

# STONE.<sup>a</sup>

## INTRODUCTION.

A comparison of the total stone output of the United States for the last four or five years furnishes a fairly good summary of the standing of the stone trade for the present year, and also indicates to some extent the activity or depression of building construction, road-improvement work, and the general condition of the many trades connected with the quarrying of stone.

The years 1901 and 1902 showed a large increase in the stone output of the country, which was forwarded by an increase in the building industry, the use of crushed stone for concrete ballast and road improvement, the export trade in slate, the construction of bridges requiring heavy stone for foundations, the use of a large quantity of limestone for iron-furnace flux, and of an immense quantity of stone used in the manufacture of Portland cement, but not included in these figures. The paving-block industry was not so prominent in these years, as brick, asphalt, and macadam took the place of blocks. The lime industry was also somewhat affected by the use of cement wall plaster.

To some extent in 1902, and especially in 1903, labor troubles and builders' strikes and less railroad construction caused a general inactivity in quarrying. These causes have had their effect also on the trade in 1904, and therefore the figures show a much less increase than in previous years.

Dr. George P. Merrill, head curator of geology, United States National Museum, has recently cooperated with the United States Geological Survey in the examination of regions of special interest and will from time to time contribute articles to the report on Stone. Dr. Merrill has visited the stone deposits of Florida and of Fairfield County, S. C., and his reports on these regions are embodied in this report.

<sup>a</sup> The collection of these statistics and the compilation of the returns have been carried on, as in previous years, by Miss Altha T. Coons, statistical expert of this office, who has prepared the entire report on stone.—D. T. DAY.

### PRODUCTION.

In classifying the various kinds of stone many essentially different rocks are, for simplicity of treatment, grouped in the following classes: Granite, bluestone, marble, trap rock, limestone, sandstone, and slate. This classification was explained in detail in the report for 1902.

In making the statements as to the value of the stone, the figures given represent as nearly as it was possible to obtain it the value of the stone as it left the hands of the producer, exclusive of any cost of shipment. When the stone was sold by the producer to the manufacturers in the rough state, the value is so given; and when the producer dressed his own stone, the value given is the dressed value. This applies particularly to the rough and the dressed granite, sandstone, and marble used for building and for monumental work.

The figures as given in the table which follows do not include values of stone quarried for the following purposes: Sandstone converted into grindstones, whetstones, and other abrasive materials; sandstone quarried and crushed into sand for the manufacture of glass; bituminous limestone and sandstone used in making asphalt pavements and asphalt blocks; and limestone used in the manufacture of Portland cement.

In this report for the first time are included figures showing the quantity of lime burned.

The total value of the stone reported to this office in 1904 was \$74,200,361. The value in 1903 was \$72,945,908—a gain of \$1,254,453 for 1904. The corresponding gain in 1903 over 1902, when the figures were \$69,830,351, was \$3,115,557. In 1902 the gain over 1901, when the total value was \$60,275,762, was \$9,554,589; and in 1901 the gain was \$12,267,023 over 1900.

In 1904 granite, marble, and limestone increased in value, while slate and sandstone decreased.

Granite showed the largest increase. In 1904, including trap rock, the total value was \$19,992,983; in 1903 it was \$18,436,087, a gain of \$1,556,896 for 1904. The granite production increased from \$15,703,793 in 1903 to \$17,169,437 in 1904, a gain of \$1,465,644; and the trap rock from \$2,732,294 in 1903 to \$2,823,546 in 1904, a gain of \$91,252.

Sandstone, including bluestone, decreased in value from \$11,262,259 in 1903 to \$10,295,933 in 1904, a loss of \$966,326. The value of bluestone included in the sandstone was \$1,779,457 in 1903, and \$1,791,729 in 1904, an increase of \$12,272. The sandstone figures decreased from \$9,482,802 in 1903 to \$8,504,204 in 1904, a loss of \$978,598.

The value of marble increased from \$5,362,686 in 1903 to \$6,297,835 in 1904, a gain of \$935,149.



The slate output was valued at \$6,256,885 in 1903, and at \$5,617,195 in 1904, a loss of \$639,690.

The limestone output remained nearly the same, being valued at \$31,627,991 in 1903, and \$31,996,415 in 1904, a gain of \$368,424 in 1904.

The following table shows the value of different kinds of stone produced in the United States from 1895 to 1904, inclusive:

*Value of the different kinds of stone produced in the United States, 1895-1904.*

Year.	Granite.	Trap rock.	Marble.	Slate.	Sandstone.	Bluestone.	Limestone.	Total.
1895....	\$8,894,328	.....	\$2,825,719	\$2,698,700	\$4,211,314	<sup>a</sup> \$750,000	\$16,563,044	\$35,943,105
1896....	7,944,994	.....	2,859,136	2,746,205	4,023,199	<sup>a</sup> 750,000	13,879,127	32,202,661
1897....	8,905,075	.....	3,870,584	3,524,614	4,065,445	<sup>a</sup> 900,000	15,526,054	36,791,772
1898....	9,324,406	.....	3,629,940	3,723,540	4,724,412	<sup>a</sup> 1,000,000	16,842,966	39,245,264
1899....	10,343,298	\$1,275,041	4,011,681	3,962,733	<sup>b</sup> 4,924,670	815,284	23,453,168	48,785,875
1900....	10,969,417	1,706,200	4,267,253	4,240,466	<sup>b</sup> 5,272,865	1,198,519	20,354,019	48,008,739
1901....	14,266,104	1,710,857	4,965,699	4,787,525	<sup>b</sup> 6,974,199	1,164,481	26,406,897	60,275,762
1902....	16,076,787	2,181,157	5,044,182	5,696,051	<sup>b</sup> 9,437,646	1,163,525	30,231,003	69,830,351
1903....	15,703,793	2,732,294	5,362,686	6,256,885	<sup>b</sup> 9,482,802	1,779,457	31,627,991	72,945,908
1904....	17,169,437	2,823,546	6,297,835	5,617,195	<sup>b</sup> 8,504,204	1,791,729	31,996,415	74,200,361

<sup>a</sup> Estimated.

<sup>b</sup> Does not include value of grindstones and whetstones.

The following tables show the value of stone produced in the United States in 1903 and 1904, by States:

*Value of various kinds of stone produced in 1903 and 1904, by States.*

1903.

State.	Granite.	Sandstone.	Slate.	Marble.	Limestone.	Total value.
Alabama.....	.....	\$42,933	.....	(a)	\$719,404	\$762,337
Arizona.....	\$3,000	526,875	.....	(a)	1,260	531,135
Arkansas.....	47,136	61,172	\$4,709	.....	242,628	355,645
California.....	<sup>b</sup> 1,627,592	762,327	70,000	\$78,329	611,126	3,375,378
Colorado.....	100,791	389,132	.....	.....	218,120	708,043
Connecticut.....	<sup>b</sup> 1,101,425	119,417	.....	(a)	154,536	1,375,378
Delaware.....	369,166	.....	.....	.....	.....	369,166
Florida.....	.....	.....	.....	.....	64,893	64,893
Georgia.....	672,947	.....	.....	565,605	73,352	1,311,904
Hawaii.....	.....	.....	.....	.....	.....	.....
Idaho.....	2,750	11,856	.....	.....	18,952	33,558
Illinois.....	.....	26,293	.....	.....	3,206,271	3,232,564
Indiana.....	.....	32,651	.....	.....	2,935,274	2,967,925
Indian Territory.....	4,030	.....	.....	.....	1,450	5,480
Iowa.....	.....	19,011	.....	.....	635,431	654,442
Kansas.....	.....	102,128	.....	.....	495,069	597,197
Kentucky.....	.....	93,742	.....	.....	736,590	830,332
Maine.....	2,586,765	.....	231,230	.....	793,553	3,611,548
Maryland.....	837,787	2,170	137,631	83,672	386,226	1,447,486
Massachusetts.....	<sup>b</sup> 2,720,066	372,478	.....	154,228	272,471	3,519,243
Michigan.....	.....	121,350	.....	.....	609,082	730,432
Minnesota.....	403,906	363,262	.....	.....	676,090	1,443,258
Missouri.....	150,409	49,402	.....	(a)	2,516,688	2,716,499
Montana.....	25,993	68,036	.....	(a)	152,694	246,723
Nebraska.....	.....	1,067	.....	.....	187,718	188,785
Nevada.....	7,450	2,370	.....	.....	2,400	12,220
New Hampshire.....	854,513	.....	.....	.....	.....	854,513
New Jersey.....	<sup>b</sup> 943,171	364,337	(c)	.....	187,711	1,495,219
New Mexico.....	.....	7,510	.....	.....	1,000	8,510
New York.....	549,015	<sup>d</sup> 1,756,501	145,401	748,160	2,543,756	5,742,833
North Carolina.....	218,947	600	.....	4,365	600	224,512
Ohio.....	.....	1,793,379	.....	.....	3,320,672	5,114,051
Oklahoma.....	5,000	6,500	.....	.....	54,690	66,190
Oregon.....	118,411	2,912	.....	.....	16,684	138,007
Pennsylvania.....	<sup>b</sup> 829,535	<sup>d</sup> 3,255,073	3,959,906	93,200	5,775,506	13,913,220
Rhode Island.....	710,291	.....	.....	.....	39,315	749,606
South Carolina.....	476,863	.....	.....	.....	44,780	521,643
South Dakota.....	.....	163,067	.....	.....	39,266	202,333
Tennessee.....	.....	20,649	.....	485,905	555,574	1,062,128
Texas.....	173,325	114,381	.....	.....	262,053	549,759
Utah.....	3,803	71,279	.....	3,200	190,608	268,890
Vermont.....	1,810,179	.....	1,592,652	3,011,505	190,724	6,605,060
Virginia.....	299,335	4,471	115,356	.....	569,205	988,367
Washington.....	209,095	47,430	.....	40,117	297,701	594,343
West Virginia.....	.....	252,204	.....	.....	558,024	810,228
Wisconsin.....	573,391	142,445	.....	.....	1,256,661	1,972,497
Wyoming.....	.....	91,849	.....	3,100	12,183	107,132
Other States.....	.....	.....	.....	<sup>e</sup> 91,300	.....	91,300
Total.....	<sup>b</sup> 18,436,087	<sup>d</sup> 11,262,259	6,256,885	5,362,686	31,627,991	72,945,908

<sup>a</sup> Included in other States.  
<sup>b</sup> Includes trap rock.  
<sup>c</sup> Included in New York.

<sup>d</sup> Includes bluestone.  
<sup>e</sup> Includes Alabama, Arizona, Connecticut, Missouri, and Montana.



Value of various kinds of stone produced in 1903 and 1904, by States—Continued.

1904.

State.	Granite.	Sandstone.	Slate.	Marble.	Limestone.	Total value.
Alabama.....		\$12,788		(a)	\$735,528	\$748,316
Alaska.....				(a)		
Arizona.....	\$2,500	91,960		(a)	12,450	106,910
Arkansas.....	52,616	63,950	\$14,300	(a)	248,860	379,726
California.....	<sup>b</sup> 1,742,330	735,662	39,200	\$87,659	660,156	3,265,007
Colorado.....	91,132	281,142			158,960	531,234
Connecticut.....	<sup>b</sup> 854,784	117,696		(a)	168,937	1,141,417
Delaware.....	245,272					245,272
Florida.....					89,363	89,363
Georgia.....	942,466		4,500	690,714	73,972	1,711,652
Hawaii.....		22,042				22,042
Idaho.....		9,320			46,042	55,362
Illinois.....		47,377			3,151,890	3,199,267
Indiana.....		22,681			3,140,679	3,163,360
Indian Territory.....	5,152				6,270	11,422
Iowa.....		9,300			533,593	542,893
Kansas.....		130,516			810,056	940,572
Kentucky.....		93,622			718,297	811,919
Louisiana.....		8,315				8,315
Maine.....	2,400,509		181,168		802,472	3,384,149
Maryland.....	815,471	8,998	133,972	73,814	437,500	1,469,755
Massachusetts.....	<sup>b</sup> 2,868,305	320,861		133,388	329,707	3,702,261
Michigan.....		74,868			760,613	835,481
Minnesota.....	405,956	319,209			591,703	1,316,868
Mississippi.....	440					440
Missouri.....	155,716	44,455		(a)	2,875,227	3,075,398
Montana.....	33,890	64,232			133,915	232,037
Nebraska.....		142			236,780	236,922
Nevada.....	1,200	10,558			2,700	14,458
New Hampshire.....	927,487					927,487
New Jersey.....	<sup>b</sup> 833,518	236,426			226,908	1,296,852
New Mexico.....		133,390		4,250	3,383	141,023
New York.....	622,986	<sup>c</sup> 1,755,524	71,543	565,987	2,032,536	5,048,576
North Carolina.....	297,749	250		2,741	16,888	317,628
Ohio.....		1,808,062			3,396,048	5,204,110
Oklahoma.....	26,930	2,995			95,246	125,171
Oregon.....	235,213	6,186			15,581	256,980
Pennsylvania.....	<sup>b</sup> 900,530	<sup>c</sup> 2,641,510	3,633,246	90,390	5,246,423	12,512,099
Rhode Island.....	684,952				32,183	717,135
South Carolina.....	382,428				33,084	415,512
South Dakota.....	900	338,970			27,914	367,784
Tennessee.....		24,868	607	505,259	505,117	1,035,851
Texas.....	348,317	209,313			387,061	944,691
Utah.....	7,980	70,168	300	3,950	255,947	338,345
Vermont.....	2,447,979		1,408,151	4,004,669	194,334	8,055,133
Virginia.....	510,788	13,522	130,208		442,978	1,097,496
Washington.....	422,508	88,185		23,098	288,311	822,102
West Virginia.....		287,381			644,363	931,744
Wisconsin.....	724,422	158,503			1,409,075	2,292,000
Wyoming.....	557	30,986		2,000	17,365	50,908
Other States.....				<sup>d</sup> 59,916		59,916
Total.....	<sup>b</sup> 19,992,983	<sup>c</sup> 10,295,933	5,617,195	<sup>d</sup> 6,297,835	31,996,415	74,200,361

<sup>a</sup> Included in other States.

