

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

WM. J. HARRIS, DIRECTOR

BULLETIN 117

SUPPLY AND DISTRIBUTION
OF COTTON

FOR THE YEAR ENDING AUGUST 31, 1913



WASHINGTON
GOVERNMENT PRINTING OFFICE

1913

CONTENTS.

	Page.
SUPPLY AND DISTRIBUTION OF COTTON IN THE UNITED STATES.....	7-27
General summary.....	7
Table 1.—Supply and distribution of cotton in the United States, for years ending August 31: 1906 to 1913.....	7
Method of collecting and assembling data.....	8
Imports of cotton.....	9
Table 2.—Net imports of raw cotton, by countries from which imported, for the year ending August 31, for specified years: 1895 to 1913.....	9
Table 3.—Total imports of cotton by countries of production for each month from September, 1912, to August, 1913, inclusive.....	9
Cotton manufacturing in the United States.....	9
Table 4.—Spindles, raw cotton consumed, and stocks held in manufacturing establishments, by states: 1909 to 1913.....	10, 11
Spindles.....	12
Ring and mule spindles.....	12
Table 5.—Number of active ring and mule cotton spindles, by states, for specified years: 1904 to 1913.....	12
Cotton consumed.....	13
Kinds of cotton used.....	14
Table 6.—Quantity of the several kinds of raw cotton consumed and of stocks held in manufacturing establishments: 1911, 1912, and 1913.....	14
Growth of the cotton industry since 1840.....	15
Table 7.—Production and consumption of cotton and number of active cotton spindles in the United States, by sections, for specified years: 1840 to 1913.....	15
Stocks of cotton.....	15
Periodical reports.....	16
Monthly reports of cotton consumed, imported, exported, and on hand.....	16
Table 8.—Cotton consumed, imported, exported, and on hand, and active consuming cotton spindles, by months: September, 1912, to August, 1913.....	16
Comparative data for specified periods.....	17
Table 9.—Supply and distribution of cotton in the United States for specified periods: 1910 to 1913.....	17
Cotton consumed during each month, by states.....	17
Table 10.—Cotton consumed during each month, by states: September, 1912, to August, 1913.....	18
Table 11.—Linter and foreign cotton consumed during each month: September, 1912, to August, 1913.....	18
Cotton stocks on specified dates.....	18
Table 12.—Cotton on hand in manufacturing establishments and in independent warehouses and other public storage places at the close of each month, by states: September, 1912, to August, 1913.....	19
Table 13.—Linter and foreign cotton on hand in manufacturing establishments and in independent warehouses and other public storage places at the close of each month: September, 1912, to August, 1913.....	20
Cotton exports.....	20
Exports of cotton, by customs districts.....	20
Table 14.—Exports of domestic raw cotton from the United States, by customs districts, for the year ending August 31: 1909 to 1913.....	20
Net receipts of cotton, by ports.....	20
Table 15.—Net receipts of raw cotton at principal cotton ports for the year ending August 31, for specified years: 1875 to 1913.....	20
Exports of cotton, by countries to which exported.....	21
Table 16.—Exports of domestic cotton—Value and quantity with distribution of the quantity by countries to which exported: 1821 to 1913.....	22
Exports of domestic cotton by months.....	23
Table 17.—Exports of domestic cotton, by countries to which exported, by months: September, 1912, to August, 1913.....	23
Exports of sea-island cotton.....	23
Table 18.—Exports of sea-island cotton, by countries to which exported, for the year ending August 31, for specified years: 1885 to 1913.....	23
Exports and imports of cotton manufactures.....	23
Table 19.—Exports of domestic manufactures of cotton, by countries to which exported, for the year ending June 30, 1913.....	24
Table 20.—Imports of cotton manufactures, by countries from which imported, for the year ending June 30, 1913.....	25
Table 21.—Value of exports and imports of cotton manufactures, by countries to which exported or from which imported, for the year ending June 30: 1900 and 1905 to 1913.....	26
Production, consumption, exports, and imports of cotton.....	27
Table 22.—Production, consumption, exports, and net imports of raw cotton, for the United States: 1790 to 1912.....	27

CONTENTS.

