864,757
Idaho									(d)
Kentucky							12,500		12,500
Maryland	25,653	6,400	2,040	41,750	10,180		10,000	2,895	98,918
Massachusetts	242		2,493	61,800	35,050	$811	97,542	14,500	212,438
Missouri									(e)
Nevada									
New Mexico	2,000	1,050	560	1,500	1,000	200	625	600	f 7,535
New York	147,119	68,565	19,624	590,515	66,286		10,000	9,842	911,951
Oklahoma	15,000	1,325					480		16,805
Pennsylvania	17,667	1,250	3,800	53,587	17,235			25,000	118,539
Tennessee	111,185	10,500	39,500	25,500	3,000		427,463	71,000	688,148
Utah					2,500				2,500
Vermont	126,438	169,340	226	1,077,774	1,874,689	24,039	1,183,940	140,278	4,596,724
Washington									(d)
Wyoming									
Total	954,092	596,130	147,669	1,905,145	2,044,000	25,050	1,900,952	264,647	7,837,685

a Included in Washington.
b Included in limestone to prevent disclosure of individual figures.
c Includes Alaska.
d Included in New Mexico.
e Included inlimestone.
f Includes Idaho and Washington.

The following table shows the value of the marble produced in the United States from 1903 to 1907, inclusive, by States and Territories:

Value of marble produced in the United States, 1903–1907, by States and Territories.

State or Territory.	1903.	1904.	1905.	1906.	1907.
Alabama	(a)	(a)	.....	$85,000	$85,475
Alaska	.....	(a)	$710	(b)	38,110
Arizona	(a)	(a)	.....	.....	.....
Arkansas	.....	(a)	1,000	16,900	.....
California	$78,329	$87,659	95,540	103,048	183,285
Connecticut	(a)	(a)	.....	.....	.....
Georgia	565,605	690,714	774,550	919,356	864,757
Idaho	.....	.....	.....	.....	(c)
Kentucky	.....	.....	.....	.....	12,500
Maryland	83,672	73,814	138,404	176,495	98,918
Massachusetts	154,228	183,388	166,360	271,934	212,438
Missouri	(a)	(a)	.....	(d)	(d)
Nevada	.....	.....	.....	5,000	.....
New Mexico	(a)	4,250	2,200	500	e 7,535
New York	748,160	565,987	795,721	557,954	911,951
North Carolina	4,365	2,741	.....	.....	.....
Oklahoma	.....	.....	.....	.....	16,805
Pennsylvania	93,200	90,390	97,887	171,632	118,539
Tennessee	485,905	505,259	582,229	635,821	688,148
Utah	3,200	3,950	1,150	1,400	2,500
Vermont	3,011,505	4,004,669	4,410,820	4,576,913	4,596,724
Washington	40,117	23,098	60,000	59,985	(c)
Wyoming	3,100	2,000	2,500	1,000	.....
Other States	f 91,300	g 59,916	.....	.....	.....
Total	5,362,686	6,297,835	7,129,071	7,582,938	7,837,685

a Included in "Other States."
b Included in Washington.
c Included in New Mexico.
d Included in limestone.
e Includes Idaho and Washington.
f Includes Alabama, Arizona, Connecticut, Missouri, and New Mexico.
g Includes Alabama, Alaska, Arizona, Arkansas, Connecticut, and Missouri.

The following table shows the various uses to which the marble quarried in 1903, 1904, 1905, 1906, and 1907 was put:

Distribution and value of output of marble, 1903–1907, among various uses.

Use.	1902.	1903.	1904.	1905.	1906.	1907.
Sold by producers in rough state	$2,275,429	$2,454,263	$2,599,052	$2,987,542	$1,795,169	$1,697,891
Dressed for building	1,038,302	1,111,072	988,671	1,168,450	1,559,925	1,905,145
Ornamental purposes	7,300	51,359	21,554	13,643	44,523	25,050
Dressed for monumental work	956,870	1,062,339	1,211,389	1,170,279	2,214,872	2,044,000
Interior decoration in buildings	679,913	663,553	1,257,963	1,682,651	1,722,445	1,900,952
Other uses	86,368	20,100	219,206	106,506	246,004	264,647
Total	5,044,182	5,362,686	6,297,835	7,129,071	7,582,938	7,837,685

LIMESTONE.