<sup>b</sup> Includes trap rock.

<sup>c</sup> Includes bluestone.

<sup>d</sup> Includes Alabama, Alaska, Arizona, Arkansas, Connecticut, and Missouri.

The following table is given to show the total values of the stone used for various purposes in 1903 and 1904. Only those values are given which are for uses common to two or more varieties of stone:

*Value of granite, sandstone, limestone, and marble used for various purposes in 1903 and 1904.*

## 1903.

Kind.	Building (rough and dressed).	Monumental (rough and dressed).	Flagstone.	Curbstone.	Paving.	Crushed stone.
Granite .....	\$6,192,145	\$3,808,417	\$91,142	\$701,018	\$1,954,266	\$3,780,487
Sandstone .....	6,403,969	.....	1,164,156	1,003,528	696,053	827,585
Limestone .....	4,981,241	.....	166,961	355,167	515,760	8,580,866
Marble.....	2,218,136	1,958,943	.....	.....	.....	.....
Total.....	19,795,491	5,767,360	1,422,259	2,059,713	3,166,079	13,188,938

## 1904.

Granite .....	\$6,940,425	\$3,663,682	\$58,152	\$769,462	\$1,983,328	\$4,930,003
Sandstone .....	5,125,858	.....	1,110,163	1,253,492	664,062	1,041,493
Limestone .....	4,543,760	.....	108,029	277,772	186,670	9,558,626
Marble.....	2,273,412	2,328,032	.....	.....	.....	.....
Total.....	18,883,455	5,991,714	1,276,344	2,300,726	2,834,060	15,580,122

As will be seen from this table the value of stone used for building decreased from \$19,795,491 in 1903 to \$18,883,455 in 1904, a decrease of \$912,036. In 1903 there was a decrease in the building-stone output of \$994,850 from 1902, and in 1902 an increase of \$3,953,960 over the figures for 1901.

In 1904 there was an increase in monumental stone from \$5,767,360 in 1903 to \$5,991,714, a gain of \$224,354. In 1903 there was a loss of \$174,225 as compared with 1902.

Flagstone decreased from \$1,422,259 in 1903 to \$1,276,344 in 1904, a loss of \$145,915.

Curbstone increased from \$2,059,713 in 1903 to \$2,300,726 in 1904, a gain of \$241,013.

Paving decreased from \$3,166,079 in 1903 to \$2,834,060 in 1904, a loss of \$332,019. In 1903 there was a gain of \$1,114,686 as compared with 1902.



Crushed stone increased from a total value of \$13,188,938 in 1903 to \$15,530,122 in 1904, a gain of \$2,341,184, as shown in the following table:

*Value of crushed stone in the United States in 1903 and 1904.*

## 1903.

Kind.	Railroad ballast.	Road making.	Concrete.	Total value.
Limestone.....	\$3,105,602	\$2,997,547	\$2,477,717	\$8,580,866
Sandstone.....	287,988	289,325	250,272	827,585
Granite.....	750,142	1,896,191	1,134,154	3,780,487
Total.....	4,143,732	5,183,063	3,862,143	13,188,938

## 1904.

Limestone.....	\$3,153,002	\$3,714,987	\$2,690,637	\$9,558,626
Sandstone.....	450,442	341,420	249,631	1,041,493
Granite.....	904,612	2,506,566	1,518,825	4,930,003
Total.....	4,508,056	6,562,973	4,459,093	15,530,122

The following tables show the total value of the crushed stone produced in the United States in 1903 and 1904, by States:

*Value of crushed stone produced in the United States in 1903 and 1904, by States.*

## 1903.

State.	Granite.	Limestone.	Sandstone.	Total value.
Alabama .....		\$460		\$460
Arizona .....			\$13,125	13,125
Arkansas .....	\$44,136	5,813	13,076	63,025
California .....	387,228	92,245	80,920	560,393
Colorado .....	600		37,635	38,235
Connecticut .....	207,607			207,607
Delaware .....	83,221			83,221
Florida .....		3,256		3,256
Georgia .....	59,762	7,600		67,362
Hawaii .....				
Illinois .....		1,382,823		1,382,823
Indiana .....		332,644	5,000	337,644
Indian Territory .....		650		650
Iowa .....		177,484	382	177,866
Kansas .....		256,228	31,850	288,078
Kentucky .....		450,320	1,100	451,420
Louisiana .....				
Maine .....	11,678			11,678
Maryland .....	220,555	48,464	1,375	270,394
Massachusetts .....	447,674	50	204,719	652,443
Michigan .....		145,186	5,500	150,686
Minnesota .....	22,140	109,040	20,721	151,901
Missouri .....	42,827	1,041,656	24	1,084,507
Montana .....			165	165
Nebraska .....		74,452	30	74,482
Nevada .....				
New Hampshire .....	15,407			16,407
New Jersey .....	811,671	2,408	1,950	816,029
New Mexico .....			250	250
New York .....	404,694	1,234,214	29,394	1,668,302
North Carolina .....	100,432			100,432
Ohio .....		1,075,866	38,288	1,114,154
Oklahoma .....		30,000	600	30,600
Oregon .....	16,500		97	16,597
Pennsylvania .....	478,200	1,413,770	224,813	2,116,783
Rhode Island .....	20,628	300		20,928
South Carolina .....	57,577	850		58,427
South Dakota .....		19,026	6,000	25,026
Tennessee .....		108,768	93	108,861
Texas .....	64,750	58,631	22,300	145,681
Utah .....				
Vermont .....	9,541	3,345		12,886
Virginia .....	110,005	25,743	803	136,551
Washington .....	13,239	1,950		15,189
West Virginia .....		148,446	15,202	163,648
Wisconsin .....	149,415	329,178	1,550	480,143
Wyoming .....			70,623	70,623
Total .....	3,780,487	8,580,866	827,585	13,188,938



*Value of crushed stone produced in the United States in 1903 and 1904, by States—Continued.*

1904.

State.	Granite.	Limestone.	Sandstone.	Total value.
Alabama .....		\$17,356		\$17,356
Arizona .....			\$1,580	1,580
Arkansas .....	\$34,566	39,050	11,428	85,044
California .....	610,053	14,075	112,596	736,724
Colorado .....	20,228		4,655	24,883
Connecticut .....	299,297			299,297
Delaware .....	142,752			142,752
Florida .....		300		300
Georgia .....	117,280	15,200		132,480
Hawaii .....			22,042	22,042
Illinois .....		1,567,192	14,585	1,581,777
Indiana .....		383,183		383,183
Indian Territory .....	18	6,076		6,094
Iowa .....		135,421	100	135,521
Kansas .....		521,122	49,830	570,952
Kentucky .....		438,244	2,950	501,194
Louisiana .....			1,310	1,310
Maine .....	10,711			10,711
Maryland .....	271,311	111,147		382,458
Massachusetts .....	407,843		213,739	621,582
Michigan .....		176,500	1,800	178,300
Minnesota .....	51,589	147,496	11,365	210,450
Missouri .....	69,811	1,369,355	220	1,439,386
Montana .....	500		1,669	2,169
Nebraska .....		112,211	32	112,243
Nevada .....			400	400
New Hampshire .....	15,521			15,521
New Jersey .....	759,773	2,984	7,113	769,870
New Mexico .....			130,894	130,894
New York .....	480,236	948,363	29,915	1,458,514
North Carolina .....	93,396	12,088		105,484
Ohio .....		1,345,414	26,390	1,371,804
Oklahoma .....		60,020		60,020
Oregon .....	98,814		111	98,925
Pennsylvania .....	667,093	1,281,992	240,541	2,189,626
Rhode Island .....	130,573			130,573
South Carolina .....	72,893	125		73,018
South Dakota .....		2,400	31,826	34,226
Tennessee .....		147,004	2,733	149,737
Texas .....	79,407	42,649	45,356	158,412
Utah .....		13,195		13,195
Vermont .....	2,360	4,231		6,591
Virginia .....	239,335	38,249	12,672	290,256
Washington .....	69,241	150	2,500	71,891
West Virginia .....		202,166	46,128	248,294
Wisconsin .....	194,402	342,568	12,304	549,274
Wyoming .....		1,100	2,709	3,809
Total .....	4,930,003	9,558,626	1,041,493	15,530,122

## 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 1903 and 1904:

*Imports of stone into the United States in 1903 and 1904.*

	1903.	1904.
Marble and stone, unmanufactured .....	\$219, 732	\$203, 086
Roofing slate .....	838, 683	449, 743
Lime .....	48, 622	52, 296
All others .....	629, 901	684, 925
Total .....	1, 736, 938	1, 390, 050

*Exports of stone from the United States in 1903 and 1904.*

	1903.	1904.
Marble:		
In block, rough, etc .....	\$998, 858	\$851, 841
Sawed or dressed .....	1, 030	265
Slabs or paving tiles .....	107, 701	55, 020
All other manufactures .....	309, 852	243, 931
Mosaic cubes .....	33, 483	35, 128
Total .....	1, 450, 924	1, 186, 185
Lime, total .....	84, 234	82, 008
Onyx:		
In block, rough, etc .....	78, 445	63, 975
Sawed or dressed .....	1, 297	.....
Slabs or tiles .....	856	.....
All other manufactures .....	4, 052	10, 885
Total .....	84, 650	74, 860
Granite:		
Dressed .....	96, 925	111, 543
Rough .....	3, 651	7, 573
Total .....	100, 576	119, 116
Slate:		
Roofing .....	2, 266	.....
Slabs, mantels, etc .....	8, 754	9, 845
Total .....	11, 020	9, 845
Stone (other):		
Dressed .....	12, 796	24, 680
Rough .....	15, 374	15, 974
Total .....	28, 170	40, 654
Grand total .....	1, 759, 574	1, 512, 668



As will be seen from these figures, the value of both exported and imported stone decreased in 1904 as compared with 1903. On page 829 of this report will be found a table showing the exports of slate according to the ports and customs districts, by fiscal years, for a series of years, as published by the Bureau of Statistics.

#### GRANITE.

The stone classed as granite in this report includes gneiss, mica-schist, lava, andesite, syenite, quartz porphyry, trap rock, basalt, and allied igneous rocks. Too small quantities of these allied stones are quarried to make it practicable to tabulate them separately. Trap rock, however, as quarried in California, Connecticut, New York, New Jersey, and Pennsylvania represents a sufficient industry by itself to make it advisable to show the value of this stone separately from the granite. The California trap rock includes considerable basalt, quarried and manufactured mostly into paving blocks.

In 1904 the value of the granite output in the United States, including the above-mentioned classes of rocks, was \$19,992,983. This, as compared with \$18,436,087, the value for 1903, shows an increase of \$1,556,896 for 1904. In 1903 the increase was but \$178,143, or from \$18,257,944 in 1902 to \$18,436,087 in 1903. In 1903 the industry, especially in the eastern States, was disturbed by labor troubles, builders' strikes, and increased price of other materials in the large cities furnishing a market for this stone. The production of the year 1904 was also influenced by these troubles, but not so much as in 1903, and it is noteworthy that the principal increase in the granite output is for stone for building purposes and for the better class of stone—that is, for dressed stone. To some extent, especially in large cities, stone for foundation work has been done away with and concrete is used in its stead, and the increase in the value of stone used for concrete is therefore very natural. Massachusetts ranks first in value of granite output, followed by Vermont, Maine, California, Georgia, and New Hampshire.

In 1903 the order was Massachusetts, Maine, Vermont, California, Connecticut, and New Jersey.

A large increase in the figures for Vermont and Georgia, and a decrease in value for Maine and Connecticut, caused this change of rank.

There was an increase in the value of stone used for building purposes in 1904 of \$748,280, or from \$6,192,145 in 1903 to \$6,940,425 in 1904. In 1903 there was a decrease of \$842,687 in the value of this product.

