

**Sand and Gravel, and Stone.**—The Mining, Metallurgical and Chemical Branch of the Bureau of Statistics presents details of production and organization of the stone industry separately from that of sand and gravel, but for the sake of brevity they are here discussed together. However, the figures of stone production shown do not include the limestone used to produce lime and cement, nor the quartz and other rock minerals, which are shown separately in Table 2, p. 285. The production of these materials increased greatly up to the world depression that began in 1930. The expansion in the stone industry was chiefly in crushed stone. Thus a production of crushed stone in 1922 of 3,044,399 tons had increased by 1930 to 8,062,330 tons, while in the same period the production of sand and gravel increased from 11,666,374 tons to 28,547,511 tons. During the depression the output contracted sharply, but since 1933 there has been some recovery. Among the developments in Canada that resulted in increased production of these materials prior to the depression may be mentioned: (1) the tendency for brick to be replaced by reinforced concrete, cement blocks, etc., as indicated at p. 315, by a decline in brick production and an increase in that of cement; (2) the extensive improvement during that period in the mileage and character of roads and highways in Canada; and (3) the improvement of railway roadbeds.

The provincial distribution of the 1940 production of sand and gravel, and stone, is shown in Table 6, p. 291, while the chief purposes for which these materials were produced are shown in Table 36.

The quantities and values of stone produced, given in the following table, represent only the production of those establishments that actually quarry their own stone and are exclusive of the products of the stone-dressing industry comprising those establishments that buy rough stone and dress, polish or finish it; although dressing operations are frequently carried on right at the quarry and to that extent cannot be separated from the primary production.

**36.—Production of Sand and Gravel, and Stone in Canada, 1938-40**

Material and Purpose	1938		1939		1940	
	Quantity	Gross Value	Quantity	Gross Value	Quantity	Gross Value
	tons	\$	tons	\$	tons	\$
<b>Sand—</b>						
Moulding sand.....	18,845	19,698	17,618	18,652	29,602	30,538
For building, concrete, roads, etc.....	1,750,187	685,976	1,169,899	364,829	1,961,604	537,937
Other.....	67,595	22,909	55,019	15,547	53,455	23,514
<b>Sand and Gravel—</b>						
For railway ballast.....	2,359,703	443,936	3,223,718	603,238	3,834,904	699,518
For concrete, roads, etc.....	22,513,256	9,101,882	22,899,751	8,988,114	21,465,961	9,100,612
For mine filling.....	1,852,323	256,380	1,452,993	194,332	1,031,046	150,209
Crushed gravel.....	3,661,973	1,471,773	2,475,343	1,056,340	2,998,843	1,216,917
<b>Totals, Sand and Gravel.....</b>	<b>32,223,882</b>	<b>12,002,554</b>	<b>31,294,341</b>	<b>11,241,102</b>	<b>31,375,415</b>	<b>11,759,245</b>
<b>Stone—</b>						
Building.....	49,666	725,402	71,288	1,334,340	97,336	722,514
Monumental and ornamental.....	22,382	448,328	8,296	313,019	7,956	282,381
Limestone for agriculture.....	129,689	146,557	192,505	271,294	175,554	275,231
<b>Chemical Uses—</b>						
Flux.....	314,604	233,671	273,970	203,672	331,154	240,402
Pulp and paper.....	114,572	126,980	175,154	206,126	248,755	315,080
Other.....	122,561	107,349	128,154	113,781	145,776	126,314
Rubble and riprap.....	501,216	359,232	429,205	341,002	452,714	298,635
Crushed.....	3,789,680	3,197,797	4,076,208	3,405,247	5,870,099	4,799,003
<b>Totals, Stone<sup>1</sup>.....</b>	<b>5,116,022</b>	<b>5,556,026</b>	<b>5,443,522</b>	<b>6,455,696</b>	<b>7,417,665</b>	<b>7,398,959</b>

<sup>1</sup> Totals include minor items not specified.