The value of the limestone in this report does not include the value of the stone burned into lime or the value of the lime burned, this being given in a special report on lime. 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 $4,410,489 in 1907, or from $27,327,142 in 1906 to $31,737,631 in 1907. In 1906 the ncrease over $26,025,210, the value for 1905, was $1,301,932. The

large increase in 1907 was in the value of crushed stone, which gained $2,602,188 and in blast furnace flux which gained $1,531,797. Other increases in value were in paving, curbing, rubble, riprap, and in the stone used by sugar factories, paper mills, carbonic-acid plants, alkali works, glass works, and for other miscellaneous purposes. Limestone for building and flagstones decreased in value.

The chief States producing limestone in 1907 were, in order, Pennsylvania, Illinois, Indiana, Ohio, New York, and Missouri, each reporting over $2,000,000. In 1906 the rank of production for these States was Pennsylvania, Indiana, Ohio, Illinois, New York, and Missouri—Illinois becoming second in 1907 in place of Indiana and pushing Ohio to fourth place. The combined output of these six States in 1907 amounted to $21,839,006, or 68.78 per cent of the total; in 1906, these States produced $18,751,122, or 68.62 per cent of the total. The increase for these six States would account for over $3,000,000 of the total limestone increase, but it must be borne in mind, that Indiana did not increase but decreased somewhat in value of output. Other States reporting a value of over $500,000 were Wisconsin, Kentucky, West Virginia, Kansas, Michigan, Minnesota, Alabama, Iowa, and Colorado; in 1906 these States ranked as follows: Wisconsin, Kansas, Kentucky, Michigan, Minnesota, West Virginia, and Alabama.

In 1907 thirty-one States and Territories—Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Iowa, Kentucky, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New Mexico, New York, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin—increased in the value of their limestone output; the remaining ten States—Indiana, Kansas, Maine, Maryland, Massachusetts, Montana, North Carolina, Oregon, Tennessee and Wyoming—showed decreases.

States showing notable increases were Alabama, Arizona, California, Colorado, Illinois, Missouri, New York, Ohio, Pennsylvania, West Virginia, and Wisconsin.

The increase in Alabama and Arizona was in value of furnace flux, reports being obtained for the first time from smelting plants in Arizona. In California there was an increase in flux and also in quantity of stone reported as used by sugar factories. The price of California stone was reported as much higher than in previous years on account of conditions of labor and high cost of production occasioned by the earthquake of 1906. The Colorado increase was in value of flux and in more complete returns for stone used in sugar factories. The large gain in Illinois of $832,015 was due to the largely increased demand for crushed stone. This State produced in 1907 18.84 per cent of the total limestone value of crushed stone and 11.68 per cent of the total value of crushed stone for the United States. The increase in New York was in value of crushed stone, furnace flux and stone sold to or used by alkali works, carbonic-acid plants, paper mills, etc. The increase for Ohio was in value of crushed stone, flux, and stone used by or sold to alkali plants, glass works, carbonic-acid plants, etc. The output of Pennsylvania and West Virginia was also increased by the production of more crushed stone than in preceding years.

Building stone.—Limestone for building purposes, including rough and dressed stone sold by the producers, was valued at $4,580,226 in

1907, as against $5,098,631 in 1906, a decrease of $518,405. In 1906 the decrease from the 1905 value, $5,312,183, was $213,552.

The rough building stone sold by the quarrymen in 1907 was valued at $2,593,875, the dressed stone at $1,986,351; the figures for 1906 were rough stone $2,730,612, dressed stone $2,368,019—a decrease of $136,737 in rough stone and of $381,668 in dressed stone.

Indiana with an output of building stone valued at $2,378,008 produced 51.92 per cent of the total building limestone in 1907; in 1906 the output was $2,636,421, or 51.71 per cent of the total—a decrease in 1907 of $258,413 for the State. This building stone is quarried principally in Lawrence and Monroe counties and is universally known as "Bedford limestone," from the town of Bedford, Lawrence County, the shipping center for a large quantity of the stone. Although used chiefly for building purposes some of this stone is sold for flagging curbing, monumental stone, crushed stone, furnace flux, and a quantity—not included in this report—for making cement and lime. The total value of the output from Lawrence County in 1907 was $1,413,280; from Monroe County, $908,612, a total of $2,321,892 for the two counties; in 1906 the total for the two counties was $2,622,805, with a value of $1,460,743 for Lawrence County and of $1,162,062 for Monroe County, a decrease of $300,913 in the total for 1907 of $253,450 for Monroe County and of $47,463 for Lawrence County. The total product of these counties in 1907 was 7,849,027 cubic feet of stone, of which 4,930,055 cubic feet were sold rough and 2,918,972 cubic feet as sawed or cut stone. In 1906 the total quantity was 9,282,004 cubic feet, of which 5,586,282 cubic feet were rough stone and 3,695,722 cubic feet were cut or sawed stone. These figures for 1907 do not include 256,960 tons, valued at $110,525, sold for rubble, riprap, crushed stone, flux, etc. The decrease in both quantity and value of output accords with the statements of the quarrymen, who reported less demand during 1907, especially the last half, than in 1906. The average price per cubic foot, including rough and sawed stone, was 30 cents in 1907; in 1906 it was 28 cents.

