

REPORTS OF THE  
DEPARTMENT OF  
CONSERVATION AND DEVELOPMENT  
STATE OF NEW JERSEY

HENRY B. KÜMMEL, State Geologist and Director

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BULLETIN 31

Geologic Series

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THE MINERAL INDUSTRY  
OF NEW JERSEY  
FOR 1926

Compiled by  
MEREDITH E. JOHNSON  
Assistant State Geologist



Published 1928  
Division of Geology and Topography

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# THE MINERAL INDUSTRY OF NEW JERSEY FOR 1926

By MEREDITH E. JOHNSON

*Assistant State Geologist*

## INTRODUCTION

Believing the residents of the state of New Jersey to be interested in the quantity and value of the mineral production in the State, statistics are here presented for the year 1926. As in previous years the Division of Geology and Topography of the Department of Conservation and Development has co-operated with the Bureau of Mines and the Bureau of the Census of the United States Department of Commerce in the collection of statistics. It is the policy of all three organizations not to publish figures of individual concerns without their consent, and in accordance with that policy in each of several industries figures have been grouped together which might be of interest, but which represent the production of one or two outstanding firms. Some of the figures given do not agree exactly with those published by the federal bureaus, but differences are due only to differences in grouping and to the elimination of duplicated figures.

It should be realized that the figures given in the tables do not represent the exact amount or value of the products, for although the great majority of individuals and firms are willing to co-operate, and do their best to help by sending in their schedules of production as promptly as possible, yet there are always a few who feel that the task of filling out the schedules is an unnecessary draft upon their time and accordingly fail to make any report. In justice to the industries represented it should be stressed that those who fail to make reports are very few in number, amounting probably to less than one per cent of the total; yet so long as one is unheard from, the totals for the state's mineral production must be inaccurate to just that extent. Then, too, it is impossible to get in touch with all the small firms which spring up overnight to supply sand or stone or some other mineral product for small local demands and then as rapidly go out of existence; but the total amount of such production as compared with the state totals must be very small, and it is hoped and believed that the figures given are accurate within five per cent.

## VALUE OF THE MINERAL PRODUCTION IN 1926

The total value of the mineral production in 1926 amounted to \$90,008,915, an increase of 5.6 per cent over the corresponding figure for 1925. The increase is in part explained by the inclusion in the statistics of the value of the non-clay refractories and the by-products from the zinc ore, and by a large increase in the value of the brick and tile produced. The greatest percentage of increase, 36.5 per cent, was in the value of the iron ore shipped. The greatest percentage of decrease was in the value of the peat produced, which showed a rather pronounced decline of 19.3 per cent. Other increases and decreases were small.

MINERAL PRODUCTION IN NEW JERSEY IN 1926 AND 1925

PRODUCTS	No. of producers	Quantity—Short or long tons		Value—Dollars		Increase or decrease in value Per cent
		1926	1925	1926	1925	
Zinc ore .....	1	573,300 s. t.	606,177 s. t.	(a) 925,403	(a) 678,021	+ 36.5
Iron ore—shipped <sup>b</sup> .....	3	212,152 l. t.	164,523 l. t.	3,602,343	3,656,943	— 1.5
Stone .....	45	2,315,450 s. t.	2,335,820 s. t.	3,680,064	3,658,312	+ 0.6
Sand and gravel .....	85	4,935,934 s. t.	4,886,994 s. t.	1,463,288	1,418,979	+ 3.0
Clay—sold raw .....	40	342,586 s. t.	343,202 s. t.	23,046,186	21,610,853	+ 6.2
Brick and tile .....	70			24,466,328	24,399,771	+ 0.3
Pottery .....	56			174,365	179,788	— 3.0
Greensand marl .....	5	12,606 s. t.	12,728 s. t.	129,664	160,695	— 19.3
Peat .....	3	29,326 s. t.	31,530 s. t.			
Other products—						
Coke <sup>c</sup> .....	2					
Ground feldspar <sup>d</sup> .....	3					
Fuel briquets <sup>e</sup> .....	1					
Lime .....	1					
Portland cement .....	2					
Ground quartz .....	1			32,521,274	29,496,088	+ 10.5
Talcose rock—ground .....	1					
Zinc ore, spiegeleisen and low-grade manganiferous zinc residuum .....	1					
Non-clay refractories .....	17					
Totals .....				90,008,915	85,259,450	+ 5.6

<sup>a</sup> Individual figures concealed. Included in "Other products," <sup>d</sup> Raw material brought into the state and ground at Trenton.

<sup>b</sup> Includes limonite.

<sup>c</sup> By-product coke made from Pennsylvania coal.

<sup>e</sup> No data available in 1926.

## DETAILS OF PRODUCTION IN EACH MINERAL INDUSTRY

### ZINC

The zinc industry as a whole prospered greatly in 1926. Prices, however, were slightly lower than in the preceding year, the average quoted price of prime western zinc at St. Louis dropping from 7.6 cents to 7.4 cents.

The sole New Jersey producer, the New Jersey Zinc Company, shared in the general prosperity, although the production from its mines at Franklin Furnace and Ogdensburg declined from 606,177 short tons of ore in 1925 to 573,300 short tons in 1926. The value of the zinc produced also declined, but the total value of the ore as included in "Other Products" increased because of the inclusion in that figure of the value of two products derived from the zinc ore, namely, spiegeleisen and manganiferous iron ore (see also p. 30).

### IRON ORE

In 1926, as in 1925, only two iron mines were in operation. These two mines, the Mt. Hope mine, of the Replogle Steel Company (succeeded in 1927 by the Warren Foundry and Pipe Corporation), and the Richard mine, of the Thomas Iron Company, produced 209,117 long tons of magnetic iron ore, averaging about 60 per cent iron, an increase of 6,175 tons over the production of the previous year. Sales of magnetic iron ore were slightly in excess of the ore mined and amounted to 209,687 tons, valued at \$908,826, the balance of the ore sold coming from the stock pile. The Basic Iron Ore Company did not operate its mine, but shipped from stock 2,465 long tons of brown ore, valued at \$16,577. The higher price received for this ore is explained by the fact that it is used in the purification of manufactured gas and not smelted for pig iron as in the case of the magnetic iron ore.