	Page.
WORLD'S CONSUMPTION AND STOCKS OF COTTON, AND TRADE IN COTTON AND ITS MANUFACTURES.....	29-30
Table 23.—World's active cotton spindles and mill consumption of raw cotton: 1900 and 1913.....	30
	Page.
United States.....	30
Europe.....	30
United Kingdom.....	31
Germany.....	32
Russia.....	32
France.....	32
Austria-Hungary.....	32
Italy.....	32
Other European countries.....	32
India.....	33
Japan.....	33
China.....	33
Brazil.....	33
Canada.....	34
Mexico.....	34
Other countries.....	34
Stocks of cotton in foreign countries.....	34
Table 24.—Number of spindles and stocks on hand in foreign cotton mills on August 31, by countries: 1909 to 1913.....	35
Table 25.—Stocks of cotton on hand at selected ports and cotton afloat to Great Britain and the Continent on the Friday nearest the end of August: 1909 to 1913.....	36
Stocks of cotton, August 31, 1913.....	36
Imports and exports of cotton and cotton manufactures.....	37
Table 26.—Imports and exports of raw cotton and of cotton manufactures, for selected countries.....	37
LOCALIZATION OF THE COTTON INDUSTRY IN THE UNITED STATES.....	39, 40
Table 27.—Counties in the United States having more than 100,000 cotton spindles each, arranged in order of number of spindles: 1913.....	39

DIAGRAMS.

	Page.
Diagram 1.—Proportion of supply of cotton for 1913 consumed in the United States, held in stocks, and exported, with distribution of exports by countries to which exported.....	8
Diagram 2.—Exports of domestic cotton for specified years: 1830 to 1913.....	23
Diagram 3.—Relative importance of the several countries in the production and consumption of cotton.....	31

MAPS.

Map 1.—Classification of states according to the quantity of cotton consumed, 1913.....	13
Map 2.—Classification of counties according to the number of cotton spindles, 1913.....	38

LETTER OF TRANSMITTAL.

DEPARTMENT OF COMMERCE,
BUREAU OF THE CENSUS,
Washington, D. C., November 1, 1913.

SIR:

I have the honor to transmit herewith Census Bulletin 117, which is a report on the supply and distribution of cotton in the United States for the year ending August 31, 1913. The statistics were collected and compiled under the supervision of Mr. William M. Steuart, chief statistician for manufactures, assisted by Mr. H. J. Zimmerman.

The report is presented in two divisions: (1) The supply of cotton in the United States for the year ending August 31, 1913, and the distribution of the same, together with statistics of spindles, cotton consumed, cotton on hand, and imports and exports of cotton and cotton goods, including comparative figures for previous years; and (2) the world's spindles and consumption of cotton for 1900 and 1913, together with statistics of the trade in cotton and cotton manufactures for selected countries, and of cotton on hand in manufacturing establishments and at ports in foreign countries. Information is also presented in regard to the localization of the cotton manufacturing industry in the United States.

Prior to 1913 the bureau issued four reports each year, showing the supply and distribution of cotton for the periods ending with October, December, February, and August. In conformity with the act of Congress approved July 22, 1912, twelve reports were issued during the year ending August 31, 1913, giving for each month statistics of the quantity of cotton consumed, the quantity on hand in manufacturing establishments and in independent warehouses and other public storage places, the quantity imported, the quantity exported, and the number of active consuming cotton spindles. The statistics of imports show the countries of production, and those of exports the countries to which exported. The present report, which forms the complement to the report on production compiled from the returns of the ginners, gives the aggregate of the figures included in the preliminary statements and covers the ninth consecutive year for which statistics of cotton consumed and cotton stocks have been collected and published by this bureau.

Very respectfully,



Director of the Census.

HON. WILLIAM C. REDFIELD,
Secretary of Commerce.

SUPPLY AND DISTRIBUTION OF COTTON IN THE UNITED STATES.

GENERAL SUMMARY.

Table 1 summarizes under certain general headings the statistics for the supply of cotton in the United

States and for the distribution of the supply for the year ending August 31, giving comparative data from 1906 to 1913, inclusive.

TABLE 1.—SUPPLY AND DISTRIBUTION OF COTTON IN THE UNITED STATES, FOR YEARS ENDING AUGUST 31: 1906 TO 1913.

[Quantities are given in running bales, except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. Linters are included.]