Rough building stone sold by the quarrymen, however, decreased \$466,891 in 1904, or from \$1,671,929 in 1903 to \$1,205,038 in 1904, while the stone dressed by the producers increased in value \$1,215,171, or from \$4,520,216 in 1903 to \$5,735,387 in 1904.

The stone sold for monumental work in 1904, including the rough stock sold by the quarrymen for this purpose, was valued at \$3,663,682; in 1903 this value was \$3,808,417, a loss of \$144,735 in 1904. The rough monumental stock was valued at \$1,692,880 in 1903 and at \$1,718,185 in 1904, an increase of \$25,305. The dressed stone was valued at \$2,115,537 in 1903 and at \$1,945,497 in 1904, a decrease of \$170,040.

The stone sold "rough for other purposes" includes in California, Delaware, South Carolina, and Texas a large quantity of stone used for jetty work and for breakwater.

The value of paving blocks increased slightly, from \$1,954,266 in 1903 to \$1,983,328 in 1904, a gain of \$29,062.

The crushed stone increased in value from \$3,780,487 in 1903 to \$4,930,003 in 1904, a gain of \$1,149,516.

The following tables show the value of the granite produced in the United States in 1903 and 1904 by States and uses:

*Value of granite produced in the United States in 1903 and 1904, by States and uses.*

1903.

State.	Sold in the rough.			Dressed for building.	Dressed for monumental work.	Made into paving blocks.	Curbing.	Flagging.
	Building.	Monumental.	Other.					
Arizona .....					\$3,000			
Arkansas .....								
California .....	\$34,064	\$48,351	\$284,509	\$479,979	81,869	\$92,082	\$46,290	\$470
Colorado .....	12,855	8,122		77,188	526		1,500	
Connecticut .....	71,041	26,164	93,699	408,875	58,811	85,686	24,398	805
Delaware .....	63,462		185,680	8,034	214	11,812	4,654	89
Georgia .....	39,535	34,374	1,000	29,421	18,345	189,571	249,948	7,585
Idaho .....	1,500						1,250	
Indian Territory .....	840	90		2,350	400			
Maine .....	267,778	43,961	10,016	1,300,608	159,478	639,607	96,867	12,475
Maryland .....	228,896	29,996	1,400	271,929	10,634	38,104	21,174	3,992
Massachusetts .....	324,688	374,544	44,875	648,471	211,175	349,066	65,148	18,049
Minnesota .....	21,992	14,161	682	53,474	172,927	73,950	34,351	2,678
Missouri .....	2,680	28,593	413	11,732	100	20,178	11,125	31,159
Montana .....	3,430	2,000		11,863	2,100		600	
Nevada .....	950	2,500					4,000	
New Hampshire .....	115,524	57,775	6,964	282,014	252,044	58,708	35,603	1,040
New Jersey .....	50,824	6,800	360	20,672	12	41,605		
New York .....	86,406		42	51,172	2,400	3,500	801	
North Carolina .....	8,259	510	3,888	44,628	6,760	7,215	36,915	1,375
Oklahoma .....		1,000			4,000			
Oregon .....	1,533	2,325	230	1,691	16,390	80	200	150
Pennsylvania .....	167,442		426	91,594	1,300	28,706	10,220	343
Rhode Island .....	9,890	111,458	2,040	149,114	360,043	37,984	11,570	705
South Carolina .....	13,300	29,000	192,500	157,100	1,900	5,600	4,150	196
Texas .....	3,839	19,475	22,611	2,600	5,675		1,275	
Utah .....	661	2,490	560					
Vermont .....	103,353	828,508	579	346,293	481,346	28,839	10,647	
Virginia .....	26,345	13,440		14,740	43,845	28,034	4,582	5,485
Washington .....	6,612	2,775		50,792	17,604	12,000	23,381	
Wisconsin .....	4,185	4,468	750	3,882	202,639	201,939	869	4,546
Total .....	1,671,929	1,692,880	853,224	4,520,216	2,115,537	1,954,266	701,018	91,142



*Value of granite produced in United States in 1903 and 1904, by States and uses—Cont'd.*

1903—Continued.

State.	Crushed stone.			Rubble.	Riprap.	Other.	Total.
	Road making.	Railroad ballast.	Concrete.				
Arizona .....							\$3,000
Arkansas .....	\$4,813	\$23,500	\$15,823	\$3,000			47,136
California .....	112,298	74,039	200,891	162,089	\$9,161	\$1,500	1,627,592
Colorado .....	150		450				100,791
Connecticut .....	116,236	34,164	57,207	32,752	91,587		1,101,425
Delaware .....	14,245	47,976	21,000	6,000	6,000		369,166
Georgia .....	1,800	30,350	27,612	26,792	5,770	10,794	672,947
Idaho .....							2,750
Indian Territory .....				350			4,030
Maine .....	5,254	3,318	3,106	6,920	15,920	21,957	2,586,765
Maryland .....	60,664	37,771	122,120	8,278	1,029	1,800	837,787
Massachusetts .....	288,685	36,868	122,121	191,212	40,895	4,274	2,720,066
Minnesota .....	20,706	734	700	7,069	457	25	403,906
Missouri .....	38,384		4,443		1,252	350	150,409
Montana .....				5,000	1,000		25,993
Nevada .....							7,450
New Hampshire .....	7,850	2,470	6,087	9,275	18,684	475	854,513
New Jersey .....	575,338	86,109	150,224	2,104	5,733	3,390	943,171
New York .....	283,480	40,000	81,214				549,015
North Carolina .....	3,447	91,001	5,984	630	3,255	5,080	218,947
Oklahoma .....							5,000
Oregon .....	12,000	1,500	3,000	73,587	5,725		118,411
Pennsylvania .....	145,923	182,425	149,852	12,893	34,331	4,080	829,535
Rhode Island .....	18,031		2,597	3,650	619	2,590	710,291
South Carolina .....	13,000	36,797	7,780	15,450	90		476,863
Texas .....	25		64,725		53,100		173,325
Utah .....					92		3,803
Vermont .....	3,321	3,720	2,500		356	717	1,810,179
Virginia .....	31,785	17,400	60,820	28,449	22,410	2,000	299,335
Washington .....	3,608		9,631	9,048	73,644		209,095
Wisconsin .....	135,148		14,267	591		107	573,391
Total .....	1,896,191	750,142	1,134,154	605,139	391,110	59,139	18,436,087

*Value of granite produced in United States in 1903 and 1904, by States and uses—Cont'd.*

1904.

State.	Sold in the rough.			Dressed for building.	Dressed for mon- umental work.	Made into paving blocks.	Curbing.	Flag- ging.
	Building.	Monu- mental.	Other.					
Arizona .....					\$2,500			
Arkansas .....	\$100	\$100	\$100				\$150	
California .....	58,820	56,058	221,349	\$360,734	99,151	\$252,054	63,760	\$350
Colorado .....	1,600	22,479	840	33,550	5,835	4,000	2,500	
Connecticut .....	92,016	23,371	3,988	289,772	42,202	49,354	21,690	386
Delaware .....	26,328	14	45,220	8,909	270	13,031	4,392	276
Georgia .....	34,033	40,275	2,150	234,931	450	250,896	218,266	1,000
Idaho .....								
Indian Territory ..				5,000			38	
Maine .....	126,959	31,066	19,547	1,592,132	86,610	426,463	70,731	10,516
Maryland .....	124,994	15,037	3,450	270,791	8,139	46,864	14,970	19,001
Massachusetts .....	225,322	365,607	52,763	876,517	209,077	320,714	142,347	4,969
Minnesota .....	9,529	24,435	2,800	71,934	143,247	66,000	18,787	2,507
Mississippi .....	440							
Missouri .....		16,681	521	18,680	6,335	31,786	5,002	
Montana .....	4,890	3,100		9,500	7,200	3,000	700	
Nevada .....				200	1,000			
New Hampshire .....	124,186	74,478	12,314	393,144	214,578	65,151	16,807	1,003
New Jersey .....	9,930	1,030		27,499	2,079	28,535		
New York .....	26,615	1,100	900	61,800	4,900	15,500	665	60
North Carolina .....	18,171	110	400	61,488	874	15,807	95,708	6,323
Oklahoma .....	60	1,060		240	10,240		120	
Oregon .....	1,695	3,397	12	3,140	12,117	7,000	150	
Pennsylvania .....	118,049	50	2,577	60,169	381	30,643	10,671	200
Rhode Island .....	12,643	118,236	1,000	214,599	153,930	47,823	2,350	375
South Carolina .....	47,104	23,895	132,349	60,753	6,882	5,945	20,365	1,260
South Dakota .....	100	300		500				
Texas .....	11,230	20,725	141,214	56,646	23,885		130	
Utah .....	506	1,606			500			
Vermont .....	83,148	797,830	3,900	912,801	615,057	14,745	6,006	
Virginia .....	33,613	17,320		48,452	55,608	30,966	33,324	3,516
Washington .....	11,600	3,552	1,000	57,520	26,390	3,000	16,743	800
Wisconsin .....	800	55,272		3,986	206,060	254,051	3,090	5,610
Wyoming .....	557							
Total .....	1,205,038	1,718,185	648,394	5,735,387	1,945,497	1,983,328	769,462	58,152



*Value of granite produced in United States in 1903 and 1904, by States and uses—Cont'd.*

1904—Continued.

State.	Crushed stone.			Rubble.	Riprap.	Other.	Total.
	Road mak- ing.	Railroad ballast.	Concrete.				
Arizona .....							\$2,500
Arkansas .....	\$10,450	\$3,936	\$20,180	\$15,050	\$2,550		52,616
California .....	215,431	171,569	223,053	17,456	935	\$1,610	1,742,330
Colorado .....	20,228						91,132
Connecticut .....	177,842	45,183	76,272	7,812	24,886	10	864,784
Delaware .....	47,138	94,976	638	3,380	700		245,272
Georgia .....	9,422	57,228	50,630	42,285	300	600	942,466
Idaho .....							
Indian Territory .....			18	96			5,152
Maine .....	3,505		7,206	3,970	3,601	18,203	2,400,509
Maryland .....	128,672	5,537	137,102	31,155	3,881	5,878	815,471
Massachusetts .....	267,938	28,515	111,390	222,879	37,660	2,607	2,868,305
Minnesota .....	46,893		4,696	11,129	20	3,979	405,956
Mississippi .....							440
Missouri .....	31,119		38,692	400	2,030	4,470	155,716
Montana .....			500	5,000			33,890
Nevada .....							1,200
New Hampshire .....	11,856		3,665	1,910	6,515	1,880	927,487
New Jersey .....	570,679	74,567	114,527	14	2,328	2,330	833,518
New York .....	380,246	58,590	41,400	30,135		1,075	622,986
North Carolina .....	22,159	66,783	4,454	3,801	746	1,025	297,749
Oklahoma .....					15,060	150	26,930
Oregon .....	54,064	43,750	1,000	108,638	250		235,213
Pennsylvania .....	237,290	112,693	317,110	6,971	318	3,408	900,530
Rhode Island .....	55,673	35,025	39,875	3,120	248	55	684,952
South Carolina .....	16,669	25,555	30,669	5,502	5,480		382,428
South Dakota .....							900
Texas .....	35		70,372		23,594	485	348,317
Utah .....				5,000	368		7,980
Vermont .....	414	225	1,721	1,361	121	10,650	2,447,979
Virginia .....	12,940	61,352	165,043	40,524	7,630	500	510,788
Washington .....	10,629		58,612	196,181	36,481		422,508
Wisconsin .....	175,274	19,128		1,151			724,422
Wyoming .....							557
Total .....	2,506,566	904,612	1,518,825	764,920	175,702	58,915	19,992,983

The following table shows the value of the production of granite in the United States from 1900 to 1904, inclusive:

*Value of granite produced in the United States, 1900-1904.*

State.	1900.	1901.	1902.	1903.	1904.
Arizona .....			\$3,000	\$3,000	\$2,500
Arkansas .....	\$62,500	\$23,554	12,115	47,136	52,616
California .....	738,993	1,134,675	1,137,679	1,627,592	1,742,330
Colorado .....	143,054	138,996	66,023	100,791	91,132
Connecticut .....	507,754	616,654	812,141	1,101,425	854,784
Delaware .....	608,028	671,204	276,753	369,166	245,272
Georgia .....	380,434	761,646	803,778	672,947	942,466
Idaho .....	2,450	5,100	12,910	2,750	.....
Indian Territory .....				4,030	5,152
Kansas .....	30,000	48,530			.....
Maine .....	1,568,573	2,703,116	2,659,450	2,586,765	2,400,509
Maryland .....	486,822	613,356	758,203	837,787	815,471
Massachusetts .....	1,698,605	2,216,258	3,451,397	2,720,066	2,868,305
Michigan .....	3,957	2,706			.....
Minnesota .....	221,684	260,105	478,989	403,906	405,956
Mississippi .....					440
Missouri .....	139,103	95,806	157,708	150,409	155,716
Montana .....			77,050	25,993	33,890
Nevada .....	9,091	19,300	2,090	7,450	1,200
New Hampshire .....	870,646	935,494	1,147,097	854,513	927,487
New Jersey .....	1,170,555	894,167	948,474	943,171	833,518
New York .....	446,171	489,828	651,014	549,015	622,986
North Carolina .....	257,962	261,288	338,750	218,947	297,749
Oklahoma .....				5,000	26,930
Oregon .....	5,313	10,754	38,429	118,411	235,213
Pennsylvania .....	396,271	486,008	661,062	829,535	900,530
Rhode Island .....	444,316	501,698	734,623	710,291	684,952
South Carolina .....	500,802	996,084	598,848	476,863	382,428
South Dakota .....	114,115	99,941	(a)	(a)	900
Texas .....	76,069	27,005	60,003	173,325	348,317
Utah .....	2,170	5,588	1,479	3,803	7,980
Vermont .....	1,113,788	1,245,828	1,570,423	1,810,179	2,447,979
Virginia .....	211,080	275,701	282,046	299,335	510,788
Washington .....	48,900	43,808	147,273	209,095	422,508
Wisconsin .....	407,711	389,953	369,137	573,391	724,422
Wyoming .....	8,700	2,810			557
Total .....	12,675,617	15,976,961	18,257,944	18,436,087	19,992,983

<sup>a</sup> Value of quartzite included in sandstone.



