

CHAPTER IX.  
MANUFACTURES.

TABLE OF COTTON FACTORIES IN MEXICO — CONSUMPTION — PRODUCTION. — INCREASE OF FACTORIES — DAY AND NIGHT WORK. — DEFICIT OF MATERIAL — WATER AND STEAM POWER — MEXICAN MANUFACTURES GENERALLY.

TABULAR STATEMENT OF THE COTTON FACTORIES IN MEXICO, THEIR CONSUMPTION AND PRODUCTION IN 1844.

States.	No. of factories.	Spindles in operation.	Spindles erecting.	Total.	No. of looms.	Quintals of cotton consumed weekly.	Weekly product of pounds of cotton twist.	Weekly product of pieces of cotton cloth.	Weekly expenses.
Durango...	5	5,560	816	6,376	140	139	400	778	\$1,795
Guanajuato	1	500	800	800	.....	10	900	.....	150
Jalisco.....	4	8,904	5,664	14,568	220	228	16,800	.....	2,450
Mexico.....	17	23,894	200	24,094	1,187	401	36,000	3,277	8,413
Puebla.....	21	37,396	5,842	42,874	530	691	61,710	1,290	6,154
Queretaro..	2	5,400	4,200	9,600	112	137	10,000	400	2,400
Sonora.....	1	2,198	.....	2,198	54	71	.....	57	385
Vera Cruz .	8	22,856	1,992	24,848	366	361	35,835	733	5,510
	59	106,708	18,654	125,362	2,609	2,038	161,654	6,535	\$27,257

Very few returns are wanting to make this table perfect in every respect.

From this summary it appears that the total number of spindles in operation and in course of erection in the republic in the year 1844, — anterior to the war and during a period of comparative progress, — amounted to 125,362, together with 2609 looms in the fifty-nine factories of cotton stuffs and twist. These factories consumed, weekly, 2038 quintals of cotton, and gave, according to the table, a weekly product of 161,654 lbs. of cotton twist, a portion of which they converted into 6535 pieces of cotton cloth, the remainder being sold for the consumption of private and scattered hand looms throughout the country. An intelligent and experienced manufacturer, acquainted with Mexican factories, and at present residing in this country, calculates with apparent justice, that 2038

quintals of cotton, allowing fairly for waste, will yield, 183,420 lbs. of twist and filling, and that the weekly product of cotton cloth will be 8479 pieces of 32 varas each, from 2609 looms, each loom averaging about three and one quarter pieces per week. But allowing this correction of the above table of the *Junta de Fomento*, and adhering to its data in other respects in which it appears to be entirely faithful, we attain some important results. By comparing the number of spindles actually in Mexico at that epoch, with the number known to be there in 1842, viz: 131,280, and adding to the number now stated 8050 which are in the various factories closed in the interval but whose machinery is still in existence, we show an increase of 2132 according to the most accurate accessible information. Since the war the number has been no doubt largely augmented if we may judge by the numerous shipments of machinery to Mexico from Europe and North America.

In order to show the importance to Mexico of allowing the liberal importation of cotton from the United States, inasmuch as it is not likely she will become a cotton growing country in proportion to the increase of her manufacturing population, we have prepared the following comparative estimates. In our chapters on the agriculture of the republic we have endeavored, and we hope successfully, to demonstrate the impracticability of inducing the Indians to produce sufficient for present purposes, or to devote themselves to the labor of extensive cotton plantations for the benefit of the future.

Working *by day* alone the Mexican factories consume yearly 105,976 quintals, or 10,597,600 lbs. of raw cotton, whilst the whole cotton crop of the republic according to recent estimates, is not more than 60,000, or, 70,000 quintals, equal to 7,000,000 lbs.; but if they worked *by day and night*, they would use 18,545,800 lbs. of the raw material, allowing three-fourths of the day consumption for night work. From these calculations we derive the following important results, as to deficiency:

1st.