As shown in the table (page 5), the total value of all iron ore sold increased 36.5 per cent over the previous year, a most encouraging amount; but the tonnage mined increased only three per cent. Since New Jersey has produced as much as half a million tons of ore in other years, it is obvious that there is still room for improvement in this industry. Not only must New Jersey mines compete with the great

mines of Michigan and Minnesota, but they must also meet the competition of foreign producers. The latter, with cheap labor and low ocean freight rates, can lay down their product at any eastern seaport more cheaply than the great majority of eastern mines. As one New Jersey producer puts it, "Tariff protection for ore and pig iron is essential to preserve our eastern mine and furnace industry. . . ." That he is not alone in this opinion is borne out by a statement of Mr. Reynders,<sup>1</sup> consulting engineer of New York and past president of the American Institute of Mining and Metallurgical Engineers, who says:

" . . . . It is certain that the effectiveness of our tariff barriers in protecting home markets for the American steel industry will be brought into question. Contrary to popular impression, the steel industry is not surrounded by a wall, although there are a few 'protecting bunkers' in front of our home greens, which may compel foreign competitors to use a niblick now and then instead of a brassie. That they are playing close to par is evident from the fact that foreign steel is being laid down, duty paid, at our ports not at \$1, but at \$10 a ton below domestic prices. . . . ."

" . . . . German works, which I visited, were fully as modern and well equipped as any in this country, and what is more their labor receives but a fraction of the wages paid to the American workman."

## STONE

Although New Jersey possesses many varied types of rock its production of stone is largely concentrated in a few products, namely, crushed rock for road and building purposes and for railroad ballast, and limestone for fluxing and use in making lime. In 1926, as in other recent years, by far the greatest proportion of the rock quarried was trap rock (diabase or basalt). New Jersey continues to lead all other states in the Union in the value of that product, and in fact led its nearest competitor, Connecticut, by more than a million dollars. The limestone produced, although somewhat less in quantity than in the preceding year, was sold for several thousand dollars more. "Other stone," including granite, argillite, marble (serpentine, in bulk) and sandstone, declined rather drastically in both the amount quarried and the value of that production. The decline can be attributed to the same cause which has been evident for many years, namely, the shift in favor from stone

<sup>1</sup> Reynders, J. V. W., Fears Foreign Competition: Iron Age, Vol. 118, No. 14, p. 946, 1926.

as a building material to concrete, cement blocks, or other manufactured products. The reason for the change is, of course, economic; it is cheaper to build with cement blocks than with stone, even where stone can be delivered for the same price, for anyone can build a wall of cement blocks, but it takes a mason to build with stone.

The seriousness of the decline in New Jersey's building-stone industry is reflected in the figures for the combined value of the sandstone and granite production. In 1908 that production was valued at \$280,-226; whereas, in 1926 the reported production was valued at \$77,308. When one considers that the purchasing value of the dollar at present is only half of what it was in 1908, the actual decline in the building-stone industry is seen to be even more severe than the figures would indicate. It is to be hoped that one result of the general prosperity of the last few years will be a return to stone as a building material. Stone homes may cost a little more than other types of construction, but by proper blending of colors, they can be made more beautiful than if built of any other material, and they endure for generations.

Details of the production of stone in 1926 are given in the following table:

STONE—1926 AND 1925

Kind	No. of pro- ducers	1926		1925	
		Production in short tons	Value in dollars	Production in short tons	Value in dollars
Trap rock ....	32	2,053,130	3,139,316	2,011,150	3,140,696
Limestone ....	8	218,640	353,605	237,100	338,037
Other stone....	5	43,681	109,422	87,570	178,210
Totals .....	45	2,315,451	3,602,343	2,335,820	3,656,943

*Trap Rock.* The production of trap rock (a name universally used for both diabase and basalt by the quarry operators of this state) continued on a large scale. One more quarry was operated than in 1925 although its addition to the active list caused only a slight increase in the total yearly production. The average price obtained for crushed stone remained satisfactory, although slightly less than in the preceding year.



## PRODUCTION OF TRAP ROCK IN 1926

<i>Use</i>	<i>Quantity— Short tons</i>	<i>Value— Dollars</i>
Road metal .....	358,810	565,305
Railroad ballast .....	232,320	301,832
Concrete .....	1,460,940	2,266,582
Other uses .....	1,060	5,597
<b>Total</b> .....	<b>2,053,130</b>	<b>3,139,316</b>

The following list of quarries active in 1926 is given chiefly for the benefit of consumers seeking to know the nearest point from which they can obtain trap rock. The list includes all quarries for which any production was reported. Much of the information given in this and in subsequent lists has already been published, in somewhat different form, in the *Industrial Directory of the State of New Jersey*, but since that publication is not readily available to many of those for whom this bulletin is intended, it is here repeated:

## TRAP ROCK QUARRIES—1926

<i>Name of operator</i>	<i>Office address</i>	<i>Location of quarry</i>
Belmont-Gurnee Stone Co. ....	North Bergen	Alpine, Bergen Co. <sup>a</sup>
“ “ “ “ .....	“	Fairview “ “ <sup>b</sup>
Cliffside Trap Rock Co. ....	Cliffside	Cliffside “ “
Englewood Stone Co. ....	Englewood	Englewood “ “
William C. Batt .....	South Orange	South Orange, Essex Co. <sup>c</sup>
Essex Co. Penitentiary .....	North Caldwell	“ “ “ “
Michael L. Kernan .....	South Orange	“ “ “ “
Orange Quarry Co. ....	West Orange	West Orange, Essex Co.
Belmont-Gurnee Stone Co. ....	North Bergen	Granton, Hudson Co.
Hudson County Penitentiary .....	Secaucus	Secaucus, Hudson Co.
Public Service Railway Co. ....	Newark	North Bergen, Hudson Co. <sup>d</sup>
Delaware River Quarry and Construction Co. ....	Lambertville	Lambertville, Hunterdon Co.
Lambertville Stone Quarry Co. ....	Philadelphia, Pa.	“ “ “
Delaware River Quarry and Construction Co. ....	Lambertville	Moore, Mercer County.
Mercer County Work House .....	Trenton	“ “ “
Pennington Trap Rock Co. ....	Philadelphia, Pa.	Pennington, Mercer County
Morris County Crushed Stone Co. ....	Morristown	Millingtown, Mercer Co.
Samuel Braen .....	Paterson	Paterson, Passaic County
Consolidated Stone & Sand Co. ....	Upper Montclair	Great Notch, Passaic County
Dyer-Kane Co. ....	Passaic	Clifton, Passaic County
W. A. Ferguson Sons, Inc. ....	Little Falls	Paterson, Passaic County
Great Notch Corporation .....	Newark	Great Notch, Passaic County

TRAP ROCK QUARRIES—1926—*Continued*

<i>Name of operator</i>	<i>Office Address</i>	<i>Location of quarry</i>
Paterson Crushed Stone Co. ....	Morristown .....	Paterson, Passaic County
Philip Kramer .....	Paterson .....	" " "
The Sowerbutt Quarries .....	" .....	Paterson and Clifton, Passaic
Union Bldg. and Construction		County
Co. ....	Passaic .....	Richfield, Passaic County
Bound Brook Crushed Stone Co.,	Bound Brook .....	Bound Brook, Somerset Co.
George Sanders .....	Plainfield .....	Plainfield, Union Co.
Smalley Stone Co. ....	" .....	N. Plainfield, Somerset Co.
Wilson Stone Co. ....	" .....	" " "
Commonwealth Quarry Co. ....	Summit .....	Summit, Union County
Fanwood Stone Crushing and		
Quarry Company .....	Fanwood .....	Scotch Plains, Union County
Interstate Crushed Stone Co. ....	Springfield .....	Springfield, Union County

<sup>a</sup> Dismantled since 1926.