The following tables show the value of the trap rock produced in the United States in 1903 and 1904, by States and uses:

*Value of trap rock produced in the United States in 1903 and 1904, by States and uses.*

## 1903.

State.	Build- ing.	Paving.	Crushed stone.			Other.	Total.
			Road mak- ing.	Railroad ballast.	Concrete.		
California .....	\$152,383	\$25,120	\$71,538	\$22,977	\$193,731	\$577	\$466,326
Connecticut .....	11,620	22,426	114,986	31,164	46,288	.....	229,484
Massachusetts .....	51,392	.....	212,127	23,322	82,168	30	369,039
New Jersey .....	14,611	39,704	575,338	86,109	100,224	3,050	819,036
New York .....	.....	.....	283,480	40,000	65,945	.....	389,425
Pennsylvania .....	9,336	5,476	129,324	180,225	129,991	4,632	458,984
Total .....	239,342	92,726	1,386,793	386,797	618,347	8,289	2,732,294

## 1904.

California .....	\$34,814	\$74,464	\$150,965	\$106,403	\$194,614	\$655	\$561,915
Connecticut .....	4,061	1,456	175,528	45,183	70,222	.....	296,450
Massachusetts .....	25,022	.....	203,958	11,628	72,949	.....	313,557
New Jersey .....	14,003	28,535	566,679	72,877	112,127	2,100	796,321
New York .....	1,750	.....	352,251	58,500	13,800	.....	426,301
Pennsylvania .....	5,541	7,923	202,691	105,633	106,685	469	429,002
Total .....	85,191	112,378	1,652,072	400,284	570,397	3,224	2,823,546

From the above tables it will be seen that the value of trap rock increased \$91,252, from \$2,732,294 in 1903 to \$2,823,546 in 1904. The increase was in crushed stone and paving stone, and from California, Connecticut, and New York; a decrease in value appearing from Massachusetts, New Jersey, and Pennsylvania.

In 1904 an endeavor was made to compile statistics showing the number of paving blocks made, as well as their value, and the following table gives the results obtained. In some cases, notably in Virginia, the number of blocks was based on an estimate, but the greater part of the figures were those given by the quarrymen themselves.

*Number and value of paving blocks produced in 1904.*

State.	Paving blocks.	
	Number.	Value.
California.....	5,524,250	\$252,054
Colorado.....	53,150	4,000
Connecticut.....	1,464,656	49,354
Delaware.....	366,475	13,031
Georgia.....	6,677,265	250,896
Maine.....	9,808,465	426,463
Maryland.....	983,575	46,864
Massachusetts.....	5,678,562	320,714
Minnesota.....	1,004,325	66,000
Missouri.....	697,852	31,786
Montana.....	60,000	3,000
New Hampshire.....	1,892,260	65,151
New Jersey.....	1,246,100	28,535
New York.....	330,000	15,500
North Carolina.....	417,700	15,807
Oregon.....	190,000	7,000
Pennsylvania.....	677,688	30,643
Rhode Island.....	1,138,190	47,823
South Carolina.....	163,825	5,945
Vermont.....	382,758	14,745
Virginia.....	1,032,200	30,966
Washington.....	100,000	3,000
Wisconsin.....	4,277,333	254,051
Total.....	44,176,629	1,983,328

The paving blocks vary in price from \$15 per thousand to about \$80 per thousand, according to size and to regularity of shape.

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



## SANDSTONE.

The total value of the sandstone output in the United States in 1904 was \$10,295,933; in 1903 the value was \$11,262,259, a decrease of \$966,326 for 1904. In 1903 there was an increase of \$661,088 as compared with 1902, when the value was \$10,601,171. These figures include bluestone quarried in New York and Pennsylvania, valued at \$1,791,729 in 1904 and at \$1,779,457 in 1903, an increase in 1904 of \$12,272. The sandstone output, not including bluestone, decreased from \$9,482,802 in 1903 to \$8,504,204 in 1904, a loss of \$978,598. In 1903 there was a slight increase over the figures for 1902.

The decrease was in the value of stone used for building purposes, which, including dressed and rough stone, was valued at \$6,403,969 in 1903 and at \$5,162,158 in 1904, a decrease of \$1,241,811. The greater part of this decrease was in the State of Pennsylvania, which, on account of a decreased quantity of stone used for railroad bridge construction, showed a smaller output than in 1903.

Crushed stone increased in value from \$827,585 in 1903 to \$1,041,493 in 1904, an increase of \$213,908, the increase being in the stone used for railroad ballast and roadmaking.

Stone used for riprap, rubble, paving, and flagstones decreased somewhat in value of production, while stone used for curbing increased somewhat in value.

In Pennsylvania, the State showing the largest value for sandstone, the value of the output decreased from \$3,255,073 in 1903 to \$2,641,510 in 1904, a loss of \$613,563. This loss was chiefly in the value of stone used in construction of railroad bridges.

Ohio, the next State in rank as a sandstone producer, increased very slightly in 1904 in value of output—from \$1,793,379 in 1903 to \$1,808,062 in 1904, or a gain of \$14,683.

The output of New York, the third State in rank, like that of Ohio, remained practically the same during the two years, being valued at \$1,756,501 in 1903 and at \$1,755,524 in 1904. The greater part of the New York output is bluestone, the value of which was reported as \$1,026,968 in 1903 and as \$1,044,314 in 1904.

California is the next State in rank, with an output valued at \$735,662 in 1904 as compared with \$762,327 in 1903, a decrease of \$26,665.

Of the other sandstone-producing States Arizona showed the greatest change, the output declining in value from \$526,875 in 1903 to \$91,960 in 1904, a decline due to less railroad construction work.

The figures reported from Hawaii are for tufa stone used for road ballast, railroad work, and concrete.

The following tables show the value of the sandstone production of the United States in 1903 and 1904, by States and uses:

*Value of sandstone produced in the United States in 1903 and 1904, by States and uses.*

1903.

State.	Rough building.	Dressed building.	Crushed stone.			Ganister.	Riprap.
			Road-making.	Railroad ballast.	Concrete.		
Alabama .....	\$2,800	\$6,000					\$13,995
Arizona .....	7,000	425,000		\$625	\$12,500		50,000
Arkansas .....	4,415	3,555	\$960	960	11,156		1,881
California .....	20,450	547,000	49,750	15,000	16,170		10,100
Colorado .....	56,192	13,075		30,000	7,635	\$18,975	2,000
Connecticut .....	115,765	3,652					
Idaho .....	10,787	1,069					
Illinois .....	16,319	4,269				600	100
Indiana .....	19,062	4,910	5,000				1,280
Iowa .....	8,072	49	366	16			7,525
Kansas .....	15,431	7,650	600	31,250			500
Kentucky .....	51,997	23,200	1,100				1,085
Maryland .....	795		1,375				
Massachusetts .....	72,328	93,360	157,039	14,000	33,680		
Michigan .....	89,931	10,365	2,050		3,450		
Minnesota .....	41,359	39,424	4,500		16,221		7,508
Missouri .....	23,511	14,931	24				2,500
Montana .....	11,087	46,175			165		2,450
Nebraska .....	1,000		30				
Nevada .....	100	2,000					
New Jersey .....	270,253	91,721	1,750		200		
New Mexico .....	1,955	1,758			250		
New York .....	131,268	555,379	5,000	1,500	22,894		25,532
North Carolina .....	600						
Ohio .....	471,106	407,170	32,080	300	5,908	5,897	34,428
Oklahoma .....	2,900	3,000	600				
Oregon .....	1,654	793	97				300
Pennsylvania .....	550,991	1,602,152	12,919	185,452	26,442	143,639	46,797
South Dakota .....	50,868	40,895	500	500	5,000		7,119
Tennessee .....	600	19,536			93		
Texas .....	18,795	19,455	7,000		15,300		41,506
Utah .....	39,958	12,031					
Virginia .....	2,682	986			803		
Washington .....	1,100	32,450					
West Virginia .....	57,978	109,469	5,460	8,125	1,617		2,285
Wisconsin .....	56,699	18,870	1,125	260	165	18,578	1,256
Wyoming .....	11,240	3,572			70,623		
Total .....	2,239,048	4,164,921	289,325	287,988	250,272	187,689	260,147



*Value of sandstone produced in the United States in 1903 and 1904, by States and uses—Continued.*

1903—Continued.

State.	Rubble.	Paving.	Flagstone.	Curbstone.	Other.	Total.
Alabama .....	\$15,021				\$5,117	\$42,933
Arizona .....	31,750					526,875
Arkansas .....	10,286	\$3,993	\$3,776	\$19,684	506	61,172
California .....	98,852	375		1,100	3,530	762,327
Colorado .....	61,288	2,962	168,509	25,689	2,807	389,132
Connecticut .....						119,417
Idaho .....						11,856
Illinois .....	4,400		374	50	181	26,293
Indiana .....	2,010	93	78	168	50	32,651
Iowa .....	2,502	170	190	121		19,011
Kansas .....	4,754	5,100	21,141	15,502	200	102,128
Kentucky .....	10,000		5,560	800		93,742
Maryland .....						2,170
Massachusetts .....	2,071					372,478
Michigan .....	15,554					121,350
Minnesota .....	31,186	187,374	552	34,210	928	363,262
Missouri .....	5,060	15	1,482	1,639	240	49,402
Montana .....	1,759		1,260	4,140	1,000	68,036
Nebraska .....	10				27	1,067
Nevada .....	100	20		150		2,370
New Jersey .....			40	373		364,337
New Mexico .....	2,032		500	1,015		7,510
New York .....	4,237	356,788	231,366	412,922	9,615	1,756,501
North Carolina .....						600
Ohio .....	65,043		532,046	230,586	8,815	1,793,379
Oklahoma .....						6,500
Oregon .....	68					2,912
Pennsylvania .....	156,818	83,243	192,225	228,204	26,191	3,255,073
South Dakota .....	23,277	34,553		355		163,067
Tennessee .....	420					20,649
Texas .....	4,425		1,200	5,425	1,275	114,381
Utah .....	766	15,000	1,500	2,024		71,279
Virginia .....						4,471
Washington .....	11,000	1,800		1,080		47,430
West Virginia .....	43,541	4,567	709	17,671	782	252,204
Wisconsin .....	43,909		648		935	142,445
Wyoming .....	4,794		1,000	620		91,849
Total .....	656,933	696,053	1,164,156	1,003,528	62,199	11,262,259

*Value of sandstone produced in the United States in 1903 and 1904, by States and uses—Continued.*

1904.

State.	Rough building.	Dressed building.	Crushed stone.			Ganister.	Riprap.
			Road-making.	Railroad ballast.	Concrete.		
Alabama .....							\$6,796
Arizona .....	\$19,050	\$44,860			\$1,580		170
Arkansas .....	6,676	3,709	\$3,750		7,678		1,540
California .....	30,638	468,701	76,000	\$36,221	375		1,626
Colorado .....	58,386	27,596			4,655	\$5,000	5,087
Connecticut .....	108,130	9,255					271
Hawaii .....			3,133	10,000	8,909		
Idaho .....	4,725	4,150					25
Illinois .....	16,804	7,092	5,105	50	9,430	600	525
Indiana .....	5,940	11,160					1,150
Iowa .....	7,952	460	92	8			90
Kansas .....	22,338	7,481	4,175	44,494	1,161		179
Kentucky .....	41,751	14,622	2,550		400		600
Louisiana .....			810		500		
Maryland .....	4,192	150				4,656	
Massachusetts .....	60,691	43,950	155,960	525	57,254		
Michigan .....	47,593	14,818	1,400		400		
Minnesota .....	6,519	57,597	3,314	3,000	5,051		7,925
Missouri .....	12,553	17,130			220	10	6,058
Montana .....	7,683	45,099	169		1,500		3,157
Nebraska .....	90				32		
Nevada .....	1,000	9,000	400				
New Jersey .....	188,613	28,700	5,500		1,613		700
New Mexico .....	924	680		130,294	600		
New York .....	303,053	318,418	11,883	12,695	5,337		4,397
North Carolina .....		250					
Ohio .....	489,464	374,960	11,890	2,500	12,000	4,618	27,217
Oklahoma .....	725	1,800					
Oregon .....	5,505	123	111				
Pennsylvania .....	452,713	1,133,209	28,122	165,664	46,755	101,525	57,556
South Dakota .....	61,859	80,260	5,225	600	26,001		10,060
Tennessee .....	8,350	10,000	840		1,893		200
Texas .....	19,844	20,750			45,356		116,733
Utah .....	46,800	3,443					
Virginia .....	300	500		12,672			
Washington .....	30,750	29,080		2,500			5,915
West Virginia .....	73,384	98,411	8,327	27,119	10,682		7,560
Wisconsin .....	69,485	35,367	10,204	2,100		20,548	4,591
Wyoming .....	14,247	10,650	2,460		249		
Total .....	2,228,727	2,933,431	341,420	450,442	249,631	136,957	270,148



*Value of sandstone produced in the United States in 1903 and 1904, by States and uses—Continued.*

1904—Continued.