Missouri ranked next to Indiana in the production of building limestone, the value of the output for 1907 being $538,114 as against $690,625, a decrease of $152,511. This stone is principally from Carthage, Jasper County.

Paving.—Limestone used for paving increased slightly in 1907, from $531,275 in 1906 to $545,300 in 1907, an increase of $14,025. Illinois and Pennsylvania supplied the largest part of this material.

Curbing.—Limestone for curbing increased in value from $289,615 in 1906 of $378,853 in 1907, a gain of $89,238. Indiana gave the largest output for this class of stone.

Flagging.—Flagging decreased in value from $109,632 in 1906 to $84,076 in 1907, a loss of $25,556. Indiana and Missouri had the largest productions.

Rubble.—Limestone for rubble increased from $924,275 in 1906 to $1,067,445 in 1907, a gain of $143,170. Illinois, Missouri, and Minnesota reported the largest productions.

Riprap.—Limestone for riprap increased from $550,385 in 1906 to $620,328 in 1907, a gain of $69,943. Missouri, Minnesota, Illinois, and Ohio reported the largest productions.

Crushed stone.—The largest item in value of the limestone production is for stone crushed and used for road making, railroad ballast,

concrete, etc., which in 1907 was valued at $13,675,453, representing 23,532,897 short tons; in 1906 these figures were 20,286,589 short tons, valued at $11,073,265, an increase in 1907 of 3,246,308 short tons in quantity and of $2,602,188 in value. In 1906 the increase over 1905, when the output was reported as 19,334,168 short tons, valued at $10,487,638, was 952,421 short tons in quantity and $585,627 in value.

In 1907 the total was divided into 9,619,178 short tons, valued at $5,860,977, for road making; 8,122,342 tons, valued at $4,144,345, for railroad ballast, and 5,791,377 tons, valued at $3,670,131, for concrete, which, compared with the itemized output for 1906—road making, 6,685,781 tons, valued at $3,857,500; railroad ballast, 8,106,850 tons, valued at $3,899,396; concrete, 5,493,958 tons, valued at $3,316,369—shows an increase of 2,933,397 tons in quantity and of $2,003,477 in value for road making, 15,492 tons and $244,949 for railroad ballast, and 297,419 tons and $353,762 for concrete.

It is possible that the large increase in crushed stone for road making contains some stone used for concrete, many of the operators reporting that they were unable to subdivide, except approximately, their total output of crushed stone, not knowing the exact use which was to be made of the stone. The average price per short ton in 1907 was 58 cents compared with 55 cents in 1906.

Illinois ranked first in 1907 in the production of crushed limestone, followed by Ohio, New York, Pennsylvania, Missouri, Indiana, Kentucky, Wisconsin, and Kansas in the order named. These nine States, each reporting values ranging from $2,576,155 to $489,709, represented 83.46 per cent of the total value of crushed limestone. Ohio, Illinois, and New York had the largest output for road making, Pennsylvania, Illinois, and New York for railroad ballast, and Illinois, New York, Missouri, and Pennsylvania for concrete.

Furnace flux.—Next to crushed stone the largest production of limestone is that for furnace flux, which was valued at $9,144,489 in 1907 as against $7,612,692 in 1906, an increase of $1,531,797 for 1907. These figures represent outputs of 17,119,297 long tons in 1907 and 16,077,202 long tons in 1906, a gain in 1907 of 1,042,095 long tons. The average value per ton increased from 47 cents in 1906 to 53 cents in 1907. Pennsylvania, Ohio, Alabama, and West Virginia are the ranking States, Pennsylvania producing 41.88 per cent of the total quantity. Most producers report increased prices per ton due to increased cost of production. This was especially true in California. In Indiana for perhaps the first time a quantity of the waste stone from the quarries in the Bedford-Bloomington district was utilized as furnace flux, it being sold at a very low price loaded on cars for shipment, mostly to Chicago.