<sup>b</sup> Recently acquired.

<sup>c</sup> Since sold to Genart Lepre, South Orange

<sup>d</sup> Since sold to Belmont-Gurnee Stone Co.

*Limestone.* Although there were the same number of operators in 1926 as in 1925, there were a number of changes in the list of active quarries. Those reported as active in 1926 are given below :

## ACTIVE LIMESTONE QUARRIES—1926

<i>Name of operator</i>	<i>Office address</i>	<i>Location of quarry</i>
M. C. Mulligan & Son .....	Clinton .....	Clinton, Hunterdon County
E. J. Neighbour .....	Long Valley .....	Califon, Hunterdon County
Peapack Limestone Products Co.,	Peapack .....	Peapack, Somerset Co.
Bethlehem Mines Corp. ....	S. Bethlehem, Pa. ....	McAfee, Sussex County
Hamburg Ridge Lime Co. ....	Dover .....	Sussex County
Lime and Stone Products Corp.,	Hamburg .....	Hamburg, Sussex County
Limestone Products Corp. ....	Newton .....	Sparta Jct., Sussex Co.
New Jersey Lime Products		
Corp. ....	New York, N. Y. ....	Ogdensburg, Sussex Co.

More than half of all the limestone produced in 1926 was used for flux, although the production for that purpose was about 38,000 tons less than in 1925. The value of the limestone used for other purposes, however, increased enough to more than counterbalance the loss in value of that used for flux.

PRODUCTION OF LIMESTONE IN 1926 AND 1925

Use	Quantity—Short tons		Value—Dollars	
	1926	1925	1926	1925
Road metal and concrete .....	20,640	11,610	25,988	17,093
Flux .....	136,120	174,420	129,884	153,321
Agriculture .....	35,030	.....	100,901	.....
Other uses .....	26,850	<sup>a</sup> 51,070	96,832	<sup>a</sup> 167,623
Total .....	218,640	237,100	353,605	338,037

<sup>a</sup> Including agriculture.

The "other uses" to which limestone was put in 1926 were as follows: Chemical use, poultry grit, rubber filler, asphalt filler, mineral wool, and riprap.

*Other Stone.* The following concerns also quarried rock in 1926:

Kind of rock quarried	Name of operator	Office address	Location of quarry
Granite .....	Lyman Kice .....	Long Valley	Long Valley, Morris Co.
Granite .....	Pompton Crushed Stone Co. ....	Bloomg'dale	Bloomington, Passaic Co.
Argillite .....	C. A. Williamson .....	Princeton	Princeton, Mercer Co.
Serpentine .....	Rock Products Co. ....	Easton	Phillipsburg, Warren Co.
Sandstone .....	James L. Bried .....	Englewood	Closter, Bergen Co.

Since there are less than three producers of each kind of stone, the production and value of all are grouped together to conceal individual figures.

### SAND AND GRAVEL

The sand and gravel industry had another prosperous year. Production increased 48,940 tons over 1925, and the value of the production increased \$21,752. The statistical table given below has been compiled from incomplete data, but shows the relative production of each type of sand and gravel listed.

## PRODUCTION AND VALUE OF SAND AND GRAVEL—1926 and 1925

Type of Production	No. of producers	Quantity produced —Short tons		Value of production in dollars	
		1926	1925	1926	1925
Building sand .....	37	1,548,018	1,967,189	743,659	909,433
Molding sand .....	36	468,757	449,578	633,554	597,284
Paving sand .....	26	1,005,136	1,061,582	534,004	560,276
Glass sand .....	6	185,581	195,770	308,507	310,796
Grinding and polishing sand .....	7	88,346	81,119	241,147	213,057
Fire or furnace sand .....	11	50,083	47,145	68,320	71,391
Engine sand .....	6	69,358	.....	28,423	.....
Other sands <sup>a</sup> .....	10	78,209	125,365	151,541	194,764
Total sand .....			3,927,748		2,857,001
Building gravel .....	21	346,074	570,325	328,803	495,598
Paving gravel .....	22	519,749	388,921	435,294	305,713
Other gravel <sup>b</sup> .....	6	96,101	.....	103,068	.....
Total gravel .....			959,246		801,311
Total sand and gravel,		<sup>c</sup> 4,935,934	4,886,994	<sup>c</sup> 3,680,064	3,658,312

<sup>a</sup> Includes filter sand, railroad ballast sand and sand for purposes not specified in 1926 figures. Also includes engine sand in 1925 figures.

<sup>b</sup> Includes gravel for railroad ballast and other purposes not specified.

<sup>c</sup> Corrected figures for 1926. Not sum of amounts shown.

The most interesting feature of the above table is the change shown in building gravel and paving gravel. Apparently there was a lessened demand for concrete as a building material in 1926 (see also decline in production of building sand), which, in the sand and gravel industry, was just about offset by an increased amount of road building.