State.	Rubble.	Paving.	Flagging.	Curbing.	Other.	Total.
Alabama .....	\$5,992					\$12,788
Arizona .....	26,000				\$300	91,960
Arkansas .....	3,950	\$5,056	\$4,008	\$25,543	2,040	63,950
California .....	58,625			180	63,296	735,662
Colorado .....	52,277	1,850	78,872	42,720	4,699	281,142
Connecticut .....				40		117,696
Hawaii .....						22,042
Idaho .....	420					9,320
Illinois .....	4,012	2,500	153	290	816	47,377
Indiana .....	3,780	72	195	384		22,681
Iowa .....	415		190	88	5	9,300
Kansas .....	3,658	980	25,698	19,952	400	130,516
Kentucky .....	13,800	2,949	11,750	3,200	2,000	93,622
Louisiana .....	5,500	1,400		105		8,315
Maryland .....						8,998
Massachusetts .....	1,481				1,000	320,861
Michigan .....	10,657					74,868
Minnesota .....	24,834	160,129	5,751	44,102	987	319,209
Missouri .....	6,029		1,237	893	325	44,455
Montana .....	3,623		2,280	550	171	64,232
Nebraska .....	20					142
Nevada .....				158		10,558
New Jersey .....	10,000		500	800		236,426
New Mexico .....	842		50			133,390
New York .....	15,780	271,540	249,432	551,389	11,600	1,755,524
North Carolina .....						250
Ohio .....	71,808	500	512,381	296,589	4,135	1,808,062
Oklahoma .....	400			70		2,995
Oregon .....					447	6,186
Pennsylvania .....	99,947	72,761	227,318	246,658	9,282	2,641,510
South Dakota .....	23,606	122,665	375	6,114	2,205	338,970
Tennessee .....	2,490	60		65	970	24,868
Texas .....	6,000	35	65	420	90	209,313
Utah .....	2,705	12,400	100	4,020	700	70,168
Virginia .....	50					13,522
Washington .....	10,940	9,000				88,185
West Virginia .....	42,862		1,490	14,599	2,947	287,381
Wisconsin .....	14,360	165	268	23	1,392	158,503
Wyoming .....	2,240		750	40	350	30,986
Total .....	529,103	664,062	1,122,863	1,258,992	110,157	10,295,933

The following table shows the value of the sandstone production in the United States from 1900 to 1904, inclusive, by States:

*Value of sandstone production in the United States, 1900-1904, by States.*

State.	1900.	1901.	1902.	1903.	1904.
Alabama .....	\$7,132	\$8,680	\$42,706	\$42,933	\$12,788
Arizona .....	64,000	202,500	107,910	526,875	91,960
Arkansas .....	104,923	62,825	85,917	61,172	63,950
California .....	200,090	301,028	462,328	762,327	735,662
Colorado .....	119,658	237,331	366,161	389,132	281,142
Connecticut .....	192,593	146,814	128,579	119,417	117,696
Georgia .....	600		1,250		
Hawaii .....			6,688		22,042
Idaho .....	438	20,843	13,777	11,856	9,320
Illinois .....	19,141	12,884	32,200	26,293	47,377
Indiana .....	45,063	28,334	37,593	32,651	22,681
Iowa .....	19,063	14,341	15,061	19,011	9,300
Kansas .....	55,173	49,901	105,509	102,128	130,516
Kentucky .....	56,178	108,259	128,470	93,742	93,622
Louisiana .....	<sup>a</sup> 118,192				8,315
Maryland .....	6,655	4,546	15,405	2,170	8,998
Massachusetts .....	153,427	247,310	487,366	372,478	320,861
Michigan .....	238,650	174,428	188,073	121,350	74,868
Minnesota .....	267,000	246,685	347,472	363,262	319,209
Missouri .....	53,401	42,170	56,990	49,402	44,455
Montana .....	59,630	58,439	85,152	68,086	64,232
Nebraska .....		515	168	1,067	142
Nevada .....			6,115	2,370	10,558
New Jersey .....	198,234	244,512	406,726	364,337	236,426
New Mexico .....	2,500		12,291	7,510	133,390
New York .....	<sup>b</sup> 1,467,496	<sup>b</sup> 1,331,327	<sup>b</sup> 1,408,699	<sup>b</sup> 1,756,501	<sup>b</sup> 1,755,524
North Carolina .....	27,210	11,682	4,825	600	250
Ohio .....	2,233,596	1,999,180	2,078,754	1,793,379	1,808,062
Oklahoma .....				6,500	2,995
Oregon .....	5,450	531	25,309	2,912	6,186
Pennsylvania .....	<sup>b</sup> 1,050,248	<sup>b</sup> 2,063,082	<sup>b</sup> 2,800,108	<sup>b</sup> 3,255,073	<sup>b</sup> 2,641,510
South Dakota .....	12,675	17,647	110,789	163,067	338,970
Tennessee .....	11,300	10,342	7,670	20,649	24,868
Texas .....	37,038	111,568	165,565	114,381	209,313
Utah .....	66,733	38,919	105,011	71,279	70,168
Virginia .....	6,000	5,303	2,500	4,471	13,522
Washington .....	68,133	89,174	30,725	47,430	88,185
West Virginia .....	72,438	103,010	423,532	252,204	287,381
Wisconsin .....	81,571	90,425	207,086	142,445	158,503
Wyoming .....	27,671	54,145	90,691	91,849	30,986
Total .....	7,149,300	8,138,680	10,601,171	11,262,259	10,295,933

<sup>a</sup> Includes Mississippi.

<sup>b</sup> Includes bluestone.



The following table shows the value and uses of the bluestone produced in New York and Pennsylvania in 1903 and 1904:

*Value and uses of bluestone produced in New York and Pennsylvania in 1903 and 1904.*

## 1903.

State.	Building purposes.	Flagging.	Curbing.	Crushed stone.	Other purposes.	Total value.
New York .....	\$588,015	\$205,558	\$230,345	.....	\$3,050	\$1,026,968
Pennsylvania .....	323,763	173,701	126,593	\$45,971	82,462	752,489
Total .....	911,777	379,259	356,938	45,971	85,512	1,779,457

## 1904.

New York .....	\$482,908	\$241,062	\$295,064	\$10,425	\$14,855	\$1,044,314
Pennsylvania .....	287,685	216,251	149,491	29,842	64,146	747,415
Total .....	770,593	457,313	444,555	40,267	79,001	1,791,729

## SLATE.

In 1903, owing to strikes and various troubles in the building trades, the production of slate in the United States suffered somewhat of a check, the chief slate producers reporting for the last months of that year a much decreased demand. These conditions held also for the beginning of 1904, and the output for 1904 was less on that account. The total value of the output in 1903 was \$6,256,885, and in 1904 it was \$5,617,195, a decrease of \$639,690. In 1903 the increase in value of production was \$560,834, from \$5,696,051 in 1902 to \$6,256,885 in 1903.

In 1903, as compared with 1902, there was a decrease in the number of squares of slate produced with an increase in their value, the output being 1,435,168 squares valued at \$4,950,428 in 1902, and 1,378,194 squares valued at \$5,400,078 in 1903, an increase in value of \$449,650 and a decrease in the number of squares of 56,974.

In 1904, as compared with 1903, there was a decrease both in the number of squares and in their value from 1,378,194 squares of slate valued at \$5,400,078 in 1903 to 1,233,757 squares valued at \$4,669,289 in 1904, a loss of 144,437 in the number of squares produced and of \$730,789 in their value. The average price per square was \$3.91 in 1903 and \$3.78 in 1904, a decrease of 13 cents per square, though the prices remained much steadier in 1904 than in 1903.

The value of milled stock increased \$91,099 in 1904 as compared with 1903, from \$856,807 in 1903 to \$947,906 in 1904. All the producers reported a good demand for this class of slate, although Pennsylvania was the only State showing any advance in value. In 1904

Georgia, Tennessee, and Utah reported a small output from quarries not worked for commercial purposes in 1903. New Jersey reported no production. Work was done on the development of quarries in Arizona, Colorado, North Carolina, and West Virginia, the slate in Arizona being first discovered in 1904.

The following table shows the value of roofing and milled slate quarried in the United States in 1903 and 1904, by States:

*Value of roofing and mill slate produced in the United States in 1903 and 1904, by States.*

## 1903.

State.	Roofing slate.		Value of milled stock.	Total value.
	Number of squares.	Value.		
Arkansas .....	118	\$709	\$4,000	\$4,709
California .....	10,000	70,000	.....	70,000
Maine .....	27,377	157,911	73,319	231,230
Maryland .....	24,475	135,424	2,207	137,631
New Jersey .....	7,647	33,403	.....	33,403
New York .....	15,690	89,548	22,450	111,998
Pennsylvania .....	871,875	3,378,804	581,102	3,959,906
Vermont .....	391,366	1,418,923	173,729	1,592,652
Virginia .....	29,646	115,356	.....	115,356
Total .....	1,378,194	5,400,078	856,807	6,256,885

## 1904.

Arkansas .....	1,750	\$10,300	\$4,000	\$14,300
California .....	5,600	39,200	.....	39,200
Georgia .....	1,000	4,500	.....	4,500
Maine .....	20,789	120,838	60,330	181,168
Maryland .....	22,628	131,245	2,727	133,972
New York .....	10,022	64,102	7,441	71,543
Pennsylvania .....	778,825	2,922,259	710,987	3,633,246
Tennessee .....	115	607	.....	607
Utah .....	50	300	.....	300
Vermont .....	361,126	1,245,730	162,421	1,408,151
Virginia .....	31,852	130,208	.....	130,208
Total .....	1,233,757	4,669,289	947,906	5,617,195



The following table shows the average value of roofing slate per square since 1890:

*Average annual price per square of roofing slate for the entire country.*

1890 .....	\$3.34	1898 .....	\$3.42
1891 .....	3.49	1899 .....	3.14
1892 .....	3.56	1900 .....	3.01
1893 .....	3.55	1901 .....	3.15
1894 .....	3.11	1902 .....	3.45
1895 .....	3.23	1903 .....	3.91
1896 .....	3.36	1904 .....	3.78
1897 .....	3.09		

The following table shows the total value of the slate production of the United States from 1900 to 1904, inclusive:

*Value of slate produced in the United States, 1900-1904.*

State.	1900.	1901.	1902.	1903.	1904.
Arkansas .....			\$4,000	\$4,709	\$14,300
California .....	\$26,500	\$18,608	31,500	70,000	39,200
Georgia .....	9,375	3,000	4,000		4,500
Maine .....	177,342	202,325	206,558	231,230	181,168
Maryland .....	128,673	105,798	118,084	137,631	133,972
Minnesota .....	700	1,400			
New Jersey .....	13,600	30,000	32,000	33,403	
New York .....	62,755	100,960	126,718	111,998	71,543
Pennsylvania .....	2,713,598	2,984,264	3,547,322	3,959,906	3,633,246
Tennessee .....	250				607
Utah .....					300
Vermont .....	917,462	1,162,191	1,464,918	1,592,652	1,408,151
Virginia .....	190,211	178,979	160,951	115,356	130,208
Total .....	4,240,466	4,787,525	5,696,051	6,256,885	5,617,195

The following table shows the value per square at the beginning of 1905 of the various kinds of No. 1 slate. The figures were compiled from information sent in by the producers and represent the value free on board at the quarry:

Value per square January 1, 1905, of No. 1 slate free on board at quarry.

