

Similar convictions are shared by all beet-producing countries, there being no dissent. This industry has even been termed "the greatest agricultural conquest of our time," while the historian Thiers has called it "the Providence of the Empire," which, according to E. B. Grant, "in the opinion of eminent French statesmen, has twice within fifteen years saved France from famine."

Indeed, it is the opinion gained from experience in all beet-producing countries that the cultivation of beet materially increases the production of cereals and other crops and of animal food; and that, therefore, it stands pre-eminent as a beneficent industry. In this respect we have not only the testimony of Europe, but we have also that of California, where the beet industry is now firmly established on a sound and solid basis. The British Consul at San Francisco, under instructions from his Government, has very recently reported as follows: "The sugar-beet industry has proved itself to be a most sure and satisfactory agricultural proposition in California to-day."

Such testimony from the named State of the American Union, which admittedly most resembles Victoria in climate, in people, and in products, must therefore be considered most valuable for our own conditions, and further verdicts from that part of the world will be most significant for us. Mr. R. Gird, in his annual address for 1894 before the Californian State Board of Agriculture already referred to, says, "The sugar-beet is a plant the cultivation of which under the scientific methods necessary for its success, increases the productiveness of the soil for other crops, and makes such division and increase of labour as to help solve the question of profitable employment, and of the instilling of these habits of industry into the rising generation, which at present seems such a difficult problem in our industrial labour system."

Dr. H. W. Wiley, the chief of the chemical laboratory in the Agricultural Department of California, says, in April, 1894, number of *The Engineering Magazine*, in regard to sugar-beet: "There is no other way in which the plethora of agricultural products can be so readily relieved and renewed prosperity brought to our agricultural interests, thus stimulating every other interest in the land."

The *Pacific Rural Press*, of 7th April, 1894: "There is no crop which will repay a farmer better for the labour and care devoted to it than the sugar-beet."

The beet industry is most emphatically an agricultural industry of the first order—that is to say, it has the tendency to enlarge infinitely the productive capabilities of the soil; it leads to increased production of other crops which it does not exclude, but on the contrary demands; it is of a progressive character; and therefore its success in a civilised world is assured. It has brought about that state of affairs which J. R. Dodge has so ably summed up in the following words in his admirable essay on "The Future of Wheat," see *Pacific Rural Press* of the 17th February, 1894: "The incoming of diversified cropping, having a scientific basis, and conducted systematically and on business principles, and not as a haphazard speculation, will regulate the area of all products, reduce the cost of production by increasing the yield, modify the losses from insect depredations and incursions of weeds, and reduce agricultural production to an equilibrium, at the same time increasing materially the margin of profit."

These considerations briefly represent the general—more particularly the agricultural—aspect of the sugar-beet industry, whose industrial progress will now be illustrated by statistics of its general results referring to the quantities of sugar manufactured from beet, in tons, and put on the market, and representing a period of the last thirty years.

These statistics are partly taken from *The Sugar Cane* and partly from Licht:—

Year.	Germany.	Austria.	France.	Russia.	Belgium.	Others.	Totals.
1865-66	180,000	80,000	270,000	64,000	30,000	6,000	630,000
1871-72	189,166	161,527	335,351	90,000	72,236	25,000	873,280
1875-76	305,000	170,000	475,000	150,000	75,000	30,000	1,205,000
1880-81	594,223	498,082	333,614	250,000	68,626	30,000	1,774,545
1884-85	1,155,000	558,000	308,000	387,000	88,000	50,000	2,546,000
1890-91	1,331,965	778,473	694,037	544,162	205,623	156,635	3,710,895
1891-92	1,198,156	786,566	650,377	550,994	180,377	135,450	3,501,920
1892-93	1,225,331	802,577	588,838	455,000	196,699	160,070	3,428,515
1893-94	1,390,000	841,809	579,111	650,000	235,000	186,015	3,881,945
1894-95		Estimated by Licht, of Magdeburg, Germany					4,680,000

From this tabular statement, which is compiled from reliable sources, it will be seen that during the period embraced between the years 1865 and 1894 the increase of the world's beet-sugar production has actually amounted to no less than 616·18 per cent. Obviously, the individual countries fully participate in that increase, more particularly those where this industry is of more recent origin. The respective corresponding increased percentages in the lands enumerated are the following for the same period: Germany, 772·22 per cent.; Austria, 1,052·25 per cent.; France, 214·49 per cent.; Russia, 1,015·63 per cent.; Belgium, 783·33 per cent.; other countries, 3,100·25 per cent.

The above are very significant figures, which naturally and demandingly call for our attention and inquiry. The beet-sugar having become a *sine quâ non* in the social economics of most civilised countries, we are forcibly led to ask ourselves earnestly about our own position to the question.

Amongst the "other countries" in the preceding statements there are two wherein the beet industry is but very few years old, and it will therefore be all the more interesting to note its