LIST OF ACTIVE SAND AND GRAVEL PRODUCERS

Operator	Products reported in 1926	Office address	Location of pits
Acme Silica Co.	1	Flanders	Flanders, Morris Co.
K. S. Beatty Clay and Sand Co. a	1, 2, 7, 9,	Toms River	Whiting's, Ocean Co.
Bethlehem Mines Corporation b	1	Bethlehem, Pa.	Harmony and Delaware, Warren Co.
Bloomfield Clay Co.	7	Metuchen	Bonhampton, Middlesex Co.
Brennan Sand Co.	1	Tullytown, Pa.	Atlantic County; Lumberton, Burlington Co.; Muskee, Cape May County.
Bridgeton Sand Co.	1, 2, 11	Bridgeton	Williamstown Junction, Camden Co.
William Brimfield	1	Waterford Works	Winslow, Camden Co.
Cape May Sand Co.	1, 3, 6, 8, 9, 12, 13	Cape May	Cape May Point, Cape May Co.
Cedar Grove Sand and Gravel Co.	3, 12	Paterson	Cedar Grove, Essex Co.
Champion Sand and Gravel Co.	13, 14	Ocean City	Palermo, Cape May Co.
Conard and Buzby	3	Burlington	Burlington
Crossman Company	1, 3, 4, 7, 8 & filler	South Amboy	Sayreville, Middlesex Co.
Crystal Sand Co.	1, 2	Bridgeton	Millville, Cedarville and South Vineland, Cumberland Co.
Joe Cugliotta	1, 3	Burlington	Burlington
Henry D. Culin	1	Mount Holly	Hainesport, Burlington Co.
Dallenbach Sand Co. a	3, 4	Milktown	Milktown, Middlesex Co.
Delaware River Sand Dredging Co.	3	Bordentown	Bordentown, Burlington Co.
S. W. Downer	1, 3, 7	Downer	Downer, Gloucester Co.
J. B. Drinker & Co.	1, 3, 5, 7	Philadelphia, Pa.	Sea Isle Jet, Cape May Co., and South Vineland, Cumberland Co.
Robert R. Erato	1, 3, 12	Margate City	Delair, Camden Co.
Edward Gallers, Jr.	11, 12	Swedesboro	Swedesboro, Gloucester Co.
Glacial Sand and Gravel Co.	3, 12	Hackettstown	East of Hackettstown, Warren Co.
Edward Gochler a	3, 4	Pleasantville	Port Republic, Atlantic Co.
Daniel Goff Co.	1, 15	Philadelphia, Pa.	Mays Landing, Atlantic Co. and Millville, Cumberland Co.
Charles Hahn	3	West Easton, Pa.	Lower Harmony, Warren Co.
Hainesport Mining and Transportation Co.	3, 4, 12, 13	Philadelphia, Pa.	Bridgeboro, Burlington Co.

LIST OF ACTIVE SAND AND GRAVEL PRODUCERS—Continued

Operator	Products reported in 1926	Office address	Location of pits
F. A. Hillman	1, 7		Lumberton, Burlington Co. and South Amboy, Middlesex Co.
George F. Hillman	1, 3	Lakewood	Lakewood, Monmouth Co.
Hodgson Sand and Gravel Co.	3, 4, 8, 12, 13	Stanhope	Netcong, Morris Co.
Lakewood Sand Co.	3	Somerville	South Lakewood, Ocean Co.
Lemuel Leach	3, 4	Sussex	Sussex
Lehigh and Hudson River Ry. Co.	12, 13, 14	Warwick, N. Y.	Woodruff's Gap, Sussex Co.
Little Falls Sand and Gravel Co.	3, 4, 12	Upper Montclair	Cedar Grove, Essex Co.
Menanico Sand and Gravel Co.	1, 3, 4, 6, 8, 9, 12, 13, 14	Millville	Clark's Mill, Cumberland Co.
A. C. Million <sup>a</sup>	3, 4, 12	Cedar Grove	Cedar Grove, Essex Co.
William G. Moore	13	Philadelphia, Pa.	Tuckahoe, Atlantic Co.
Morris County Crushed Stone Co.	4, 13	Morristown	Morristown
Mount Pleasant Silica Sand Co. <sup>a</sup>	1, 4, 6, 9	Cape May	Woodbine, Cape May Co.
L. H. McHose, Inc.	1 and fire brick	Perth Amboy	Perth Amboy
Natural Products Co. <sup>c</sup>	1	Reading, Pa.	Blenheim, Camden Co.
New Jersey Sand and Gravel Co. <sup>d</sup>	3, 4, 6, 12, 13	Spring Lake	Farmingdale and Wayside, Monmouth Co.
New York, Susquehanna and Western R. R., Norcross and Edmunds	10	New York City	Sussex County
Ostrander Fire Brick Co.	3, 4, 8, 11	Philadelphia, Pa.	Birmingham & S. Pemberton, Burlington Co.
Paxson-Taggart, Inc.	7	Kearney	Fords, Middlesex Co.
	1, 4, 15	Philadelphia, Pa.	Hayville, Camden Co.; Cedar Lake, Atlantic Co.; Masonville and Lumberton, Burlington Co.; Millville, Cumberland Co.
Charles E. Pettinos	1, 4	New York City	Folsom, Atlantic Co.; Ewansville, Burlington Co.; Dorchester, Cumberland Co.
George F. Pettinos	1, 4	Philadelphia, Pa.	Mt. Holly and Hainesport, Burlington Co.; Albion, Camden Co.; Cedarville, Millville and Manumuskim, Cumberland Co.
Finehurst Development Co.	3, 4, 12, 13	Williamstown, Jct.	Williamstown Jct., Camden Co.
Pompton Sand and Gravel Co.	3, 4, 13	Passaic	Pompton Plains, Morris Co.
Progressive Sand and Gravel Co. <sup>a</sup>	3, 12	Woodbridge	Fairtown, Bergen Co.
Raritan River Sand Co.	3, 6, 7, 12	New Brunswick	Nixon, Middlesex Co.



## CLAY

It is impossible to give accurate statistics of the production of raw clay in New Jersey because many concerns which manufacture brick, terra cotta, hollow tile or some type of pottery, use clay from their own pits in manufacturing and do not keep any record of the amount used—their interest being only in the manufactured products. The figures given, therefore, represent chiefly the clay that was mined and sold as clay. The values given are f. o. b. mines or works. It will be noted that fire clay constituted the great bulk of the clay sold and that 22,000 tons more were mined than in the preceding year. The total amount of clay sold declined slightly, due to a big drop in the production of miscellaneous clays, used chiefly in making terra cotta.