Quantities of stone used or sold in many States for the purpose of sugar refining have warranted a separation of this stone from other chemical industries.

Other purposes.—This heading includes stone quarried and used by alkali works in New York and Michigan in the manufacture of all kinds of alkaline salts; stone sold to glass factories in Pennsylvania, Ohio, Missouri, Indiana, Illinois, and New York; also stone sold to paper mills, to farmers for burning into lime to be used as a fertilizer, and to carbonic-acid plants. It also includes some stone sold for the making of whiting, mineral wool, and for many minor uses.

The following table shows the value of limestone produced in the United States in 1906 and 1907 by States and Territories and uses:

Value of the production of limestone in the United States in 1906 and 1907, by States and Territories and uses.

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	500				3,622	
Iowa	105,203	31,350	6,527	8,030	7,632	84,553	35,810
Kansas	95,009	36,528	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	6,334	2,000				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	2,730,612	2,368,019	531,275	289,615	109,632	924,275	550,385

Value of the production of limestone in the United States in 1906 and 1907 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	.....	1,224	14,728
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	315,042	27,327,142

Value of the production of limestone in the United States in 1906 and 1907, by States and Territories and uses—Continued.

1907.

State or Territory.	Rough building.	Dressed building.	Paving.	Curbing.	Flagging.	Rubble.	Riprap.
Alabama	$5,200	$12,375	$11,100	.....	.....	$11,113	$23,970
Arizona	200	.....	.....	.....	.....	.....	.....
Arkansas	10,373	33,069	.....	.....	.....	3,157	.....
California	9,400	.....	.....	.....	.....	225	.....
Colorado	.....	.....	.....	.....	.....	.....	.....
Connecticut	.....	.....	.....	.....	.....	.....	.....
Florida	.....	.....	.....	.....	.....	.....	.....
Georgia	1,860	500	.....	$200	.....	245	.....
Idaho	.....	.....	.....	.....	.....	.....	.....
Illinois	83,408	26,022	150,193	12,031	$5,916	363,045	77,627
Indiana	1,168,476	1,209,532	3,202	204,750	21,432	20,188	12,980
Iowa	108,992	34,663	23,411	1,345	3,682	72,232	46,146
Kansas	92,206	49,172	53,885	51,663	4,052	42,613	18,078
Kentucky	106,293	71,938	3,515	23,555	1,663	2,467	8,730
Maine	.....	.....	.....	.....	.....	.....	.....
Maryland	2,100	.....	1,767	20	150	.....	50
Massachusetts	100	.....	.....	.....	.....	.....	.....
Michigan	15,120	100	56,500	.....	.....	1,433	1,234
Minnesota	151,985	112,993	3,065	4,264	8,267	109,928	98,529
Missouri	205,436	332,678	2,218	14,104	12,099	218,827	152,090
Montana	6,160	.....	.....	.....	.....	.....	.....
Nebraska	21,050	29	.....	.....	.....	16,983	17,833
New Jersey	700	.....	.....	.....	.....	.....	.....
New Mexico	300	.....	180	.....	.....	.....	.....
New York	176,746	41,202	25,304	14,869	6,630	21,453	8,380
North Carolina	13,328	.....	.....	.....	.....	.....	.....
Ohio	114,250	4,495	17,027	2,228	440	70,851	63,434
Oklahoma	4,105	2,175	9,000	7,855	877	2,663	19,566
Oregon	3,000	500	.....	100	.....	.....	600
Pennsylvania	113,919	2,315	143,013	2,272	6,820	27,805	11,220
Rhode Island	.....	.....	.....	.....	.....	.....	.....
South Dakota	1,100	.....	.....	.....	.....	.....	.....
Tennessee	9,275	9,497	2,672	3,542	30	11,100	4,018
Texas	31,295	1,948	8,388	1,075	.....	32,150	21,650
Utah	10,855	445	.....	.....	.....	.....	475
Vermont	9,598	364	.....	107	.....	850	.....
Virginia	3,170	1,130	500	.....	.....	.....	.....
Washington	.....	.....	.....	.....	.....	.....	.....
West Virginia	420	.....	.....	.....	.....	.....	.....
Wisconsin	110,955	39,209	30,360	34,873	11,418	38,117	33,718
Wyoming	2,500	.....	.....	.....	.....	.....	.....
Total	2,593,875	1,986,351	545,300	378,853	84,076	1,067,445	620,328

Value of the production of limestone in the United States in 1906 and 1907, by States and Territories and uses—Continued.

