

solution of calcium chloride. The clumps so produced are transferred directly into a rotary kiln, heated either by oil or powdered coal flame. During the passage of the clumps through the furnace, the reaction takes place which converts the insoluble potassium silicate into the soluble potassium chloride. The red hot clumps, as they come from the furnace, fall directly into water, contained in leaching vats, which dissolves the chloride of potash formed. The remainder of the process consists in recovering the solid chloride of potash from the concentrated solution.

The authors recommend a plant large enough to handle 300 tons of feldspar per day of 24 hours, producing 47.54 tons of 80 per cent potassium chloride.

The cost of this product comes to \$31.32 per ton. The price quoted before the war in the United States for the same article, of German origin, was \$37.50 per ton. This is over \$6.00 higher than the calculated cost of the article manufactured by the Cushman-Coggeshall process. According to their cost sheet, this \$6.00 represents a profit of 20 per cent on the manufacturing costs of potash from feldspar. For the figures in detail on which this cost of manufacture is based, I must refer you to the inventors' paper.

Assuming that cost of plant, overhead and operating charges would be the same in Canada as stated in their paper, the cost of the raw materials would be determined by the cost at which they can be assembled at the locality selected for the proposed plant in Canada. The prices quoted per ton of the raw materials entering into the calculation of costs of product given by the authors are : Coal, \$2.50 ; feldspar, \$1.00 ; burnt lime, \$2.33, and calcium chloride, \$7.33. The latter is a by-product of the ammonia-soda-alkali process, and would require to be imported from the United States at a considerably higher figure than that given.

**Prices of Potash
in America**

During the last week of November, 1914, chloride of potash was quoted at \$100.00 per ton in the United States, an advance of 266 per cent on the price before the war. How long such, or even higher, prices will prevail depends upon the length of the war and how soon the potash deposits of Germany can again be drawn upon to supply the market. It is stated that the cost of mining the potash deposits permits the product to be sold profitably at one-third the cost charged to customers in the United States before the war. It is evident, therefore, that, when commercial relations are once more adjusted, the proprietors of the potash deposits, whoever they may then be, could undersell any manufacturer of potash from feldspar, and this would mean the