DETAILED STATISTICS OF THE RAW CLAY PRODUCTION  
IN 1926 AND 1925

<i>Kind of Clay</i>	<i>Amount sold—Short tons</i>		<i>Value—Dollars</i>	
	1926	1925	1926	1925
Fire clay .....	292,155	269,660	1,296,759	1,233,502
Ball clay .....	5,919	5,155	39,862	30,096
Stoneware clay .....	16,506	15,865	74,617	69,817
Miscellaneous clay .....	28,006	52,523	52,050	85,564
Total .....	342,586	343,203	1,463,288	1,418,979

Forty operators reported a production of raw clay in 1926, four less than in the preceding year. A list of the operators active in 1926, or later, is here given:



LIST OF OPERATORS REPORTING SALES OF RAW CLAY IN 1926, OR LATER, BY COUNTIES

<i>Operator</i>	<i>Kind of clay</i>	<i>Office address</i>	<i>Location of pits</i>
Julius Einsidel & Sons	4	Egg Harbor City	Atlantic County.
William G. Moore	4	Philadelphia, Pa.	"
Charles H. Bliss	1	Chatsworth	Burlington Co., southeast of Chatsworth.
Enterprise White Clay Co.	4	Philadelphia, Pa.	" near Woodmansie.
Hampshire Clays, Inc.	1, 4	Bridgeboro	" " Bridgeboro.
J. M. Stokes	4	Rancocas	" " Rancocas.
Robert E. Erato	1	Margate City	Camden Co., near Delair.
Hatch Land Improvement Co.	4	Camden	" " near Delair.
Hydraulic-Press Brick Co.	1	Philadelphia, Pa.	" " near Winslow Jct.
Daniel Goff Co.	1	Philadelphia, Pa.	Cumberland, near Millsville & Clayville.
Moon Clay and Kaolin Co.	1	Trenton	Mercer Co., near Trenton.
Anness Hollow Tile Corp.	4	Woodbridge	Middlesex Co., near Woodbridge.
Atlantic Terra Cotta Co.	1	New York City	" " Woodbridge.
Bloomfield Clay Co.	1	Woodbridge	" " Metuchen.
S. G. Brinkman	1, 2, 3, 4	Fords	" " Fords.
The Crossman Co.	1, 4	South Amboy	" " Sayreville.
Hampton Currier	1, 3	Woodbridge	" " Woodbridge.
W. G. Demarest	1	New York City	" " Keasbey.
William Dinwiddie	4	Metuchen	" " Metuchen.
Edgar Bros. Co.	1, 2	Metuchen	" " Milltown.
F. A. Hillman	.....	South Amboy	" " South Amboy.
Henry Maurer & Son	1	New York City	" " Maurer.
Mutton Hollow Fire Brick Co.	1	Woodbridge	" " Woodbridge.
L. H. McHose, Inc.	1, 3	Perth Amboy	" " Perth Amboy.
National Fire Proofing Co.	1	Pittsburgh, Pa.	" " Keasbey.
New Jersey Ceramic Products Corp.	1	Old Bridge	" " Old Bridge.
Ostrand Fire Brick Co.	1	Woodbridge	" " Fords.
H. C. Perrine & Son	3	South Amboy	" " Old Bridge.
Raritan River Sand Co.	1	South Brunswick	" " Nixon.
R. U. Rue Co.	1	South Amboy	" " Sayreville.
P. L. Ryan, Estate of	1, 2, 3, 4	Woodbridge	" " Woodbridge.
Sayre and Fisher Co.	1, 4	Sayreville	" "

LIST OF OPERATORS REPORTING SALES OF RAW CLAY IN 1926, OR LATER, BY COUNTIES—Continued

Operator	Kind of clay	Office address	Location of pits
Sayre and Fisher Land Co.	1, 3	Sayreville	Middlesex Co., Sayreville.
Seaboard Refractories Co.	1	Perth Amboy	" "
South River Brick Co.	1	South River	" near South River.
Such Clay Co.	1, 2	Perth Amboy	" " South Amboy.
M. D. Valentine & Bro. Co.	1, 4	Woodbridge	" " Woodbridge and Perth Amboy.
Whitehead Bros. Co.	1	New York City	" " Sayreville.
Woodbridge Ceramic Corp.	1	Woodbridge	" " Woodbridge.
Marcus S. Wright	1, 4	South River	" " Milltown and Ryders Lane.
United Clay Mines Corp.	1	Trenton	Ocean Co., near Crossley and Toms River.
Yorktown Brick and Tile Works	3	Yorktown	Salem Co., near Yorktown.

a No production prior to 1927.

- 1. Fire clay.
- 2. Ball clay.

- 3. Stoneware clay.
- 4. Miscellaneous clay.

## BRICK AND TILE

Although, strictly speaking, these are manufactured products, no record is kept of the raw materials used in their manufacture and hence the amount and value of that production can only be estimated from the production and value of the manufactured products.

The total value of the brick and tile production in 1926, amounting to \$23,046,186, is approximately one-fourth of the total value of all the mineral industries. This record output is nearly a million dollars in excess of the figures for the best previous year, 1923, and is more than double the value of the production in 1921. The large increases in the value of common brick and terra cotta would seem to indicate that the building industry is largely responsible for the increased production shown. The most striking increase is in the value of architectural terra cotta, which for the first time exceeded \$5,000,000 and which exceeded the highest previous value, made last year, by \$909,563. In 1916, ten years ago, the architectural terra cotta produced was valued at only \$1,818,052.

## BRICK AND TILE IN 1926 AND 1925

Products	No. of producers	Quantity produced		Value—Dollars	
		1926	1925	1926	1925
Common brick	30	335,673 M	309,101 M	4,750,628	4,356,375
Face brick	3	25,389 M	26,537 M	868,635	812,061
Enameled bricks <sup>a</sup>	3		9,458 M		831,791
Fire brick	14	18,557 M	21,011 M	1,385,262	1,405,033
Terra cotta	6	42,310 n. t.	39,876 n. t.	5,672,649	4,763,086
Hollow bldg. tile <sup>b</sup>	8	440,110 n. t.	416,563 n. t.	3,829,492	4,153,151
Floor tile <sup>b</sup>	6	3,935,919 sq. ft.	2,718,766 sq. ft.	960,734	677,127
Ceramic mosaic	6	6,336,463 sq. ft.	7,061,011 sq. ft.	1,325,761	1,467,315
Patience tile <sup>b</sup>	5	583,679 sq. ft.	443,163 sq. ft.	463,981	320,797
Wall tile <sup>b</sup>	7	8,206,827 sq. ft.	7,426,784 sq. ft.	2,716,276	2,334,152
Miscellaneous <sup>c</sup>	10			1,072,768	489,965
Totals				23,046,186	21,610,853

<sup>a</sup> Included in miscellaneous to conceal figures of individual production.

<sup>b</sup> Includes all kinds.

<sup>c</sup> Includes enamelled brick, hollow brick, drain tile, flue linings, wall coping and other unspecified products.

M = 1,000

n. t. = net ton of 2,000 pounds.

