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DOMINION BUREAU OF STATISTICS - CANADA

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DOMINION BUREAU
OF STATISTICS

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ASBESTOS, 1931.

The Canadian asbestos mining industry continued to feel keenly in 1931 the effects of the world-wide economic depression to which was added the increasing competition of Russian and Rhodesian fibre, according to finally revised data issued by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics at Ottawa. In 1931 the quantity of Quebec asbestos fibre placed on the market was 164,296 tons valued at \$4,812,886, a decrease of 77,818 tons in volume and \$3,577,277 in value as compared with 1930. The total volume of asbestos-bearing rock mined and hoisted during the year was 2,274,048 tons; 2,164,060 tons were milled. A high record for the yearly average fibre extraction was established; this fact indicates that there is no decline in the quality of rock mined.

Exports of non-fabricated asbestos (including sand and waste) from Canada in 1931 totalled 159,438 tons worth \$5,174,643 as against 235,500 tons valued at \$8,453,257 in 1930. Shipments during 1931 consisted of 129,084 tons to the United States, 8,751 tons to Belgium, 6,282 tons to Germany, 4,539 tons to Japan, 3,327 tons to France, 2,816 tons to Great Britain, and smaller tonnages to other countries.

The principal asbestos of commerce occurs in serpentine. That from Canada, and especially from Thetford Mines, is found to be more uniform in requisite commercial qualities and therefore more desirable and valuable than asbestos from most other countries.

For several years past, extensive diamond-drill campaigns have been attempted in the Quebec asbestos-bearing areas, and it is stated that ore reserves are now being definitely blocked out; open workings having a maximum depth of nearly 400 feet at the King mine, underground work at the 500 foot level, and drill cores from 1,700 feet deep have proved no variation in content or grade with depth.

The Rhodesian Chamber of Mines reports the 1931 production of Rhodesian asbestos at 24,042 tons valued at £386,494; this represents a considerable decline from a production of 37,766 tons in 1930. In 1931 the Chamber suggested to the Rhodesian government that it should form a central committee for Southern Rhodesia for the collection and tabulation of data relating to the mineral resources of the colony in accordance with the agreement arrived at in 1930 at the Imperial Conference of Premiers in London.

In the Union of South Africa the Cape Asbestos Company Ltd. reports that the acute difficulties experienced in the asbestos industry during 1931 are reflected in the reduction of the company's net profit to £13,141 as compared with £26,210 in 1930; operations at the Blue Asbestos mines were curtailed and those of Egnepe Ltd. further drastically reduced.

The economic review of the Soviet Union states that an all-union industrial combine for the production and refining of asbestos and for the manufacture of asbestos products was recently organized. This is known as Soyuzasbest (United Asbestos Industry). Sales of Russian asbestos in the United States during 1931 are reported by the Amtorg Trading Corporation at \$193,000 as compared with \$43,000

in 1930. Aside from the most important Russian deposits, in the Urals, there are other reserves in the North Caucasus and the Buriat-Mongolian Republic. Russian asbestos exports totalled 15,749 tons in 1930, of which Germany took 13,805 tons, the United States, 980 tons, and Great Britain, 536 tons. Pre-war Russian exports reached their peak in 1913 at 12,399 tons.

It is reported in "Asbestos" that Admiralty Alaska Asbestos Inc. will commence asbestos mining operation at a property on Admiralty Island, Southeastern Alaska; manufacturing will be conducted at Portland, Oregon.

A new company, Tasmanian Asbestos Mining Company, has been formed to develop extensive asbestos deposits at Beaconsfield, Tasmania. The asbestos from this area is reported to equal in general quality that now imported into Australia.

Possible new uses for asbestos have been recently announced, the mineral being utilized in the manufacture of protected metals by bonding. Advantages claimed include their resistance to heat and fire, their increased insulating value over bare metals and their soundless character.

Asbestos fibres of various grades are constituent components of many manufactured products. The longer fibres are used chiefly for spinning yarns, cords, and the production of woven fabrics. The short and very short fibres and a limited amount of residual sand are used with other constituents principally to produce a long line of building products and moulded articles.

A Committee formed by the asbestos mine operators of Quebec established in 1931 a uniform standard classification to designate and name or mark each quality of fibre produced by the Quebec mines. Asbestos mine products are now divided into two classes:- "crude asbestos" and "milled asbestos" respectively defined as follows:-

"Crude asbestos" consists of the hand selected cross-vein material essentially in its native or unfibrized form.

"Milled asbestos" consists of all grades produced by mechanical treatment of asbestos ore. Crude and milled are defined as follows:-

- | | |
|-------------------|------------------------------------------------------------------------------------------------|
| Crude No. 1 | - Consists basically of crude three-quarters of an inch staple and longer. |
| Crude No. 2 | - Consists basically of crude three-eighths of an inch staple up to three-quarters of an inch. |
| Crude run of mine | - Consists of unsorted crudes. |
| Crudes, sundry | - Consists of crudes not otherwise specified. |

Milled Asbestos.

- | | |
|----------------------------|---------------------------------------------------------------------------------------------------|
| Spinning or textile fibres | - Consists of fibre testing over 0-8-6-2. |
| Shingle fibre | - Consists of fibre testing below 0-8-6-2 to and including 0-1 $\frac{1}{2}$ -9 $\frac{1}{2}$ -5. |
| Paper fibre | - Consists of fibre testing below 0-1 $\frac{1}{2}$ -9 $\frac{1}{2}$ -5 to and including 0-0-8-8. |

Waste stucco or plaster -- Consists of material testing below 0-0-8-8 and above 0-0-5-11.

