

"the per centage of sugar produced depends entirely on the quality of the beet, the nature of the soil which produced it, the system of cultivation adopted, the state of preservation the beet may be in when worked, and the mode employed for the extraction of the saccharine juices. The quantity of sugar contained in the best beets varies from 12 to 18 per cent; but manufacturers consider that they have been quite successful, if they can obtain an average of eight per cent of sugar, (besides

a small per centage of molasses) as the final result of one years work. On the other hand when they cannot extract more than five per cent of sugar from the total weight of the beets worked, they consider their work as unprofitable. However, the excise which manufacturers of sugar generally pay in Europe, must affect considerably this incidental question of profit and loss."

The following further extracts are taken from Mr. Barnard's Report:—

1. PRODUCTION OF BEET ROOT SUGAR IN EUROPE.

See "Fabrication du Sucre de Betterave." (Translation from the German.)

Year.	Total production in tons.	Average for each Manufacturer.	Number of Factories	Remarks.
1866-67	France.....216,854	499 tons.	434	All fractions are omitted.
" "	Germany...202,750	685 "	296	The total production of beet sugar in Europe has nearly doubled within the last ten years.
" "	Austria.....103,000	544 "	140	
1866-66	Russia.....149,000	575 "	259	For Russia and Belgium the amounts mentioned here can truly be doubled to obtain the present production.
1867-68	Belgium.... 40,000	370 "	108	
" "	Holland.... 5,79	355 "	18	
1866-67	Poland..... 15,000	276 "	41	

GRADUAL INCREASED PRODUCTION OF BEET SUGAR, &c., IN GERMANY (ZOLLVEREIN.)

(Extract from U. S. Agricultural Report, 1863, page 161.)

Year.	Number of Factories.	Tons of beets worked. 2,100 lbs #/ton.	Weight of beets for 1 lb sugar.	Yield of		Av'ge # factory		Consumption per capita.	Internal Revenue paid to Governments.
				Raw Sugar.	Molasses.	Beets worked.	Raw Sugar produced.		
1836-37	122	27,880	lbs.	p.c.	p.c.	tons.	tons.	lbs.	\$
1839-40	152	242,310	18.00	5.50	4.30	223	13	3.99	None.
1840-41	145	265,635	17.40	5.75	3.80	1,594	92	5.10	None.
1845-46	96	245,030	17.00	5.88	3.77	1,833	108	4.69	28,173
1850-51	184	809,836	14.70	6.60	3.10	2,552	174	5.60	155,918
1855-56	216	1,201,185	13.80	7.25	2.70	4,401	319	6.01	1,030,701
1860-61	247	1,614,472	12.50	8.00	2.35	5,061	445	7.10	3,057,572
1865-66	295	2,389,853	11.60	8.62	2.15	6,534	563	8.32	5,136,955
1866-67	296	2,789,199	11.70	8.55	2.70	8,101	692	10.69	7,304,230
			12.60	7.94	2.45	9,423	748	9.00	8,874,724

"For nearly 25 years every encouragement was given by the different governments in Europe to foster the production of beet sugar, with the object of increasing the agricultural productions of the country, improving the system of agriculture and the value of property. No internal revenue whatever was charged in Germany until 152 factories had been established, with an annual production of about twenty-eight million pounds of sugar. In 1840 a tax of about 11 cents per ton of beets worked, was collected from the manufacturers—the following year the tax was doubled—in 1844, 66

cents per ton of beets worked were charged; in 1850 it was increased again to \$1.20; in 1853 to \$2.40, and finally in 1858 to about \$3.50 per ton, or about the price paid to the farmers for the beets.

"During my stay on the continent, particularly in Belgium, I made careful enquiries with relation to the increased value of lands caused by the introduction of beet sugar factories. I ascertained that sugar beet producing farms which rented from \$3 to \$4 only per acre, previous to the establishment of beet root sugar factories, now rent at from \$19 to \$21. The labor bestowed on