Number per square.	Size.	Monson, Me., No. 1.	New York red.	Maryland and Pennsylvania Peach Bottom.	Pennsylvania.								Vermont.					Virginia.
					Bangor No. 1.	Bangor ribbon No.1.	Albion No. 1.	Pen Argyl.	Hard vein.	Danelsville.	Chapman.	Slatington unfading big bed.	Franklin unfading big bed.	Unfading.	Sea green.	Intermediate sea green.	Purple vein.	
	Inch.																	
686	9 × 7	\$3.50	\$6.50															
588	10 × 7		7.00											\$4.00				
515	10 × 8	4.00	7.00											4.00				
450	11 × 8	4.50	8.00															
534	12 × 6	4.50	9.50		\$4.50		\$4.25	\$4.00	\$3.50			\$3.25	\$3.50	{4.50 4.00	\$2.50		\$2.50	
458	12 × 7	5.00	9.50		4.50		4.25	4.25	3.50				3.75	{4.50 4.00	2.50			
400	12 × 8	5.50	9.50		4.50	\$4.25	4.25	4.25				3.75	4.00	{4.50 4.00	3.25			
356	12 × 9	5.60	9.50											{4.50 4.00	3.25		3.25	
320	12 × 10	5.80	9.50		4.50									4.50	3.25		3.25	
267	12 × 12				6.00													
374	14 × 7	6.40	11.00	\$6.00	4.75	4.25	4.50	4.25	4.50			4.25	4.50	5.25	3.25		3.25	
328	14 × 8	6.60	11.00	6.00	4.75	4.25	4.50	4.25	4.50			4.25	4.50	5.25	3.50	\$2.60	3.50	
291	14 × 9	6.50	11.00	6.25								4.25	4.50	5.25	3.50	2.60	3.50	
262	14 × 10	6.60	11.00	6.25	4.75	4.25	4.50	4.50				4.25	4.50	5.25	3.50	2.60	3.50	
219	14 × 12	6.50													3.50	2.60	3.50	
187	14 × 14		11.00		6.00		5.50					{4.75 4.50						
277	16 × 8	7.20	11.00	6.35	5.75	4.25	5.00	4.75	4.50	\$4.25	\$5.25		5.00	{5.25 4.50	3.50	2.90	3.50	{5.00 5.50
247	16 × 9	7.00	11.00	6.35	5.25		5.00	4.75	4.50			4.75	5.00	5.25	3.50	2.90	3.50	
222	16 × 10	7.10	11.00	6.35	5.25	4.25	5.00	4.75				4.75	5.00	5.25	3.70	2.90		
202	16 × 11	6.90																
185	16 × 12	6.80			4.50	4.00	4.25	4.50					5.00	5.25	3.70	2.90		
139	16 × 16		11.00		6.00		5.50											
214	18 × 9	7.10	11.00	6.35	5.75	4.25	5.00	4.75	4.50				5.00	5.25	3.70	2.90	3.70	
192	18 × 10	7.20	11.00	6.35	5.25	4.25	5.00	4.75	4.50			4.75	5.00	5.25	3.80	2.90	3.80	
175	18 × 11	7.00												5.25	3.70	2.90	3.70	
160	18 × 12	6.80		6.25	4.50	4.00	4.25	4.50					5.00	5.25	3.70	2.90	3.70	
...	18 × 18				6.00		5.50											
170	20 × 10	6.80	11.00	6.35	5.25	4.00	5.00	4.75	4.50			4.75	5.00	{5.50 5.25	4.00	2.90	4.00	
154	20 × 11	6.80												5.25	3.80	2.90	3.80	
142	20 × 12	6.90		6.25	4.50	4.00	4.25	4.50						5.25	3.80	2.90	3.80	
121	20 × 14	6.90										4.50	4.75		3.70	2.90		
138	22 × 11	6.50		6.25	4.75	4.00	4.50	4.50	4.25			4.50	4.75	{5.25 4.50	4.00	2.90	4.00	
127	22 × 12	6.60		6.25	4.50	4.00	4.25	4.50				4.50	4.65	{5.25 4.50	3.80	2.90	3.80	
108	22 × 14	6.60													3.70	2.90	3.70	
115	24 × 12	6.60		6.25	4.50	4.00	4.25		4.00			4.25	4.50	{5.25 4.50	4.00	2.90	4.00	
98	24 × 14	6.50		6.00	4.50	3.80	4.25	4.25				4.25	4.50	4.50	3.80	2.90	3.20	
...	26 × 14														4.00		4.00	
...	28 × 14														4.00		4.00	



A "square" of slate is the number of slate required to lay 100 square feet of roof, allowing a 3-inch lap. The estimated weight of roofing slate of ordinary thickness is 650 pounds to the square, and the slate is generally shipped in carload lots of from 50 to 90 squares per carload.

The prices per square vary from month to month, and the freight rates vary according to place of shipment, ranging from \$1 to \$1.75 per square to places west of Pittsburg and east of the Mississippi River, and to nearly \$8 per square delivered in San Francisco.

#### EXPORTS.

The exports of roofing slate increased, according to the figures of the Bureau of Statistics, Department of Commerce and Labor, from \$628,612 in the fiscal year ending June 30, 1903, to \$726,715 in 1904, an increase of \$98,103. There was a slight increase in the slate exported to the United Kingdom, which was valued at \$477,251 in 1903, and at \$515,085 in 1904.

The figures for the fiscal year are used in the following table instead of for the calendar year, because the details by ports and customs districts are not given by the Bureau of Statistics for any other periods except fiscal years.

The following table shows the ports and customs districts from which and to which slate has been exported since 1893:

*Exports of slate from the United States, showing ports and customs districts from which and to which sent, in the fiscal years 1895-1904.*

Port and customs district.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.
Baltimore, Md. ....		\$9,860	\$101,581	\$170,916	\$99,083	\$110,049	\$135,571	\$240,734	\$221,933	\$275,393
Bangor, Me. ....		350				577	1,144	449	1,170	30
Belfast, Me. ....								375		
Boston and Charlestown, Mass. ....	\$443	609	1,020	385	40,622	65,531	93,972	48,299	30,273	29,175
Newport News, Va. ....			18,170	65,290	42,220	19,950	12,910	6,650	350	
New York, N. Y. ....	31,092	242,559	557,099	986,638	968,395	592,288	388,590	374,264	207,250	284,750
Passamaquoddy, Me. ....	192		120					160		
Philadelphia, Pa. ....		2,300	94,865	136,916	205,779	150,254	236,090	243,701	120,240	97,247
Portland and Falmouth, Me. ....			270							378
Brazos de Santiago, Tex. ....					14					
Corpus Christi, Tex. ....	105	174		1,761				44		505
New Orleans, La. ....										
Paso del Norte, Tex. ....								20		580
Puget Sound, Wash. ....				22	67		1,436	1,343	1,504	1,445
San Diego, Cal. ....					7					
San Francisco, Cal. ....									1,222	
Arizona. ....							20	790		
Buffalo Creek, N. Y. ....	4,748	5,903	2,378	4,141	6,364	6,584	19,193	18,014	35,185	29,034
Champlain, N. Y. ....	1,961	1,617	613	3,015	937	2,320	2,446	6,561	5,771	4,185
Detroit, Mich. ....	65	2,874	2,427	854	129	1,441	380			669
Huron, Mich. ....						424				

*Exports of slate from the United States, showing ports and customs districts from which and to which sent, in the fiscal years 1895-1904—Continued.*

Port and customs district.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.
Memphremagog, Vt.							\$644	\$246		
North and South Dakota.				\$137		\$612	942			
Oswegatchie, N. Y.						487	4,915	3,702	\$8,714	\$8,007
Vermont.	\$200	\$139	\$1,569			26	9			317
Total.	38,806	266,385	780,112	1,370,075	\$1,363,617	950,543	898,262	945,352	628,612	726,715
Belgium					524				89	
France		12,000								379
Germany	25	910	5,850	82,916	65,974	17,921	5,180	1,555		1,440
Netherlands			2,087	25	520		600	1,400		8,298
United Kingdom	3,000	197,440	695,980	1,213,377	1,188,962	813,918	727,088	731,556	477,251	515,085
Denmark				8,150	25,323	25,437	43,344	47,957	17,376	32,512
Norway and Sweden				270	669	859	1,857	25		
Bermuda	1,550	2,312	1,395	157	230	202	3,222	443	765	378
Dominion of Canada:										
Nova Scotia, New Brunswick, etc.	406	1,278	730		288	798	1,269	532	1,183	240
Quebec, Ontario, etc.	6,974	10,533	6,977	8,147	7,430	11,894	27,587	28,600	44,670	37,242
British Columbia				22	67		2,378	1,343	1,504	1,445
Newfoundland and Labrador.	13					30				59
Central American States:										
Costa Rica								1,268	423	
Guatemala				1,755						
Honduras										
Nicaragua										115
Mexico	488	821	150	1,872	330		20	854	479	1,085
Miquelon, Langley, etc.				35			60			
West Indies:										
British	4,419	1,159	1,860	2,356	1,400	2,049	1,067	6,609	4,724	4,212
Haiti				26		332			52	132
Santo Domingo	10									
Cuba	3,258	90		673	16					
Brazil										761
Colombia		259	100			285				
Ecuador										251
Guianas:										
British	702	440	165	600						
Dutch	340		1,640	1,325	2,275	650		365	1,399	
Peru						1,000				
Uruguay		417		807	760	829	424	196		
China				110						49
East Indies—British		1,628	810	550				50		
British Australasia	17,363	34,970	60,604	44,642	64,434	71,881	79,319	121,921	75,976	120,832
British Oceania									1,222	
Hawaiian Islands		245	166		77					
British Africa, South	258	1,883	1,598	2,218	4,335	2,458	4,847	679	1,499	2,200
Portuguese Africa				42	3					
Total.	38,806	266,385	780,112	1,370,075	1,363,617	950,543	898,262	945,352	628,612	726,715



## MARBLE.

The production of marble in the United States increased in value from \$5,362,686 in 1903 to \$6,297,835 in 1904, or \$935,149. The increase was in the dressed monumental stone and in the stone used for the interior of buildings.

The chief increase was from the States of Georgia, Massachusetts, Tennessee, and Vermont.

Alaska and Arkansas, with no production in 1903, reported small productions in 1904.

Builders' strikes to some extent disturbed the trade, but not so much as in 1903. There were also strikes at some of the principal quarries.

The following table shows the value of the marble produced in the United States from 1900 to 1904, inclusive, by States:

*Value of marble produced in the United States 1900-1904, by States.*

State.	1900.	1901.	1902.	1903.	1904.
Alabama .....	\$500	.....	(a)	(a)	(a)
Alaska .....	.....	\$4,500	.....	.....	(a)
Arizona .....	5,000	300	.....	(a)	(a)
Arkansas .....	.....	300	(a)	.....	(a)
California .....	17,500	6,642	\$92,298	\$78,329	\$87,659
Connecticut .....	.....	.....	(a)	(a)	(a)
Georgia .....	631,241	936,549	660,517	565,605	690,714
Idaho .....	1,250	.....	.....	.....	.....
Maryland .....	70,000	68,100	(a)	83,672	73,814
Massachusetts .....	130,735	126,546	165,489	154,228	183,388
Missouri .....	900	2,100	.....	(a)	(a)
Montana .....	1,200	1,500	(a)	.....	.....
New Mexico .....	4,500	10,600	(a)	(a)	4,250
New York .....	332,518	379,159	577,298	748,160	565,987
North Carolina .....	.....	.....	.....	4,365	2,741
Oregon .....	.....	500	.....	.....	.....
Pennsylvania .....	151,167	157,547	160,423	93,200	90,390
Tennessee .....	424,054	494,637	518,256	485,905	505,259
Utah .....	.....	320	(a)	3,200	3,950
Vermont .....	2,484,852	2,753,583	2,628,164	3,011,505	4,004,669
Washington .....	11,836	22,816	61,176	40,117	23,098
Wyoming .....	.....	.....	.....	3,100	2,000
Other States .....	.....	.....	<sup>b</sup> 180,561	<sup>c</sup> 91,300	<sup>d</sup> 59,916
Total .....	4,267,253	4,965,699	5,044,182	5,362,686	6,297,835

<sup>a</sup> Included in "Other States."

<sup>b</sup> Includes Alabama, Arkansas, Connecticut, Maryland, Montana, New Mexico, and Utah.

<sup>c</sup> Includes Alabama, Arizona, Connecticut, Missouri, and New Mexico.

<sup>d</sup> Includes Alabama, Alaska, Arizona, Arkansas, Connecticut, and Missouri.

The following table shows the various uses to which the marble quarried in 1900, 1901, 1902, 1903, and 1904 was put:

*Distribution and value of output of marble in 1900, 1901, 1902, 1903, and 1904 among various uses.*

Use.	1900.	1901.	1902.	1903.	1904.
Sold by producers in rough state.....	\$491,813	\$591,667	\$2,276,629	\$2,454,263	\$2,599,052
Dressed for building.....	1,080,969	1,236,023	1,038,102	1,111,072	988,671
Ornamental purposes.....	13,754	126,576	7,300	51,359	21,554
Dressed for monumental work.....	2,019,474	1,948,892	956,870	1,062,339	1,211,389
Interior decoration in buildings.....	555,092	1,008,482	679,913	663,553	1,257,963
Other uses.....	106,151	54,059	85,268	20,100	219,206
Total.....	4,267,253	4,965,699	5,044,082	5,362,686	6,297,835

The following table shows the value of the marble produced in the United States in 1903 and 1904, by States and uses:

*Value of the marble product, 1903 and 1904, by States and uses.*

1903.