	1913	1912	1911	1910	1909	1908	1907	1906
SUPPLY.								
Aggregate.....	16,225,734	17,896,226	13,873,423	12,188,021	15,312,885	13,358,707	15,025,720	13,047,219
Cotton on hand at beginning of year, total.....	1,776,885	1,375,031	1,040,040	1,483,585	1,236,058	1,514,567	1,349,139	1,934,548
In manufacturing establishments, total.....	870,646	542,101	533,232	907,097	594,184	1,016,738	680,471	776,801
In cotton-growing states.....	241,011	101,114	121,349	186,458	112,471	311,307	184,060	232,028
In all other states.....	629,035	441,077	411,883	720,639	481,713	705,431	496,411	543,873
In independent warehouses and other public storage places.....	556,239	432,840	306,808	325,099	444,626	388,919	668,608	1,157,747
Elsewhere (estimated).....	350,000	400,000	200,000	251,389	197,248	108,910		
Net imports.....	225,460	229,268	231,191	151,305	165,451	140,869	202,733	133,464
Ginnings.....	14,159,078	16,068,936	12,384,248	10,350,978	13,418,144	11,527,833	13,097,992	10,656,498
To balance distribution.....	64,311	222,901	217,944	202,063	493,232	175,438	375,856	322,700
DISTRIBUTION.								
Aggregate.....	16,225,734	17,896,226	13,873,423	12,188,021	15,312,885	13,358,707	15,025,720	13,047,219
Cotton exported.....	8,800,966	10,681,758	7,781,414	6,339,028	8,574,024	7,573,349	8,503,265	6,763,041
Cotton consumed, total.....	5,786,330	5,367,583	4,704,978	4,798,953	5,240,719	4,539,030	4,984,936	4,900,279
In cotton-growing states.....	2,960,518	2,712,223	2,328,487	2,292,333	2,553,797	2,187,096	2,410,993	2,373,577
In all other states.....	2,825,812	2,655,360	2,376,491	2,506,620	2,686,922	2,351,934	2,573,943	2,535,702
Cotton destroyed by fire.....	40,000	70,000	12,000	10,000	14,557	10,210	22,952	25,760
Cotton on hand at end of year, total.....	1,598,438	1,776,885	1,375,031	1,040,040	1,483,585	1,236,058	1,514,567	1,349,139
In manufacturing establishments, total.....	778,158	570,646	542,191	533,232	907,097	594,184	1,016,738	680,471
In cotton-growing states.....	234,509	241,611	101,114	121,349	186,458	112,471	311,307	184,060
In all other states.....	543,649	629,035	441,077	411,883	720,639	481,713	705,431	496,411
In independent warehouses and other public storage places.....	495,280	556,239	432,840	306,808	325,099	444,626	388,919	668,608
Elsewhere (estimated).....	325,000	350,000	400,000	200,000	251,389	197,248	108,910	

For the year ending August 31, 1913, the supply of cotton in the United States amounted to 16,225,734 bales. The largest amount shown for any year covered by the table was 17,896,226 bales for 1912, and the smallest amount 12,188,021 bales for 1910. The large supply for 1912 was due to the magnitude of the crop of 1911, while that for 1913 was due to the size of the crop of 1912, which was the second largest in the history of the country. It was also due to some extent to the increased stocks carried forward from the preceding year. The differences in the supply of cotton for the years shown practically represent the variations in the crops produced in the United States, since the differences in the stocks carried forward and in the imports are too small to affect the total materially.

Of the total supply of cotton for 1913, as shown in the table, 5,826,330 bales, or 35.9 per cent, including the quantity destroyed by fire, were consumed in this country, and 8,800,966 bales, or 54.2 per cent, were exported, while 1,598,438 bales, or 9.9 per cent, remained in the country at the close of the year. Of the supply for the preceding year, 30.4 per cent was

