

## APPENDIX I

## Aluminium, with Special Reference to Use for Electrical Energy Transmission

The aluminium industry began in a very modest manner in the early 'eighties' of the last century. Several factories were operated on the St. Claire Deville method, of which the one at Salindres, France, produced  $2\frac{1}{2}$  tons of aluminium annually. The production increased only slowly to begin with, as will appear from the appended table\* showing the world's production in metric tons†:—

|           |        |           |         |
|-----------|--------|-----------|---------|
| 1880..... | 2.4    | 1907..... | 19,800  |
| 1885..... | 13     | 1908..... | 18,600  |
| 1890..... | 175    | 1909..... | 31,200  |
| 1895..... | 1,426  | 1910..... | 43,800  |
| 1900..... | 5,000  | 1911..... | 45,000  |
| 1901..... | 6,900  | 1912..... | 61,100  |
| 1902..... | 8,350  | 1913..... | 78,790  |
| 1903..... | 8,200  | 1914..... | 84,857  |
| 1904..... | 9,300  | 1915..... | 86,394  |
| 1905..... | 11,500 | 1916..... | 112,626 |
| 1906..... | 14,500 | 1917..... | 173,500 |

In a review‡ of the international aluminium industry, published in 1917, it was stated that the demand for aluminium had increased greatly during the last few years. While the German, Swiss, French, and British works have had difficulty in extending greatly under war conditions, the aluminium industry in the United States has made enormous progress. The world's production of aluminium during 1917 is estimated at 173,500 metric tons, and, if the extensions and new constructions now in process of execution are taken into consideration, the capacity will increase to 200,000 tons in the near future. Such a large production would prevent excessive prices of aluminium, but it is questioned whether sufficient supply of alumina, bauxite, cryolite, etc., will be on hand in time to produce 200,000 tons.

\*Statistics for 1880-1902 from *Engineering*, Aug. 16, 1918, p. 163; for 1903-12, from *Metallgesellschaft*, 1903-1912, p. 16; for 1912-17, from *Mineral Industry during 1917*, p. 10.

†The metric ton is 2,204 lbs, but, as these statistics are only close approximations or estimates, it is assumed to be 2,200 lbs.

‡*Electrical Review*, London, March 30, 1917.