State.	Rough.			Dressed.					Other purposes.	Total.
	Build-ing.	Monu-men-tal.	Other.	Build-ing.	Monu-men-tal.	Orna-men-tal.	Interior decora-tion.	Other purposes.		
Alabama.....										(a)
Arizona.....										(a)
California.....	\$6,879			\$20,000	\$1,200		\$48,000	\$2,000	\$250	\$78,329
Connecticut.....										(a)
Georgia.....	271,432	\$198,223	\$50,000	25,000		\$18,000	2,950			565,605
Maryland.....	28,180	25,065	30,427							83,672
Massachusetts.....	5,387		5,000	134,600		2,400	6,841			154,228
Missouri.....										(a)
New Mexico.....										(a)
New York.....	199,027	64	7,595	362,040	179,434					748,160
North Carolina.....		4,365								4,365
Pennsylvania.....	5,090	200	194	56,866	27,000				3,850	93,200
Tennessee.....	94,500	15,000	125,279	134,226	3,500		99,600	13,700	100	485,905
Utah.....	200	3,000								3,200
Vermont.....	485,990	649,887	227,400	280,058	847,258	18,850	502,062			3,011,505
Washington.....	7,500	800		14,761	3,847	12,009	1,000	200		40,117
Wyoming.....							3,100			3,100
Other States.....	6,400		4,700	80,000	100	100				91,300
Total.....	1,110,585	896,604	450,595	1,107,551	1,062,339	51,359	663,553	15,900	4,200	5,362,686



Value of the marble product, 1903 and 1904, by States and uses—Continued.

1904.

State.	Rough.			Dressed.					Other purposes.	Total.
	Build-ing.	Monu-men-tal.	Other.	Build-ing.	Monu-men-tal.	Orna-men-tal.	Interior decora-tion.	Other purposes.		
Alabama.....										(a)
Alaska.....										(a)
Arizona.....										(a)
Arkansas.....										(a)
California.....	\$4,810	\$6,073		\$7,800		\$2,356	\$66,620			\$87,659
Connecticut.....										(a)
Georgia.....	283,223	227,491	\$12,000	108,000					\$60,000	690,714
Maryland.....	50,000	23,814								73,814
Massachusetts.....	17,000		14,638	79,472	\$1,500	2,000	30,415	\$38,363		183,388
Missouri.....										(a)
New Mexico.....	600			450		200			3,000	4,250
New York.....	89,971	115,003	10,360	287,830	59,323		3,500			565,987
North Carolina.....					2,741					2,741
Pennsylvania.....	9,031	700	3,200	38,459	24,000		10,000	5,000		90,390
Tennessee.....	53,450	15,000	149,850	50,000	12,000		215,959	9,000		505,259
Utah.....	200	750			3,000					3,950
Vermont.....	732,890	724,812	6,520	397,360	1,100,825	14,750	926,969	100,543		4,004,669
Washington.....	5,000	3,000	1,100	4,000	5,000	498	3,000	1,500		23,098
Wyoming.....	2,000									2,000
Other States.....	36,566			15,300	3,000	1,750	1,500	1,800		c 59,916
Total.....	1,284,741	1,116,643	197,668	988,671	1,211,389	21,554	1,257,963	156,206	63,000	6,297,835

<sup>a</sup> Included in "Other States."

<sup>b</sup> Includes Alabama, Arizona, Connecticut, Missouri, and New Mexico.

<sup>c</sup> Includes Alabama, Alaska, Arizona, Arkansas, Connecticut, and Missouri.

### LIMESTONE.

The limestone production in the United States in 1904 was valued at \$31,996,415, in 1903 at \$31,537,991—a gain of \$458,424 in 1904. In 1903 the total gain was \$1,306,988, from \$30,231,003 in 1902 to \$31,537,991 in 1903. In 1902 the increase over 1901 was \$3,824,106.

The comparatively small increases in 1903 and 1904 were due to labor troubles and strikes in the building trades. In 1904 the value of building stone decreased from \$4,981,241 in 1903 to \$4,543,760 in 1904, a loss of \$437,481.

The value of lime increased from \$9,255,882 in 1903 to \$9,817,451 in 1904, a gain of \$561,569.

The value of crushed limestone in 1904 was \$9,558,626, a gain of \$977,760 as compared with 1903, when the value was \$8,580,866.

The furnace flux decreased in value from \$5,423,732 in 1903 to \$4,702,768 in 1904, a loss of \$720,964.

The most important States in value of production were Pennsylvania, Ohio, Illinois, Indiana, Missouri, New York, and Wisconsin, in the order named, ranking as in 1903, except that Missouri and New York changed places.

A large quantity of limestone used for Portland cement is not included in the total.

The lime industry has been somewhat affected by the use of cement plaster in place of lime.

The following tables show the value of the production of limestone in the United States in 1903 and 1904, by States and uses:

*Value of the production of limestone in the United States in 1903 and 1904, by States and uses.*

## 1903.

State or Territory.	Building purposes.	Flagging.	Curbing.	Paving.	Lime made.	Stone sold to lime burners.
Alabama.....	\$48,903			\$2,680	\$216,894	\$432
Arizona.....					1,260	
Arkansas.....	74,102			22,000	89,337	
California.....	25,000		\$140		381,750	15,000
Colorado.....					43,042	10,595
Connecticut.....					152,568	
Florida.....	10,000				44,137	
Georgia.....	2,850				62,902	
Idaho.....	762				18,200	
Illinois.....	359,856	\$44,927	19,233	288,098	479,801	1,638
Indiana.....	1,880,561	31,184	126,684	1,942	314,206	
Indian Territory.....					800	
Iowa.....	196,843	2,408	3,506	12,469	98,525	105
Kansas.....	138,779	6,057	12,457	5,175	14,460	20
Kentucky.....	172,774	2,589	19,222	12,300	40,988	
Maine.....					791,690	
Maryland.....	8,361	340	5,129	1,479	320,494	1,219
Massachusetts.....	3,715	1,000			262,815	
Michigan.....	36,528	5,150	250	49,000	218,609	132,600
Minnesota.....	318,288	20,745	11,494	4,843	66,619	100
Missouri.....	447,884	11,628	23,791	11,734	641,948	4,100
Montana.....	2,200				21,100	
Nebraska.....	54,591	687	775	22		1,624
Nevada.....					2,400	
New Jersey.....	3,260				120,796	20
New Mexico.....					1,000	
New York.....	401,742	5,259	9,703	250	535,845	163,829
North Carolina.....					600	
Ohio.....	320,432	13,230	51,694	27,796	971,011	36,305
Oklahoma.....	10,696	5,256	530		4,000	
Oregon.....	700				13,684	
Pennsylvania.....	156,783	3,216	4,750	59,818	1,431,863	19,173
Rhode Island.....					38,432	
South Carolina.....					43,830	
South Dakota.....	375				13,051	
Tennessee.....	81,769	1,047	11,670	925	198,613	50
Texas.....	30,720	2,910	19,056	120	74,038	80
Utah.....	11,645				64,998	
Vermont.....	6,110				180,769	
Virginia.....	5,325				336,461	1,665
Washington.....	8,100				222,052	4,896
West Virginia.....	81				152,947	13,385
Wisconsin.....	161,366	9,328	35,083	15,109	555,314	4,180
Wyoming.....	150				12,033	
Total.....	4,981,241	166,961	355,167	515,760	9,255,882	411,016



*Value of the production of limestone in the United States in 1903 and 1904, by States and uses—Continued.*

1903—Continued.

State.	Crushed stone.			Rubble.	Riprap.	Flux.	Other purposes.	Total.
	Road making.	Railroad ballast.	Concrete.					
Alabama.....		\$400	\$60	\$300	\$5,000	\$444,735		\$719,404
Arizona.....								1,260
Arkansas.....	\$5,800	13		5,000	46,376			242,628
California.....	75,475	825	15,945	1,200		5,705	\$90,086	611,126
Colorado.....				30	4,213	160,240		218,120
Connecticut.....						1,968		154,536
Florida.....		3,256			7,500			64,893
Georgia.....		6,000	1,600					73,352
Idaho.....								18,952
Illinois.....	386,685	588,364	407,774	265,852	112,433	246,379	5,231	3,206,271
Indiana.....	236,467	42,427	53,750	49,364	15,756	155,209	27,724	2,935,274
Indian Territory.....	650							1,450
Iowa.....	95,306	13,479	68,699	99,478	42,715		1,898	635,431
Kansas.....	20,038	212,140	24,050	35,180	19,779		6,934	495,069
Kentucky.....	131,122	264,490	54,708	968	14,272	16,478	6,679	736,590
Maine.....							1,863	793,553
Maryland.....	18,102	15,356	15,006	80		200	460	386,226
Massachusetts.....	50					4,891		272,471
Michigan.....	61,342	35,340	48,504	710	800	15,502	4,747	609,082
Minnesota.....	30,210	11,800	67,030	110,270	24,994	250	9,447	676,090
Missouri.....	323,920	330,731	387,005	180,201	99,497	22,060	32,189	2,516,688
Montana.....					94	129,300		152,694
Nebraska.....	8,449	33,500	32,503	19,849	27,538	8,080	100	187,718
Nevada.....								2,400
New Jersey.....	1,271		1,137	1,050		60,084	93	187,711
New Mexico.....								1,000
New York.....	559,744	203,820	470,650	68,546	16,625	72,113	35,630	2,543,756
North Carolina.....								600
Ohio.....	548,073	391,998	135,795	49,064	25,982	668,778	80,514	3,320,672
Oklahoma.....		30,000		2,583			1,625	54,690
Oregon.....				1,500	800			16,684
Pennsylvania.....	211,151	656,317	546,302	4,758	38,960	2,553,711	88,704	5,775,506
Rhode Island.....	300					583		39,315
South Carolina.....	850					100		44,780
South Dakota.....			19,026	510		6,304		39,266
Tennessee.....	13,117	53,221	42,430	12,172	2,828	136,903	829	555,574
Texas.....	23,898	27,765	6,968	13,161	1,971	55,551	5,815	262,053
Utah.....						103,465	10,500	190,608
Vermont.....	845		2,500		100	200	200	190,724
Virginia.....	300	16,205	9,238		22	199,989		569,205
Washington.....	250	1,700				60,703		297,701
West Virginia.....		148,446				243,135	30	558,024
Wisconsin.....	244,132	18,009	67,037	37,349	47,110	51,116	11,528	1,256,661
Wyoming.....								12,183
Total.....	2,997,547	3,105,602	2,477,717	959,175	555,365	5,423,732	422,826	31,627,991

*Value of the production of limestone in the United States in 1903 and 1904, by States, and uses—Continued.*

1904.

State.	Rough building.	Dressed building.	Flagging.	Curbing.	Paving.	Lime made.	Stone sold to lime burners.
Alabama .....		\$34,344				\$236,805	\$320
Arizona .....						12,200	
Arkansas .....	\$6,615	46,765		\$830		142,713	
California .....	2,400			125	\$100	585,486	49,430
Colorado .....						34,360	18,692
Connecticut .....						168,107	
Florida .....	778	8,000				55,085	
Georgia .....						58,772	
Idaho .....						40,142	5,900
Illinois .....	212,477	53,804	\$18,401	17,084	4,985	461,068	7,575
Indiana .....	1,116,928	942,458	30,085	105,151	9,658	351,179	
Indian Territory .....						194	
Iowa .....	149,215	18,259	3,556	5,414	3,181	91,008	15
Kansas .....	109,152	48,932	8,337	24,706	726	10,770	
Kentucky .....	68,826	65,955	1,718	24,980	1,500	25,880	
Maine .....						799,517	
Maryland .....	12,836		80	241	715	309,079	2,466
Massachusetts .....	2,375					322,141	
Michigan .....	32,941	805			37,665	258,905	180,683
Minnesota .....	108,798	102,819	11,104	6,296	6,018	73,763	4,800
Missouri .....	139,502	271,416	7,712	8,477	2,400	597,258	50
Montana .....	3,045					24,150	
Nebraska .....	30,969	1,592	165	261	12		9,578
Nevada .....						2,700	
New Jersey .....	3,025	150				150,198	6
New Mexico .....						3,383	
New York .....	174,099	42,803	4,708	7,221	11,147	396,281	271,105
North Carolina .....						4,800	
Ohio .....	272,941	9,291	4,669	3,563	4,186	989,693	448
Oklahoma .....	12,359	6,210	5,550	1,392		3,000	
Oregon .....	2,000	740		150		10,191	
Pennsylvania .....	146,868	4,311	4,129	6,773	82,502	1,537,673	22,613
Rhode Island .....						31,871	
South Carolina .....						32,859	
South Dakota .....	926					23,960	
Tennessee .....	19,039	10,410	400	4,997	1,000	217,064	
Texas .....	40,435	21,430	1,677	5,994		134,316	
Utah .....	4,897	300				85,500	17,370
Vermont .....	5,000					184,681	
Virginia .....	8,800	360				277,519	
Washington .....	125				1,486	216,454	4,906
West Virginia .....	10					184,060	13,592
Wisconsin .....	156,687	5,878	5,738	56,591	19,389	670,391	200
Wyoming .....	2,660					2,275	3,900
Total .....	2,846,728	1,697,032	108,029	280,246	186,670	9,817,451	613,649



*Value of the production of limestone in the United States in 1903 and 1904, by State and uses—Continued.*

1904—Continued.