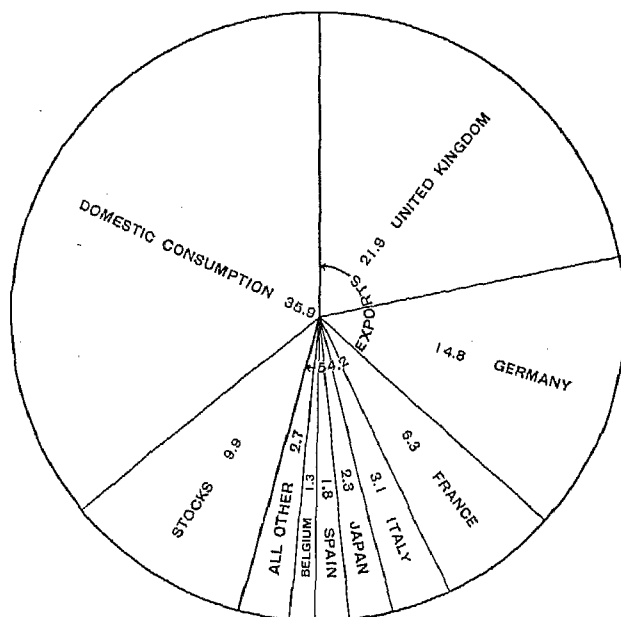
consumed at home, 59.7 per cent was exported, and 9.9 per cent remained in the country at the close of the year, while for 1910 the proportions were 39.5, 52, and 8.5 per cent, respectively.

The mill consumption of cotton in the United States for 1913 was the largest in the history of the country, exceeding that for 1912, the next largest, by 418,747 bales, and exceeding the average for the seven years preceding 1913 by 851,253 bales. The exports during the year were 1,880,792 bales less than for 1912, but greater than for any other year.

The stocks of cotton in the United States at the close of August, 1913, amounted to 1,598,438 bales, compared with 1,776,885 bales on the corresponding date in 1912, 1,375,031 bales in 1911, 1,040,040 bales in 1910, and 1,483,585 bales in 1909. Those held by manufacturers amounted to 778,158 bales, a decrease of 92,488 bales from the quantity so held in 1912 and 238,580 bales less than the quantity held in 1907 (1,016,738 bales), which was the largest amount for any year since the inauguration of these reports. On the basis of the consumption during the past year, the

stocks held by manufacturers August 31, 1913, represent about a seven weeks' supply for the American cotton mills.

DIAGRAM 1.—Proportion of supply of cotton for 1913 consumed in the United States, held in stocks, and exported, with distribution of exports by countries to which exported.



METHOD OF COLLECTING AND ASSEMBLING DATA.

The data relative to cotton ginned have been collected by local agents of the Census Bureau, who canvassed the ginners and delinters. Information as to cotton consumed, stocks held by manufacturers, and stocks in independent warehouses and other public storage places has been secured by these same local agents in the cotton-growing states; in all other states it has been obtained by correspondence and by special agents who canvassed the important mill centers. Stocks at ports, generally known as "port stocks," were reported and are included as stocks held in manufacturing establishments, in independent warehouses, and by other holders, respectively. The statistics of imports and exports have been compiled by the Bureau of Foreign and Domestic Commerce, Department of Commerce.

The supply of cotton for the year comprises the stocks held at the beginning of the year, together with the net imports of cotton, the amount of cotton ginned, and the quantity of linters produced during the 12-month period.

The statistics indicating the distribution of the supply show the quantity of cotton used in manufactures during the year, the amount destroyed by fire, that exported, and stocks in the country at the close of the year. The total for stocks held is made up of the quantity in the possession of manufacturers, both in the cotton-growing states and in all other states, that held in independent warehouses and other public storage places, and the estimated amount in the hands

of other holders. As indicated above, the canvass for stocks held was limited to manufacturing establishments and independent warehouses and other public storage places.

In order to secure a comprehensive statement of the distribution of the supply of cotton, it is necessary to include an item showing stocks held elsewhere, that is, the quantity of baled cotton in the actual possession of merchants, buyers, cottonseed-oil mills, ginners, transportation companies, and producers. The number of these agencies which would have to be canvassed to ascertain the actual stocks is very large, although the proportion which these stocks form of the total supply is comparatively small. Furthermore, the time for collecting the data and compiling the statistics is limited. For these reasons it has been deemed inexpedient to canvass such holders. Full consideration, however, has been given to all the factors entering into the situation and the quantity of baled cotton so held has been estimated at 325,000 bales. This quantity, largely cotton from the crop of 1913 held in the state of Texas, while conjectural, is believed to approximate the facts closely.