1907—Continued.

State or Territory.	Crushed stone.			Flux.	Sugar factories.	Other.	Total.
	Road making.	Railroad ballast.	Concrete.				
Alabama	$5,000	.....	$21,287	$604,654	.....	.....	$694,699
Arizona	.....	.....	.....	64,775	.....	.....	64,975
Arkansas	608	$5,000	.....	.....	.....	.....	52,207
California	6,375	1,800	18,290	48,376	$88,116	$4,751	177,333
Colorado	.....	.....	2,620	397,244	102,887	.....	502,751
Connecticut	.....	.....	.....	1,476	.....	.....	1,476
Florida	15,000	.....	.....	.....	.....	.....	15,000
Georgia	407	550	155	18,080	.....	281	22,278
Idaho	.....	.....	.....	6,900	9,000	.....	15,900
Illinois	958,032	499,204	1,118,919	423,315	8,151	48,483	3,774,346
Indiana	476,711	134,932	60,918	279,838	.....	31,667	3,624,126
Iowa	69,817	77,571	118,682	.....	.....	4,041	560,582
Kansas	76,420	357,820	55,469	50	.....	12,320	813,748
Kentucky	290,669	292,714	53,787	14,489	.....	21,680	891,500
Maine	.....	.....	.....	.....	.....	1,350	1,350
Maryland	66,565	61,881	8,842	.....	.....	1,450	142,825
Massachusetts	.....	.....	.....	1,737	.....	.....	1,837
Michigan	131,708	46,516	97,762	109,429	22,234	278,297	760,333
Minnesota	116,143	22,398	103,854	119	2,675	1,099	735,319
Missouri	428,261	284,058	418,990	43,612	317	40,627	2,153,917
Montana	.....	.....	.....	118,080	450	.....	124,690
Nebraska	55,824	53,584	120,977	11,700	13,635	1,015	312,603
New Jersey	3,545	3,000	3,830	262,873	.....	504	274,452
New Mexico	.....	175,252	.....	.....	18,000	.....	193,732
New York	956,535	440,223	450,799	343,866	.....	412,513	2,898,520
North Carolina	9,000	.....	.....	.....	.....	.....	22,328
Ohio	1,232,939	393,453	285,159	1,134,793	4,800	242,953	3,566,822
Oklahoma	4,000	120,747	15,205	.....	.....	3,375	189,568
Oregon	.....	.....	.....	.....	1,375	175	5,750
Pennsylvania	445,347	676,776	412,451	3,829,967	.....	149,370	5,821,275
Rhode Island	.....	.....	.....	750	.....	.....	750
South Dakota	.....	.....	10,500	.....	.....	.....	11,600
Tennessee	13,900	118,911	41,530	169,775	.....	1,200	385,450
Texas	48,318	57,993	3,748	59,394	.....	1,798	267,757
Utah	.....	.....	.....	266,789	27,600	180	306,344
Vermont	5,257	.....	4,850	535	.....	1,565	23,126
Virginia	37,000	12,269	32,326	275,517	.....	150	362,062
Washington	.....	.....	.....	53,868	1,200	7,249	62,317
West Virginia	18,166	271,667	21,167	528,587	.....	15,934	855,941
Wisconsin	389,430	36,026	188,014	73,901	.....	41,074	1,027,095
Wyoming	.....	.....	.....	.....	16,420	.....	18,920
Total	5,860,977	4,144,345	3,670,131	9,144,489	316,860	1,324,601	31,737,631

The following table shows the value of limestone, by States, from 1903 to 1907, inclusive:

Value of limestone, 1903–1907, by States and Territories.