LIST OF FIRMS AND INDIVIDUALS WHO REPORTED A PRODUCTION OF BRICK OR TILE IN 1926

<i>Operator</i>	<i>Office address</i>	<i>Location of plants</i>
Atlantic Brick Mfg. Co., Inc.	Mays Landing	Atlantic County, Mays Landing.
Somers Brick Co.	Atlantic City	" " Northfield.
Bergen Brick Co.	Hackensack	Bergen County, Hackensack.
I. E. Gardner	"	" " Hackensack.
Charles S. Shultz & Son, Inc.	Hoboken	" " Hudson St., Hackensack.
Henry Gardner	Little Ferry	" " Little Ferry.
Hackensack Brick Co.	"	" " near Bergen Turpike, Little Ferry.
N. Mehrhof & Co., Inc.	"	Bergen County, Little Ferry.
A. N. Krantz Co.	Paterson	" " ft. of Smith St., Lyndhurst.
Church Brick Co.	Trenton	Burlington County, two plants at Fieldsboro and one at Maple Shade.
Independent Brick Co.	"	Burlington County, plants at Bordentown, Fieldsboro and Kinkora.
John S. E. Fardu	Maple Shade	Burlington County, Maple Shade.
Philadelphia-Camden Fire Brick Co.	Camden	Camden County, Camden.
Fairview Brick Works	"	" " 412 Federal St., Delair.
Hydraulic-Press Brick Co.	Philadelphia, Pa.	" " Winslow.
Erickson Brick Co.	Bridgeton	Cumberland County, Bridgeton.
J. H. Gautier & Co.	Jersey City	Hudson County, Jersey City.
The Jersey City Refractories Co.	"	" " Jersey City.
Keystone Refractories Co., Inc.	New York City	" " Cavens Pt. Rd., Jersey City.
A. Reeder Chambers	Trenton	Mercer County, Oakland Ave., Trenton.
Crescent Tile Co., Inc.	"	" " Princeton Ave., Trenton.
Mueller Mosaic Co.	"	" " Cedar Lane and Chambers St., Trenton.
New Jersey Tile Co.	"	Mercer County, 800 Brunswick Ave., Trenton.
Pilbrico Jointless Fire Brick Co.	Chicago, Ill.	" " N. Y. Ave., at Strawberry, Trenton.
Sneyd Enameled Brick Co.	Trenton	Mercer Co., N. Y. Ave. at Plum St., Trenton.
Trenton Clay Products Co.	"	" " Princeton & Mulberry, Trenton.
The Trenton Red Front Brick Works	"	" " Princeton Ave., Trenton.
Trent Tile Co., Inc.	"	" " Klagg Ave., Trenton.

## LIST OF FIRMS AND INDIVIDUALS WHO REPORTED A PRODUCTION OF BRICK OR TILE IN 1936--Continued

Operator	Office address	Location of plants
Quigley Furnace Specialties Co., Inc.	New York City	Middlesex County, Gillespie.
The Carborundum Co.	Perth Amboy	" " Kearsbey.
National Fire Proofing Co., Raritan Plant	Pittsburgh, Pa.	" " "
Raritan Hollow Tile Co.	Kearsbey	" " "
American Encaustic Tiling Co., Ltd.	New York City	" " Maurer.
Henry Maurer & Son	Perth Amboy	near Perth Amboy.
B. H. Lage, Inc.	New York City	Menlo Park.
Ceramic Products Corp.	Old Bridge	Old Bridge.
The Old Bridge Enameled Brick and Tile Co., Inc.	" "	" " "
Atlantic Terra Cotta Co.	New York City	" " High & Buckingham Ave., Perth Amboy.
National Fire Proofing Co., Standard Plant	Pittsburgh, Pa.	Middlesex County, Perth Amboy.
" " " P. Amboy Plant	" "	" " "
The N. J. Terra Cotta Co.	Perth Amboy	" " Woodbridge Township.
Ostrandier Fire Brick Co.	Troy, N. Y.	" " Smith St. and Convery
The C. Pardee Works	Perth Amboy	Place, Perth Amboy.
Perth Amboy Tile Works	" "	Middlesex County, 611 Sayre Ave., P. Amboy.
Seaboard Refractories Co.	" "	Perth Amboy.
Sayre & Fisher Co.	Sayreville	" " Sayreville.
South Amboy Terra Cotta Co.	South Amboy	" " Broadway & Louisa St., South Amboy.
American Clay Products Co., Inc.	New York City	Middlesex County, South River.
American Enameled Brick and Tile Co.	" "	Whitehead Ave., S. River
South River Brick Co.	South River	" " 31 Reid St., South River.
The Anness Hollow Tile Corp.	Woodbridge	" " Woodbridge.
Federal Terra Cotta Co.	New York City	" " "
The Mutton Hollow Fire Brick Co.	Woodbridge	" " "
M. D. Valentine & Bro., Co.	" "	" " "
Craigien Brick Co.	Clifford	Monmouth County, Clifford.
Oschwald Brick Works, Inc.	Newark	" " "

Architectural Tile Co.	Keyport	Monmouth County, Keyport.
National Fire Proofing Co., Lorillard Plant	Pittsburgh, Pa.	"
Dunlopp & Fisk Pottery Co.	Matawan	" Matawan.
Matawan Tile Co.	"	"
The Mosaic Tile Co., Plant No. 2	Zanesville, Ohio	"
The Hanover Brick Mfg. Co.	Morristown	Morris Co., Whippany.
Mountain View Brick Co., Inc.	Mountain View	Passaic County, Mountain View.
Paterson Brick Co.	Little Falls	" Little Falls.
Walter K. Watson	Yorktown	Salem County, Yorktown.
Atlantic Terra Cotta Co.	New York City	Somerset County, Rocky Hill.
Grace-Ryan Brick Co.	Woodbridge	Union County, Berkeley Heights.
National Fire Proofing Co., Port Murray Plant	Pittsburgh, Pa.	Warren County, Port Murray.

## POTTERY

The production of pottery in 1926 was maintained at about the same rate as in 1925. The total value of the pottery produced also remained about constant, the figure for 1926, \$24,466,328, being an increase of only 0.3 per cent over 1925.

## POTTERY—1926 and 1925

<i>Products</i>	<i>No. of pro- ducers</i>	<i>Quantity—Pieces</i>		<i>Value—Dollars</i>	
		1926	1925	1926	1925
White ware <sup>a</sup> .....	3	.....	.....	548,572	461,538
Hotel china .....	4	.....	.....	1,895,962	2,042,081
Vitreous china plumbing fixtures <sup>b</sup> .....	....	1,487,084	1,870,206	9,740,589	11,339,085
Semi-vitreous or porce- lain plumbing fix- tures .....	13	.....	.....	5,063,504	(c)
Porcelain electrical supplies .....	15	.....	.....	4,352,263	3,745,689
Saggers .....	28	.....	.....	487,167	523,089
Other pottery prod- ucts <sup>d</sup> .....	20	.....	.....	2,380,271	6,288,289
Totals .....		.....	.....	24,466,328	24,399,771

<sup>a</sup> Includes cream color, white granite, semi-porcelain and semi-vitreous porcelain ware.