The supply of cotton for the season of 1912-13, as computed from the stocks at the beginning of the year and the imports and the ginnings during the year, falls short by 64,311 bales of the total quantity consumed in manufacture, destroyed by fire, exported, and held as stocks at the end of the year, and this amount, which is less than one-half of 1 per cent of the total, is accordingly entered in the table under the heading, "To balance distribution."

It is to be expected that the figures for the total supply as thus computed will not equal those for the total distribution, as numerous conditions affect these data. Among the factors responsible for this difference may be named the following: (1) The inclusion of rebaled samples, commonly called "city crop," in the statistics of distribution; (2) the lack of uniformity on the part of manufacturers and others in returning stocks; and (3) an understatement by ginners and delinters of the quantity of cotton produced, due largely to their inability to make accurate estimates, at the time of the March canvass, of the quantity of cotton remaining to be ginned and of linters to be obtained from reginning cotton seed. It is impossible to state with any degree of accuracy how much any one or all of these factors contribute to the difference. The amount due to each no doubt varies in different seasons, but a considerable part of the difference between the figures for supply and those for distribution will always be attributable to the first-named cause. Between the time a bale of cotton leaves the ginnery and the time it reaches the consumer it is "sampled" a number of times—that is, small quantities of the fiber are extracted from the bale by suc-

cessive bidders for use in determining its grade and value. These samples, with other cotton from time to time separated from the original package, are rebaled, and the bales are counted in the statistics of exports, consumption, and stocks. Statistics of supply based upon an enumeration of the bales at the ginneries before any samples have been removed show, therefore, a smaller number of bales than the statistics of exports, consumption, and stocks on hand combined, although there is present in each case the same amount of cotton. The amount of this rebaled cotton varies in different seasons with the size of the crop and other conditions.

Where bales are mentioned in this report without the standard of weight being given, it will be understood that the quantities are expressed in running bales, counting round bales as half bales, that linters are included, and that foreign cotton has been reduced to equivalent 500-pound bales.

IMPORTS OF COTTON.

Practically the entire quantity of cotton consumed in the United States is produced in the country, the imports being a negligible quantity. In Table 2 statistics of the net imports of raw cotton, by countries from which imported, are shown for 1895 and 1900, and for each year from 1905 to 1913, inclusive.

TABLE 2.—*Net imports of raw cotton, by countries from which imported, for the year ending August 31, for specified years: 1895 to 1913.*

YEAR.	NET IMPORTS OF RAW COTTON (EQUIVALENT 500-POUND BALES).				
	Total.	Imported from—			
		Egypt.	United Kingdom.	Peru.	All other countries.
1913.....	225,460	182,238	8,071	10,300	24,851
1912.....	229,268	175,835	27,049	9,201	17,183
1911.....	231,191	183,786	9,717	10,221	27,467
1910.....	151,395	102,217	19,435	12,076	17,667
1909.....	165,451	123,985	15,722	13,508	6,236
1908.....	140,869	120,187	13,741	5,586	1,355
1907.....	202,733	169,731	22,493	8,564	1,945
1906.....	133,464	103,669	20,176	7,440	2,179
1905.....	130,182	108,283	14,723	5,941	1,235
1900.....	134,778	106,166	21,810	5,116	1,686
1895.....	99,399	59,864	36,213	2,335	987

The total quantity of cotton imported into the United States during the year ending August 31, 1913, amounted to 227,645 bales of 500 pounds each. Of this cotton the equivalent of 2,185 bales of 500 pounds each was reexported, leaving in the country 225,460

bales. During the past year monthly reports were published regarding the quantity of cotton imported, giving the country of production. The following table summarizes the statistics for each month.

TABLE 3.—*Total imports of cotton, by countries of production, for each month from September, 1912, to August, 1913, inclusive.*

MONTH.	IMPORTS OF FOREIGN COTTON (EQUIVALENT 500-POUND BALES.)						
	Total.	Produced in—					
		Egypt.	China.	Peru.	India.	Mexico.	All other countries.
Total for year ending Aug. 31, 1913.....	227,645	191,075	18,341	10,737	4,373	756	2,363
1912.							
September.....	8,930	7,710	106	630	433	21	30
October.....	10,571	6,522	3,042	567	345	58	37
November.....	9,452	7,905	471	867	151	3	55
December.....	24,846	21,548	1,730	1,481	.....	72	15
1913.							
January.....	52,022	47,098	3,132	1,586	44	160	2
February.....	34,039	29,899	2,457	1,367	.....	316	.....
March.....	27,889	23,028	1,051	946	2,505	97	282
April.....	20,776	16,377	3,082	797	.....	.....	520
May.....	13,820	11,764	518	461	1	.....	1,076
June.....	8,019	6,622	617	572	.....	.....	268
July.....	9,496	7,040	1,303	906	80	.....	158
August.....	7,785	5,553	832	557	814	29	.....

