

used there in concentrating uranium-ores. So far New Zealand's sources of uranium-ores have proved to be exceedingly low grade, and their economic worth is difficult to assess.

*Mica*.—There has been no activity in mica-mining during the year as it is impossible to produce mica in New Zealand in competition with countries overseas, where cheap, coloured labour can be used for hand-dressing, for which there is so far no alternative process.

*Asbestos*.—The mine and plant of the Hume Pipe Co. in the Upper Takaka district continued on a care-and-maintenance basis, and there was no production of asbestos.

*Bentonite*.—During the year 154 tons of bentonite, of a value of £777, were produced from deposits at Porangahau, as against 167 tons, valued at £800 in 1945. Field-work by officers of the Geological Survey has shown that bentonitic material is of widespread occurrence in Marlborough and North Canterbury, and it is possible that a deposit of economic value may eventually be located.

*Phosphate*.—During the year 11,047 tons of low-grade phosphatic sandstone were obtained from the Clarendon deposits, bringing the production from this new deposit since commencement of operations in 1943 to a total of 40,685 tons.

*Serpentine*.—The demand for serpentine in the production of fertilizer has continued, and 20,058 tons were produced, as against 13,933 tons in 1945. Approximately half of this year's production came from deposits in North Auckland and half from an occurrence near Te Kuiti, at which mining operations were commenced during 1946. The total production of serpentine till the end of 1946 now amounts to 172,456 tons, valued at £101,123.

*Limestone*.—Production of limestone for agricultural use amounted to 929,794 tons, a record, and a substantial increase on the 812,635 tons produced for this use in 1945. In the last ten years the production of limestone for agricultural use has trebled, and it is apparent that demand for this material will still further increase.

*Dolomite*.—During the year 3,893 tons of dolomite were obtained from the Mount Burnett deposits, near Collingwood, as against 4,644 tons in 1945. Production would have been greater had it not been for difficulties in obtaining shipping space. In all, 26,303 tons have now been obtained from this deposit.

*Clays*.—During 1946, 109,809 tons of clay were produced for use in the making of bricks, tiles, and pipes, and 9,425 for other uses, such as in pottery and in the manufacture of refractories. It is expected that the production of clays of all classes will increase and that greater attention will be paid to processing so that clays of uniform grade will be available to industry.

*Silica Sand*.—During 1946, 16,949 tons of silica sand were produced from deposits at Parengarenga, Aramoho, Hyde, Mount Somers, Pleasant Valley, and Parapara. Of these, that at Parengarenga, which contributed 14,679 tons to this total, was the most important.

*Pumice*.—Production of pumice during 1946 amounted to 3,409 tons. Of this total 2,539 tons were exported and 870 tons were used in local industry.

*Nephrite (Greenstone)*.—There have been many requests from overseas for supplies of New Zealand's semi-precious stone, nephrite. In the past boulders of this stone have been recovered from gravels incidental to gold sluicing, but with the decline in alluvial mining supplies have not been sufficient to meet local demands, much less consider export.

*General*.—Small amounts of platinum, arsenic, diatomaceous earth, Fuller's earth, magnesite, and quartzite were also produced during 1946.