State or Territory.	1903.	1904.	1905.	1906.	1907.
Alabama	$502,510	$498,723	$532,103	$579,344	$694,699
Arizona		250	135	40	64,975
Arkansas	153,291	106,147	154,818	48,844	52,207
California	229,376	74,670	49,902	80,205	177,333
Colorado	175,078	124,600	289,920	373,158	502,751
Connecticut	1,968	830	1,558	1,171	1,476
Florida	20,756	34,278	5,800	1,450	15,000
Georgia	10,450	15,200	9,030	16,042	22,278
Idaho	752	5,900	14,105	12,600	15,900
Illinois	2,726,470	2,690,822	3,511,890	2,942,331	3,774,346
Indiana	2,621,068	2,789,500	3,189,259	3,725,565	3,624,126
Indian Territory	650	6,076	5,512	44,622	
Iowa	536,906	442,585	451,791	493,815	560,582
Kansas	480,609	799,286	923,389	849,203	813,748
Kentucky	695,602	692,417	744,465	795,408	891,500
Maine	1,863	2,955	7,428	2,000	1,350
Maryland	65,732	128,421	149,402	170,046	142,825
Massachusetts	9,656	7,566	65,908	10,750	1,837
Michigan	390,473	501,708	544,754	656,269	760,333
Minnesota	699,471	517,940	555,401	632,115	735,319
Missouri	1,874,740	2,277,969	2,238,164	1,988,334	2,153,917
Montana	131,594	109,765	103,123	141,082	124,690
Nebraska	187,718	236,780	225,119	276,381	312,630
New Jersey	66,915	76,710	147,353	221,141	274,452
New Mexico			7,200	125,493	193,732
New York	2,007,911	1,636,255	1,970,968	2,204,724	2,898,520
North Carolina		12,088	16,500	30,583	22,328
Ohio	2,349,661	2,406,355	2,850,793	3,025,038	3,566,822
Oklahoma	50,690	92,246	163,412	127,361	189,568
Oregon	3,000	5,390	8,600	7,480	5,750
Pennsylvania	4,343,643	3,708,750	4,499,503	4,865,130	5,821,275
Rhode Island	883	312	300	678	750
South Carolina	950	225			
South Dakota	26,215	3,954	6,653	10,400	11,600
Tennessee	356,961	288,053	401,622	481,952	385,450
Texas	188,015	252,745	171,847	239,125	267,757
Utah	125,610	170,447	232,519	248,868	306,344
Vermont	9,955	9,653	11,095	14,728	23,126
Virginia	232,744	165,459	212,660	260,343	362,062
Washington	75,649	71,857	52,470	49,192	62,317
West Virginia	405,077	460,303	671,318	628,602	855,941
Wisconsin	701,347	738,684	804,081	891,746	1,027,095
Wyoming	150	15,090	23,340	53,783	18,920
Total	22,372,109	22,178,964	26,025,210	27,327,142	31,737,631

The following table shows the production of limestone for furnace flux in 1906 and 1907, by States, in long tons:

Production of furnace flux in 1906 and 1907, by States, in long tons.

State or Territory.	1906.		1907.	
	Quantity.	Value.	Quantity.	Value.
Alabama	803,643	$473,062	939,437	$604,654
Arizona			115,714	64,775
California	28,758	25,000	38,225	48,376
Colorado	552,651	301,913	672,801	397,244
Connecticut	3,455	1,171	3,735	1,476
Georgia	17,793	10,417	30,825	18,080
Idaho			4,100	6,900
Illinois	909,375	384,282	970,158	423,315
Indiana	500,702	210,124	577,052	279,838
Kansas			50	50
Kentucky	33,987	15,170	31,752	14,489
Massachusetts	16,528	9,875	3,560	1,737
Michigan	162,603	81,517	128,926	109,429
Minnesota	200	150	135	119
Missouri	43,574	28,381	55,371	43,612
Montana	304,600	134,940	236,200	118,080
Nebraska	12,000	6,600	18,000	11,700
New Jersey	363,508	195,235	465,018	262,873
New York	513,452	294,659	584,964	343,866
Ohio	3,098,346	1,013,497	2,497,616	1,134,793
Pennsylvania	6,396,765	3,168,186	7,178,508	3,829,967
Rhode Island	542	678	500	750
Tennessee	250,835	139,227	299,247	169,775
Texas	122,804	75,764	93,531	59,394
Utah	262,808	198,671	372,896	266,789
Vermont	500	250	535	535
Virginia	467,341	219,707	541,610	275,517
Washington	41,171	38,831	80,295	53,868
West Virginia	1,019,931	513,413	1,063,772	528,587
Wisconsin	149,330	71,972	114,764	73,901
Total	16,077,202	7,612,692	17,119,297	9,144,489
Average price per ton		.47		.53