Nearly all of the cotton imported is produced in Egypt, 191,075 bales, or 83.9 per cent of the total, being of this origin. This cotton is used largely for mercerizing and in the manufacture of thread, knit goods, and machine lace. Chinese cotton was next in importance as regards quantity imported during the year, the amount being 18,341 bales, while Peruvian cotton, which, on account of its texture and appearance, is used for mixing with wool in the manufacture of woolen goods, ranked third, with 10,737 bales, and Indian cotton fourth, with 4,373 bales. Small quantities of cotton were also imported from a number of other countries, among which are Mexico, Santo Domingo, Haiti, Venezuela, Ecuador, and Colombia.

COTTON MANUFACTURING IN THE UNITED STATES.

Table 4 presents comparative statistics by states for the years 1909 to 1913 as to the number of cotton spindles, both total and active, the number of spindles consuming cotton mixed with other fibers, the quantity of domestic and foreign cotton consumed during the year ending August 31, and the quantity of domestic and foreign cotton held in manufacturing establishments on that date.

SUPPLY AND DISTRIBUTION OF COTTON, 1913.

TABLE 4.—SPINDLES, RAW COTTON CONSUMED, AND STOCKS HELD IN MANUFACTURING ESTABLISHMENTS, BY STATES: 1909 TO 1913.

[Quantities of cotton are given in running bales, except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. Linters are included.]