Refuse or shorts -- Consists of material testing 0-0-5-11 and below, including material testing below 0-0-1-15, and specified as weighing thirty-five pounds or less per cubic foot loose measure.

Sand -- Consists of such asbestos mill products as sand weighing over thirty-five pounds and under seventy-five pounds per cubic foot loose measure and containing a preponderance of rock.

Gravel and stone -- Consists of such asbestos mill products weighing seventy-five pounds and over per cubic foot loose measure.

These groups are further sub-divided and designated as standard grades according to a guaranteed minimum shipping test. These further sub-divisions may be found in Report of the Minister of Mines of the province of Quebec for the fiscal year 1930-31. Part A. For a description of the Quebec standard testing machine, see pages 36 and 37 of the report on mining operations in the province of Quebec for the year 1927.

OUTPUT AND SHIPMENTS OF CANADIAN ASBESTOS, 1931.

| Classification | Total output tons | SOLD or SHIPPED | | Average value per ton \$ |
|----------------------------------|-------------------------|------------------|------------------------------------|--------------------------------|
| | | Quantity tons | Total sales value at mill \$ | |
| Crude No. 1 | 389 | 206 | 88,880 | 431.46 |
| Crude No. 2 | 1,985 | 543 | 117,478 | 216.35 |
| Other crudes | 92 | ... | ... | 132.00 |
| Spinning fibre | 11,329 | 8,560 | 917,776 | 107.22 |
| Shingle fibre | 10,956 | 15,988 | 938,857 | 58.72 |
| Paper fibre | 37,251 | 39,867 | 1,381,888 | 34.66 |
| Waste, stucco or plaster | 6,328 | 6,309 | 159,043 | 25.21 |
| Refuse or shorts | 82,907 | 92,823 | 1,208,964 | 13.02 |
| TOTAL | 151,237 | 164,296 | 4,812,886 | \$29.29 |
| Sand, gravel and stone (x) | 7,209 | 7,209 | 5,952 | \$ 0.83 |

(x) This production is included under the sand and gravel industry.

Quantity of rock mined during 1931 2,274,048 tons

Quantity of rock milled during 1931 2,164,060 tons

IMPORTS INTO CANADA AND EXPORTS OF ASBESTOS, 1931.

| | Tons | Value \$ |
|--------------------------------------------------------------------------------|--------|-------------|
| IMPORTS -- | | |
| Asbestos brake and clutch lining | ... | 241,880 |
| Asbestos packing | 69 | 65,455 |
| Asbestos in any form other than crude, and all manufactures of, n.o.p. | ... | 312,484 |
| TOTAL | ... | 617,819 |
| EXPORTS -- | | |
| Asbestos | 70,903 | 3,929,317 |
| Asbestos sand and waste | 88,535 | 1,245,326 |
| Asbestos manufactures, including asbestos roofing | ... | 111,241 |
| TOTAL | ... | 5,285,884 |

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PRINCIPAL STATISTICS OF THE ASBESTOS MINING INDUSTRY IN CANADA,
1930 and 1931.

| | 1930 | 1931 |
|---------------------------------------|------------|------------|
| Number of firms | 7 | 7 |
| Capital employed\$ | 35,097,872 | 40,164,005 |
| Number of employees:- On salary | 230 | 172 |
| On wages | 2,540 | 1,503 |
| Total | 2,770 | 1,675 |
| Salaries and wages:- Salaries\$ | 475,167 | 405,060 |
| Wages\$ | 2,999,048 | 1,431,055 |
| Total\$ | 3,474,215 | 1,836,115 |
| Cost of fuel and electricity\$ | 1,133,737 | 849,047 |
| Selling value of products\$ | 8,402,576 | 4,818,838 |

WORLD PRODUCTION OF ASBESTOS, 1929 and 1930.

(Supplied by Imperial Institute)

(Long tons)

| Country | 1929 | 1930 |
|-----------------------------------------|---------|---------|
| <u>BRITISH EMPIRE</u> | | |
| Southern Rhodesia | 38,066 | 33,720 |
| Union of South Africa | 28,717 | 23,083 |
| Canada - | | |
| Chrysotile (including sand, etc.) | 294,804 | 251,019 |
| Actinolite | 27 | 30 |
| Cyprus | 14,110 | 7,256 |
| India | 318 | 33 |
| Australia | 256 | 82 |
| Total | 376,000 | 315,000 |
| <u>FOREIGN COUNTRIES</u> | | |
| Finland | 1,600 | 1,061 |
| France | 740 | (a) |
| Italy | 2,586 | 710 |
| Russia (years ended Sept. 30) | 29,054 | 56,000 |
| Portuguese East Africa | ... | 16 |
| United States (Sales) - | | |
| Amphibole | 1,046 | 526 |
| Chrysotile | 1,771 | 3,262 |
| Japan (estimated) | 1,000 | 1,000 |
| Manchuria | 111 | (a) |
| Total | 38,000 | 64,000 |
| WORLD'S TOTAL | 414,000 | 379,000 |

(a) Information not available.

Note:- Complete data regarding 1931 world production are not yet available.

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