<sup>b</sup> Includes closet bowls, flush tanks, lavatories, other bathroom and toilet fixtures, laundry tubs and kitchen sinks, and other fixtures.

<sup>c</sup> Included in "Other pottery products in 1925."

<sup>d</sup> Includes red earthenware (flower pots, etc.); red and brown white-lined cooking ware; stoneware and yellow and Rockingham ware; porcelain china, bone china, delft and belleek ware; and other pottery products.



## LIST OF POTTERIES --1926

<i>Name of concern</i>	<i>Office address</i>	<i>Location of pottery</i>
Julius Einsiedel & Son	Egg Harbor City	Atlantic Co., Wash. Ave. & White Horse Pike, Egg Harbor City.
Innsides Pottery Co.	Bordentown	Burlington County, Bordentown.
Camden Pottery Co.	Camden	Camden County Camden.
Charles Wingender & Bro.	Haddonfield	251 Lake St., Haddonfield.
Strait & Richards	Newark	493 Fifth St., Newark.
The Rigger Excelsior Pottery	"	Essex County, 23 Selvaige St., Irvington.
Fulper Pottery Co.	Flemington	" " " " " " " " " " " "
Frenchtown Porcelain Co.	Trenton	Hunterdon County, Mine St., Flemington.
Lambertville Pottery Co.	Lambertville	" " " " " " " " " " " "
Acme Sanitary Pottery Co.	Trenton	" " " " " " " " " " " "
Anchor Pottery	"	Mercer County, May St., Trenton.
Bay Ridge Specialty Co.	"	" " " " " " " " " " " "
B. O. T. Mfg. Co., Inc.	"	682 Stokes Ave., Trenton.
Circle F Mfg. Co., Porcelain Plant No. 1	"	New York Ave., Trenton.
Connecticut Porcelain Co.	"	Prince and Meade Sts., Trenton.
Cook China Co.	"	Prospect St., Trenton.
The Cook Pottery Co.	"	" " " " " " " " " " " "
Economy Pottery Co.	"	" " " " " " " " " " " "
The Electric Porcelain and Mfg. Co.	"	" " " " " " " " " " " "
The Elite Pottery Co.	"	747 New York Ave., Trenton.
Globe Porcelain Co.	"	Enterprise Ave., Trenton.
Greenwood Pottery Co.	"	127 Mulberry St., Trenton.
Healy Pottery Co.	"	Canal St., Trenton.
Imperial Porcelain Works	"	Ewing Township.
The International Pottery Co.	"	Trenton.
Keystone Pottery Co.	"	Plymouth St. at the Canal, Trenton.
Kohler Co.	"	New York Ave., Trenton.
Lenox, Inc.	"	Hamilton Township.
Thomas Maddock's Sons Co.	"	Meade St., Trenton.
Mercer Porcelain Company	"	Ewing St., Trenton, and Hutchinson's Mills.
Mercer Pottery Co.	"	Pennsylvania Ave. & Mulberry St., Trenton.
Mitchell-Bissell Co.	"	39 Muirhead Ave., Trenton.
The Monument Pottery Co.	"	Braunswick and Heil Ave., Trenton.
	"	600 Ingham Ave., Trenton.

LIST OF POTTERIES--1936--Continued

<i>Name of concern</i>	<i>Office address</i>	<i>Location of pottery</i>
National Porcelain Co.	Trenton	Mercer County, Brunswick Ave. and Southard St., Trenton.
New Jersey Porcelain Co., Inc.	"	" Pennsylvania Ave. and Plum St., Trenton.
Resolute Pottery Co.	"	" Third St., Trenton.
The Sanitary Earthenware Specialty Co.	"	" Southard St., Trenton.
Scammell China Co.	"	" Third and Landing Sts., Trenton.
The Star Porcelain Company, Inc.	"	" Muirheid Ave., Trenton.
Trenton Fire Clay & Porcelain Co.	"	" Lator and Davies Sts., Trenton.
The Trenton Potteries Co.	"	" six plants in Trenton.
The Trumbull Electric Mfg. Co.	"	" Enterprise Ave., Trenton.
Union Electric Porcelain Works, Inc.	"	" Hamilton and Clarke Sts., Trenton.
Van Pottery Co.	"	" Parker Ave., Trenton.
Whitehead Pottery Co.	"	" Foskett St., Trenton.
Circle F Mfg. Co., Porcelain Plant No. 2	Trenton	Middlesex County, Allen Ave., New Brunswick.
Fords Porcelain Works, Inc., Plant No. 1	Perth Amboy	" Bonhampton Road, Fords.
Fords Porcelain Works, Inc., Plant No. 2	"	" Lehigh Ave., Perth Amboy.
General Ceramics Co.	New York City	" plants at Kearsbey and Metuchen.
Otto E. Hansen & Son	Perth Amboy	" 188 First St., Perth Amboy.
Pollon Pottery	Woodbridge	" Rahway Ave. and Main St., Woodbridge.
Woodbridge Ceramic Cor.	"	" Green St., Woodbridge.
Imperial Porcelain Works	Trenton	Monmouth County, Manasquan.
Acme Pottery Works, Inc.	Rahway	Union County, Rahway.
Washington Porcelain Co.	Washington	Warren County, Willow St., Washington.

The predominating position of Trenton as a center of pottery manufacture is rather strikingly brought out in the above list. Of the 52 firms listed, 36 have plants in or near Trenton.

### GREENSAND MARL

There was little change in the greensand marl industry during 1926. Production declined slightly from the previous year, but all of the five plants which operated in 1925 continued to operate at about the same rate in 1926. Of the material produced, about one-third was sold raw for use as a fertilizer on lawns or fields, and the remainder was treated and used as a water softener. The prices at which the greensand was sold, both crude and treated, varied greatly, but in general the treated product sold for twice as much as the crude. Actual figures cannot be given without disclosing prices received by individual operators.

The market for greensand marl for use in water softening apparatus is limited and can easily be supplied by present operators. It is to be hoped, however, that the market for crude material for use as a fertilizer may be greatly expanded.