STATE.	Year ending August 31—	COTTON SPINDLES. ¹		Spindles consumed in cotton mixed with other fibers. ²	COTTON CONSUMED (BALES).			STOCKS IN MANUFACTURING ESTABLISHMENTS AT END OF YEAR (BALES).		
		Total.	Active.		Total.	Domestic.	Foreign.	Total.	Domestic.	Foreign.
United States.....	1913	32,149,617	31,519,766	454,733	5,786,330	5,553,401	232,929	778,158	698,179	79,979
	1912	31,532,679	30,578,528	500,208	5,367,583	5,159,920	207,663	870,646	785,870	84,776
	1911	30,803,662	29,522,507	456,242	4,704,978	4,529,548	175,430	542,191	490,767	51,424
	1910	28,929,093	28,266,862	.....	4,798,953	4,643,179	155,774	533,232	490,895	42,337
	1909	28,573,435	28,018,305	558,792	5,240,719	5,078,981	161,738	907,097	841,534	65,563
Alabama.....	1913	1,000,080	993,580	.....	299,924	299,626	298	23,859	23,832	27
	1912	985,968	960,410	.....	267,189	266,754	435	22,225	22,050	135
	1911	967,564	897,414	.....	247,179	246,693	486	11,081	10,968	113
	1910	986,239	935,329	.....	230,188	235,783	405	13,949	13,854	95
	1909	984,534	948,068	.....	250,380	250,140	240	18,511	18,354	157
Arkansas.....	1913	13,808	6,808	.....	7,895	7,895	.....	537	537	.....
	1912	13,674	6,674	.....	6,177	6,177	.....	994	994	.....
	1911	14,324	6,814	.....	6,523	6,523	.....	1,127	1,127	.....
	1910	15,279	13,754	.....	4,285	4,285	.....	975	975	.....
	1909	14,324	13,724	.....	6,325	6,325	.....	760	760	.....
California.....	1913	20,000	20,000	.....	21,713	21,661	62	3,630	3,630	.....
	1912	16,000	16,000	.....	18,780	18,524	256	3,643	3,643	.....
	1911	17,592	15,000	.....	13,375	12,413	962	2,433	2,258	385
	1910	16,442	16,442	.....	14,803	14,803	.....	2,320	2,320	.....
	1909	15,500	15,500	.....	14,574	14,555	19	1,165	1,165	.....
Connecticut.....	1913	1,308,650	1,276,832	45,998	145,477	123,754	21,723	46,926	39,342	7,584
	1912	1,307,907	1,249,593	44,076	142,745	122,995	19,750	40,075	31,321	8,754
	1911	1,270,071	1,257,827	45,230	128,091	113,958	15,033	35,840	24,210	11,636
	1910	1,232,232	1,279,416	.....	136,870	122,778	14,092	31,874	28,130	3,744
	1909	1,253,582	1,246,068	39,724	142,685	127,690	14,995	58,081	49,644	3,437
Georgia.....	1913	2,103,018	2,071,910	11,610	648,131	644,743	3,388	41,693	39,521	2,172
	1912	2,025,238	1,945,772	16,608	564,426	560,506	3,920	38,513	38,288	225
	1911	1,980,813	1,882,749	5,792	488,738	487,054	1,684	18,699	17,556	1,143
	1910	1,833,244	1,794,667	.....	496,951	493,624	3,327	22,373	21,288	985
	1909	1,831,714	1,797,484	15,612	540,818	538,686	2,132	33,204	31,527	1,677
Illinois.....	1913	52,824	50,957	3,000	37,091	37,045	46	3,604	3,591	13
	1912	48,444	48,444	3,000	27,831	27,802	29	3,582	3,573	9
	1911	43,404	43,404	600	16,598	16,530	68	1,103	1,091	12
	1910	41,032	39,240	.....	17,451	17,427	24	604	657	7
	1909	41,988	41,988	2,776	21,920	21,904	16	2,519	2,517	2
Indiana.....	1913	94,032	90,032	5,040	23,228	23,168	60	4,646	4,634	12
	1912	130,656	91,656	6,890	21,795	21,706	29	3,282	3,267	15
	1911	127,674	72,354	5,540	14,435	14,392	43	1,468	1,466	2
	1910	125,352	124,104	.....	21,612	21,609	3	2,028	2,014	14
	1909	128,856	128,856	8,004	31,280	31,280	.....	3,420	3,420	.....
Kansas.....	1913	10,400	10,400	.....	7,692	7,691	1	1,308	1,307	1
	1912	10,608	8,160	.....	4,457	4,457	.....	600	600	.....
	1911	10,600	.....	864	2,005	2,003	2	541	540	1
	1910	10,800	5,000	.....	2,457	2,457	.....	486	486	.....
	1909	10,708	10,708	1,440	5,146	5,146	.....	501	501	.....
Kentucky.....	1913	96,140	94,936	.....	26,710	26,710	.....	3,236	3,236	.....
	1912	93,628	92,424	.....	27,339	27,339	.....	3,780	3,780	.....
	1911	96,956	96,956	5,000	19,012	18,997	15	1,718	1,718	.....
	1910	85,044	85,044	.....	23,056	23,056	.....	2,353	2,353	.....
	1909	88,096	83,080	5,000	25,353	25,353	.....	3,555	3,555	.....
Louisiana.....	1913	86,095	36,683	.....	16,045	16,045	.....	320	320	.....
	1912	86,088	36,676	.....	15,151	15,151	.....	263	263	.....
	1911	86,588	37,670	.....	10,470	10,470	.....	206	206	.....
	1910	87,070	67,902	.....	10,910	10,910	.....	316	314	.....
	1909	89,152	69,152	.....	15,949	15,949	.....	324	324	.....
Maine.....	1913	1,096,986	1,078,394	11,952	175,271	172,774	2,497	27,769	26,582	1,187
	1912	1,052,674	1,047,466	16,376	166,550	164,394	2,156	30,074	29,085	989
	1911	1,066,552	1,040,932	13,168	151,565	149,899	1,666	25,004	23,568	1,436
	1910	1,037,176	1,028,680	.....	154,841	153,645	1,196	24,330	24,023	307
	1909	1,005,258	990,712	31,436	161,099	160,137	962	51,350	50,742	608
Maryland.....	1913	162,288	154,215	9,000	73,589	73,589	.....	4,608	4,608	.....
	1912	158,168	128,546	9,000	69,704	69,704	.....	6,092	6,092	.....
	1911	160,114	140,514	.....	57,892	57,892	.....	2,246	2,246	.....
	1910	153,010	141,966	.....	56,013	56,013	.....	1,645	1,645	.....
	1909	152,266	144,290	9,000	61,294	61,294	.....	2,339	2,339	.....
Massachusetts.....	1913	11,075,684	10,904,016	53,456	1,332,912	1,201,686	131,226	250,057	209,323	40,734
	1912	11,006,846	10,822,771	61,904	1,264,017	1,145,291	118,726	313,050	266,189	46,861
	1911	10,613,290	10,166,348	53,558	1,144,345	1,048,623	95,722	220,811	179,936	40,875
	1910	9,703,573	9,637,601	.....	1,228,813	1,146,664	82,149	209,852	186,206	23,646
	1909	9,688,637	9,575,461	57,560	1,321,572	1,231,779	89,793	355,474	315,970	39,504
Michigan.....	1913	15,096	15,000	3,316	7,351	7,298	53	1,788	1,788	.....
	1912	14,592	14,592	3,036	6,001	5,989	12	1,561	1,559	2
	1911	16,036	16,036	2,172	4,972	4,964	8	1,123	1,122	1
	1910	13,884	13,884	.....	5,991	5,989	2	1,810	1,807	3
	1909	15,876	15,876	2,680	4,534	4,534	.....	2,460	2,460	.....
Mississippi.....	1913	192,306	133,788	.....	33,292	33,292	.....	1,467	1,467	.....
	1912	191,022	132,766	.....	31,159	31,159	.....	2,230	2,230	.....
	1911	183,662	124,272	.....	25,719	25,719	.....	1,057	1,057	.....
	1910	185,280	160,864	.....	29,978	29,978	.....	1,500	1,500	.....
	1909	176,640	159,468	.....	37,522	37,522	.....	2,615	2,615	.....