State.	Crushed stone.			Rubble.	Riprap.	Flux.	Other.	Total.
	Road making.	Railroad ballast.	Concrete.					
Alabama.....	\$7,915	\$908	\$8,533		\$85,200	\$361,503		\$735,528
Arizona.....							\$250	12,450
Arkansas.....	33,750	3,100	2,200	\$12,012	800		75	248,860
California.....	5,650	3,100	5,325			140	8,400	660,156
Colorado.....					3,150	102,758		158,900
Connecticut.....						830		168,937
Florida.....	300			200	25,000			89,363
Georgia.....		11,200	4,000					73,972
Idaho.....								46,042
Illinois.....	641,387	297,863	627,942	357,517	124,541	324,998	2,248	3,151,890
Indiana.....	254,258	77,923	51,002	40,195	15,347	128,556	17,939	3,140,679
Indian Territory.....		2,242	3,834					6,270
Iowa.....	53,082	5,549	76,790	79,485	43,394		4,645	533,593
Kansas.....	45,949	418,438	56,735	52,486	32,756		1,069	810,056
Kentucky.....	186,796	280,489	30,959	9,690	8,494	9,420	3,590	718,297
Maine.....							2,955	802,472
Maryland.....	31,144	34,837	45,166	265		34	637	437,500
Massachusetts.....						5,191		329,707
Michigan.....	58,655	57,100	60,745	2,800	2,405	62,586	5,323	760,613
Minnesota.....	43,036	11,550	92,910	92,830	29,424	100	8,255	591,703
Missouri.....	471,254	437,334	460,767	255,308	178,756	9,460	35,533	2,875,227
Montana.....				250		106,470		133,915
Nebraska.....	16,065	34,273	61,873	47,512	26,297	5,150	3,033	236,780
Nevada.....								2,700
New Jersey.....	2,984			1,200		65,922	3,423	226,908
New Mexico.....								3,383
New York.....	418,661	257,231	272,471	20,755	9,461	130,251	16,342	2,032,596
North Carolina.....	12,088							16,888
Ohio.....	765,603	361,850	217,961	21,311	97,794	588,579	58,159	3,396,048
Oklahoma.....	20	60,000		4,765	800		1,150	95,246
Oregon.....				2,500				15,581
Pennsylvania.....	344,953	555,839	381,200	4,301	4,174	2,058,018	93,069	5,246,423
Rhode Island.....						312		32,183
South Carolina.....	125					100		33,084
South Dakota.....			2,400		600	28		27,914
Tennessee.....	60,736	68,944	17,324	13,336	6,687	82,573	2,607	505,117
Texas.....	15,418	19,060	8,171	7,624	66,930	64,072	1,934	387,061
Utah.....	5,995	6,000	1,200	900		138,685	100	255,947
Vermont.....	931		3,300	9		413		194,334
Virginia.....	210	32,371	5,668	168		117,882		442,978
Washington.....		150				65,085	105	288,311
West Virginia.....	42,965	98,105	61,096			244,535		644,363
Wisconsin.....	195,057	17,546	129,965	41,039	30,084	30,867	49,643	1,409,075
Wyoming.....			1,100		180	3,250	4,000	17,365
Total.....	3,714,987	3,153,002	2,690,637	1,068,458	792,274	4,702,768	324,484	31,996,415

The following table shows the production of limestone in the United States from 1900 to 1904, by States:

*Value of limestone, 1900-1904, by States.*

State.	1900.	1901.	1902.	1903.	1904.
Alabama .....	\$533,608	\$619,423	\$759,617	\$719,404	\$735,528
Arizona .....	165	300	.....	1,260	12,450
Arkansas .....	71,407	68,319	113,163	242,628	248,860
California .....	407,489	645,455	496,843	611,126	660,156
Colorado .....	160,587	245,799	203,700	218,120	158,960
Connecticut .....	148,060	140,424	205,371	154,536	168,937
Florida .....	128,381	51,870	63,571	64,893	89,363
Georgia .....	54,451	85,629	111,589	73,352	73,972
Idaho .....	34,587	21,251	15,074	18,952	46,042
Illinois .....	1,881,151	2,793,837	3,222,608	3,206,271	3,151,890
Indiana .....	2,344,818	2,993,186	2,865,691	2,935,274	3,140,679
Indian Territory .....	.....	.....	.....	1,450	6,270
Iowa .....	586,410	777,484	649,984	635,431	533,593
Kansas .....	339,466	478,986	670,536	495,069	810,056
Kentucky .....	178,252	199,567	593,747	736,590	718,297
Maine .....	691,312	715,272	745,132	793,553	802,472
Maryland .....	317,207	382,381	453,030	386,226	437,500
Massachusetts .....	209,359	244,039	339,349	272,471	329,707
Michigan .....	425,636	565,931	621,380	609,082	760,613
Minnesota .....	441,554	522,778	830,857	676,090	591,703
Missouri .....	1,079,343	1,362,272	1,697,139	2,516,688	2,875,227
Montana .....	141,093	143,866	104,725	152,694	133,915
Nebraska .....	107,305	154,717	145,473	187,718	236,780
Nevada .....	.....	.....	2,800	2,400	2,700
New Jersey .....	170,006	309,738	181,650	187,711	226,908
New Mexico .....	.....	.....	.....	1,000	3,383
New York .....	1,730,162	1,738,716	2,419,121	2,543,756	2,032,536
North Carolina .....	.....	8,266	23,153	600	16,888
Ohio .....	1,969,387	2,605,502	3,201,718	3,320,672	3,396,048
Oklahoma .....	25,586	32,497	50,541	54,690	95,246
Oregon .....	10,900	24,520	20,133	16,684	15,581
Pennsylvania .....	3,800,318	5,081,387	5,420,287	5,775,506	5,246,423
Rhode Island .....	16,828	38,030	71,664	39,315	32,183
South Carolina .....	38,415	28,500		44,780	33,084
South Dakota .....	47,762	53,780		39,266	27,914
Tennessee .....	238,505	330,927	482,033	555,574	505,117
Texas .....	124,728	209,658	228,662	262,053	387,061
Utah .....	12,749	78,900	186,663	100,608	255,947
Vermont .....	188,100	205,138	225,703	190,724	194,334
Virginia .....	403,318	539,128	534,113	569,205	442,978
Washington .....	249,163	234,587	213,814	297,701	288,311
West Virginia .....	53,791	447,049	616,366	558,024	644,363
Wisconsin .....	989,685	1,225,448	1,351,058	1,256,661	1,409,075
Wyoming .....	3,065	1,340	6,340	12,183	17,365
Total .....	20,354,019	26,406,897	30,231,003	31,537,991	31,996,415



The following table shows the quantity and value of blast-furnace flux produced in 1903 and 1904, by States:

*Production of blast-furnace flux in 1903 and 1904, by States.*

[Long tons.]

State.	1903.		1904.	
	Quantity.	Value.	Quantity.	Value.
Alabama.....	1,006,814	\$444,735	759,331	\$361,503
California.....	8,410	5,705	140	140
Colorado.....	353,849	160,240	215,101	102,758
Connecticut.....	3,698	1,968	2,305	830
Illinois.....	491,542	246,379	686,958	324,998
Indiana.....	400,268	155,209	298,913	128,556
Kentucky.....	33,836	16,478	18,070	9,420
Maryland.....	490	200	78	34
Massachusetts.....	6,792	4,891	13,678	5,191
Michigan.....	23,518	15,502	136,293	62,586
Minnesota.....	500	250	200	100
Missouri.....	25,953	22,060	16,860	9,460
Montana.....	229,000	129,300	250,700	106,470
Nebraska.....	10,150	8,080	10,300	5,150
New Jersey.....	119,294	60,084	130,071	65,922
New York.....	121,170	72,113	230,839	130,251
Ohio.....	1,632,367	668,778	1,479,350	588,579
Pennsylvania.....	5,558,051	2,553,711	4,727,632	2,058,018
Rhode Island.....	433	583	279	312
South Carolina.....	100	100	350	100
South Dakota.....	14,510	6,304	56	28
Tennessee.....	313,721	136,903	173,740	82,573
Texas.....	95,884	55,551	133,651	64,072
Utah.....	160,432	103,465	197,647	133,685
Vermont.....	400	200	413	413
Virginia.....	499,108	199,989	273,826	117,882
Washington.....	101,161	60,703	117,041	65,085
West Virginia.....	708,572	243,135	711,883	244,635
Wisconsin.....	108,696	51,116	66,333	30,867
Wyoming.....			5,000	3,250
Total.....	12,029,719	5,423,732	10,657,038	4,702,768

From this table it will be seen that both the quantity and the value of the limestone used for furnace flux decreased in 1904, which was due to the shutting down of the iron furnaces for a time during the year.

The greatest decrease was in Pennsylvania. The total output decreased from 12,029,719 long tons, valued at \$5,423,732, in 1903, to 10,657,038 long tons, valued at \$4,702,768, in 1904, a loss in 1904 of 1,372,681 long tons in quantity and of \$720,964 in value.

For the first time an attempt has been made to collect the figures showing the quantity of bulk lime burned in the United States during a calendar year, and the following table shows the results obtained:

*Quantity and value of lime burned in the United States in 1904, by States.*

[Short tons.]

State.	Quantity.	Value.	State.	Quantity.	Value.
Alabama .....	73,700	\$236,805	Nevada .....	150	\$2,700
Arizona .....	1,800	12,200	New Jersey .....	35,127	150,198
Arkansas .....	36,424	142,713	New Mexico .....	472	3,383
California .....	73,540	585,486	New York .....	101,810	396,281
Colorado .....	7,789	34,360	North Carolina .....	23,000	4,800
Connecticut .....	47,241	168,107	Ohio .....	279,491	989,693
Florida .....	9,072	55,085	Oklahoma .....	1,000	3,000
Georgia .....	20,804	58,772	Oregon .....	750	10,191
Idaho .....	4,983	40,142	Pennsylvania .....	567,300	1,537,673
Illinois .....	108,881	461,068	Rhode Island .....	4,553	31,871
Indiana .....	107,137	351,179	South Carolina .....	7,302	32,859
Indian Territory .....	30	194	South Dakota .....	3,700	23,960
Iowa .....	13,180	91,008	Tennessee .....	49,695	217,064
Kansas .....	1,837	10,770	Texas .....	45,000	134,316
Kentucky .....	9,830	25,880	Utah .....	19,000	85,500
Maine .....	186,881	799,517	Vermont .....	39,653	184,681
Maryland .....	116,934	309,079	Virginia .....	82,133	277,519
Massachusetts .....	68,993	322,141	Washington .....	41,626	216,454
Michigan .....	44,088	258,905	West Virginia .....	89,371	184,060
Minnesota .....	17,982	73,763	Wisconsin .....	189,981	670,391
Missouri .....	160,288	597,258	Wyoming .....	212	2,275
Montana .....	4,320	24,150	Total .....	2,697,120	9,817,451

Lime is sold by various units of measurement in the United States, the bushel, the barrel, and the ton being the principal measures. These, however, vary as to weight in the different States and in different parts of the same State, and even the same company sells by different measurements, according to demand. The average weight of the bushel is probably 80 pounds, and there are usually two and one-half bushels to a barrel, making a barrel of lime weigh 200 pounds. These weights, however, vary greatly, a barrel sometimes being over 300 pounds, and a bushel being 40 pounds. Some of the larger manufacturers are adopting the plan of quoting the value of lime by the hundredweight, and if this idea is carried out it will be easier to obtain more correct figures as to the quantity of lime burned in a year.

The value of the lime also varies considerably, according to the use to which it is put, and to the purity and richness of the lime itself.

In many of the States where limestone is found in abundance the farmers, in their leisure time, dig out a small quantity of stone, or collect it from their fields and burn one or two kilns of it for their own use as a fertilizer and sell it to the neighboring farmers at a small price, the cost to them being simply labor. This lime sells from 3 to 10 cents per bushel, and in the States where this is done to any considerable extent the price per ton is appreciably lowered, Pennsylvania, Maryland, and West Virginia being largely influenced by this custom.



The specially prepared hydrated lime, although more expensive than other lime, is now being largely used.

Pennsylvania is the largest producer, both in value and in quantity of production, being followed by Ohio, Maine, Wisconsin, and Missouri. The figures given in the tables are for bulk lime, exclusive of cooperage, as far as could be ascertained. When the value of the barrel is included the price is from 15 to 25 cents more per barrel.