Working <i>by day only</i> , the yearly consumption of cotton is	10,597,600 lbs.
Deduct the whole Mexican crop of 70,000 quintals, at 100 lbs. per quintal,	7,000,000 "
Deficit,	<u>3,597,600 "</u>

2d.	
Working by day—yearly consumption, as above,	10,597,600 lbs.
Add three-fourths for night work,	7,948,200 “
Total consumption,	18,545,800 “
Deduct Mexican crop as above,	7,000,000 “
Deficit,	11,545,800 “ <sup>1</sup>

Cotton varies, as we have seen in price according to demand, at Tepic, Mazatlan, Vera Cruz, Tampico, Puebla, Durango, the valley of Mexico, &c., from fifteen dollars, per quintal, to forty-eight. If we rate it, on an average, at twenty-five dollars per quintal, the value of the deficit on *day* consumption will be \$899,400, and on *day and night* consumption, \$2,886,450, all of which must necessarily, be made up by importation.

We have prepared the preceding table in order to attract the attention of cotton *producing* countries, and to demonstrate the fact that Mexico, in all likelihood, may become a *manufacturing* nation, inasmuch as the surplus population of towns, the women and children, may be successfully employed in this branch of human industry, when they have no agricultural district from which they may easily derive support with the least labor. There is reason to believe that water power, for the use of factories is abundant all over the republic. The natural drainage of a mountain country will at once prove this fact. Innumerable small streams, falling from the crests and sides of the *sierras*, pour through the ravines and barrancas; but in consequence of the scarcity of wood and the costliness of its transportation, it is not probable that steam power can be advantageously used. Factories of paper near the capital, at Puebla and in Guadalajara are working with success, but they do not produce enough for the consumption of the republic. At Puebla and Mexico there are several factories of the ordinary kinds of glass and tumblers, whilst woollen blankets, baizes, and, at present, *fine* cloths, are yielded by several establishments erected before and

<sup>1</sup> The cultivation of cotton is a branch of agriculture of almost marvellous increase. Mr. Burke, a member of our congress, from South Carolina, in 1789, when speaking of southern agriculture, remarked that “cotton was likewise in *contemplation*.” During the last quarter of the eighteenth century, when 7012 bags of the article were imported into Liverpool a perfect panic was produced by so unusual a supply, at present 150,000 bags may reach a single port without greatly affecting the price. In 1791 the whole United States produced only two millions of pounds, whilst in 1848, the Commissioner of Patents calculated the whole crop at 1,066,000,000 lbs.

since the war. The well known Mexican *serape*, or *poncho*,—an oblong garment, pierced in the centre to allow the passage of the head, and which falls in graceful folds from the shoulders of a horseman over his person—is one of the most generally demanded fabrics from native looms. These blankets are often of beautiful texture, composed of the richest materials and colors, and, according to the fineness of their wool and weaving, vary in cost from twenty-five to five hundred dollars. The *serape* is an indispensable article, both for use and luxury, for the *lepero* as well as the *caballero*, and being as much needed by men as the *reboso*, or long cotton shawl, is by the women, it may readily be conceived how great is the consumption of these two articles of domestic manufacture alone. There are between five and six thousand hand looms throughout the several states, and these are continually engaged in the fabrication of *rebosos* and *serapes*, the latter of which are most exquisitely dyed and woven in tasteful patterns in the neighborhood of Saltillo.<sup>1</sup>

<sup>1</sup> Whilst these pages are passing through the press information has been received from the Mexican gazettes that in 1846 there were sixty-two cotton factories for spinning and weaving, and five for manufacturing woollens;—that the first mentioned have been greatly improved by the introduction of the best kinds of machinery, and that two *new* factories for woollens have been set in operation in the state of Mexico, which produce cloths and cassimeres that are eagerly purchased by the best classes. The cost of these fabrics is not mentioned, but it is probably fifty per cent. higher than if manufactured in the United States.



INDIAN HUT IN THE TIERRA CALIENTE.