### PEAT

The Bureau of Mines of the U. S. Department of Commerce has recently published a bulletin<sup>2</sup> which discusses thoroughly the possibilities for the commercial utilization of peat. In view of the tremendous reserves of coal in nearby states, the possibility of using New Jersey's peat resources in competition with coal as a fuel seems very remote; for according to this bulletin<sup>3</sup> it costs approximately \$4.50 to manufacture a ton of peat under the best conditions, and yet it must be delivered at less than half the cost of soft coal in order to compete with the latter. The same bulletin lists the manufactured products which "might be made to a limited extent on a commercial basis, under definite conditions, particularly after a careful study of the particular process involved." Apparently the opportunity for successful exploitation of manufactured peat products is very limited; however, for the benefit of those interested in peat production the list is here repeated:

<sup>2</sup> O'Dell, W. W., and Hood, O. P., *Commercial Utilization of Peat*: U. S. Dept. of Com., Bur. of Mines, Bull. 253, 1926.

<sup>3</sup> *Ibid.*: pp. 19 and 60.

1. Peat fuel
  - (a) Domestic fuel
  - (b) Special fuel for certain furnaces and for certain metallurgical processes.
  - (c) Generator fuel for manufacturing carbureted water gas in especially designed generators.
  - (d) Dense charcoal suitable for the manufacture of charcoal iron or for domestic use.
2. Heat-insulating material, including insulating board and molded-insulation, wallboard, millboard, and similar products.
3. A substitute for wood and wood products for certain particular purposes.
4. Filler for molded plastics as a substitute for wood flour.
5. Absorbent carbon for filtration and clarification of liquids and for absorption of gases, such as gasoline from natural gas, etc.
6. Miscellaneous minor products, such as packing materials, absorbents, deodorizers, etc.

In 1926, New Jersey's entire production of peat was used either in fertilizers, as a filler, or as a humic fertilizer, or soil conditioner. Three operators, The Alphano Corporation, the Hyper-Humus Company, and J. G. Marcrum, accounted for the entire production of 29,326 short tons. This is 2,200 tons less than in 1925 and it was sold for 19.3 per cent less than the 1925 production.

## OTHER PRODUCTS

*Coke.* All the by-product coke manufactured in New Jersey is made from Pennsylvania coal. Statistics of production are included in this report only for their value in making comparisons with production in previous years.

*Ground Feldspar.* So far as known the only feldspar produced in New Jersey is that obtained from pits near Perth Amboy, where it occurs as more or less decomposed grains and larger masses in an uncemented sandy bed of the Raritan formation. The material is not separated, but is used without treatment in the manufacture of fire brick. Commercial deposits of pure feldspar have never been found within the borders of the State. Trenton, however, is one of the chief feldspar markets, and three large mills located there accounted for 14 per cent of all the domestic feldspar that was ground in 1926. The value of

this production is included in "Other Products" for the same reason that the value of by-product coke is included.

*Fuel Briquets.* No data available.

*Lime.* The production of lime in New Jersey has almost reached the vanishing point. In 1926, the Peapack Limestone Products Company, Peapack, Somerset County, was the only concern to manufacture lime on a commercial scale. Yet in 1921 there were seven producers, and in 1908, nineteen individuals or firms produced lime for agricultural purposes alone. The decline in the number of producers since 1921 is paralleled by a progressive decline in the price received for lime since then. Yet there must be some other cause for the continued decline of this industry, for in 1908 the average price received for agricultural lime was \$2.61 a ton, whereas a ton of the same product in 1926 sold for \$7.12. It seems probable that much of the decline can be attributed to a change in farming methods; for whereas in 1908 many farmers were using lime and manure only on their fields, today they are using prepared fertilizers. It is also true that less land is under cultivation now than there was ten years ago, and therefore the demand for lime, at least in country districts, is lessened to that extent.

*Portland Cement.* New Jersey's two cement plants, the Edison Portland Cement Company and the Vulcanite Cement Company, shared in the record-breaking production of the cement industry last year. Shipments of all plants in the United States, amounting to 162,187,090 barrels, exceeded the best previous record made in 1925, by three per cent. The combined sales of New Jersey's plants increased almost five per cent over the previous year. Moreover, the value of the cement sold by New Jersey's plants increased about two per cent, whereas the value of shipments from all plants decreased a fifth of a per cent. The better-than-average record of the New Jersey plants can be attributed to the greater activity in building and other construction work in this part of the country. According to figures compiled by the F. W. Dodge Corporation, the value of contracts awarded for building and all other construction work in the eastern and central states increased five per cent above the preceding year; whereas, for New York, New Jersey, eastern Pennsylvania, Maryland, Delaware, Virginia and the District of Columbia, the average increase amounted to 15 per cent.

Both of New Jersey's cement plants are located in a narrow belt of "cement rock" (an argillaceous limestone) extending in a northeast-southwest direction between Carpentersville, on the Delaware, and New Village. The Vulcanite plant is adjacent to the main line of the Central

Railroad of New Jersey; the Edison plant ships over the Delaware, Lackawanna and Western Railroad.

*Ground Quartz.* There are several mills in New Jersey which grind sand for use in making glass, whiteware and enamel, and for use in paints, metal polish, soap cleaners, etc. Of these, the New Jersey Pulverizing Company use their own sand in their mills and its value is included under "Other Products." All other mills buy their sand from other companies whose production is shown elsewhere.

*Talcosc Rock.* The Rock Products Company of Easton, Pa., quarries both serpentine, or verde antique marble, and talc. Selected blocks of the former material are dressed and polished and sold for decorative building stone. The poorer grade of serpentine, together with associated talc, is ground and sold as a rock filler. The value of this production last year was more than double that of 1925.

*Zinc Ore, Spiegeleisen and Low-Grade Manganiferous Zinc Residuum.* It has been the practice in previous years to include in statistics of the mineral production of New Jersey an estimated value of the zinc ore produced. But the zinc ore also contains valuable amounts of manganese and iron which, in the form of spiegeleisen and low-grade manganiferous zinc residuum, are sold and add appreciably to the income of the New Jersey Zinc Company. Since these products are just as much a part of the mineral industry as the zinc itself, their value is also included in the mineral statistics.

*Non-clay Refractories.* A certain amount of sand and refractory cement is used in the manufacture of non-clay refractories. Since the manufacturing concerns provide most of the raw materials themselves and report only the amount and value of the finished products, and since the value of this mineral production does not appear elsewhere, it is included in the list of the mineral products of the State. The following manufactured products comprise this group: Silicon carbide brick, other silicon carbide refractories, magnesia refractories, other non-clay refractories, and refractory cement.