¹ Statistics of spindles for 1910 relate to Dec. 31, 1909.² Statistics not available for 1910.

SUPPLY AND DISTRIBUTION OF COTTON, 1913.

TABLE 4.—SPINDLES, RAW COTTON CONSUMED, AND STOCKS HELD IN MANUFACTURING ESTABLISHMENTS, BY STATES: 1909 TO 1913—Continued.

[Quantities of cotton are given in running bales, except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. Linters are included.]

STATE.	Year ending August 31—	COTTON SPINDLES. ¹		Spindles consuming cotton mixed with other fibers. ²	COTTON CONSUMED (BALES).			STOCKS IN MANUFACTURING ESTABLISHMENTS AT END OF YEAR (BALES).		
		Total.	Active.		Total.	Domestic.	Foreign.	Total.	Domestic.	Foreign.
Missouri.....	1913	31,920	31,920	.....	21,863	21,863	.....	4,580	4,580	.....
	1912	31,840	31,840	4,059	19,868	19,864	4	2,926	2,926	.....
	1911	30,744	30,744	4,059	16,244	16,236	8	1,857	1,856	1
	1910	30,744	30,744	.....	15,038	15,014	24	1,991	1,989	2
1909	27,776	27,776	2,500	16,711	16,711	.....	2,289	2,289	.....
New Hampshire.....	1913	1,469,137	1,458,115	28,728	305,867	295,635	10,232	58,412	53,207	5,205
	1912	1,453,778	1,445,161	33,436	295,095	287,250	7,845	78,138	74,949	3,189
	1911	1,462,788	1,441,423	29,237	259,458	250,865	8,593	47,613	43,480	4,124
	1910	1,440,173	1,325,900	.....	265,501	260,055	5,446	30,145	30,201	2,854
1909	1,313,581	1,313,357	44,897	278,457	275,015	3,442	91,684	90,720	968	
New Jersey.....	1913	476,731	476,731	10,326	64,912	46,103	18,809	17,012	7,229	9,783
	1912	485,176	466,617	10,326	62,439	47,315	15,118	17,681	6,997	10,684
	1911	483,057	471,021	10,968	53,609	40,166	13,443	13,057	4,589	8,468
	1910	463,403	451,408	.....	52,853	38,534	14,319	10,147	6,161	3,986
1909	460,888	445,310	27,304	52,416	38,358	14,058	15,395	7,899	7,496	
New York.....	1913	956,595	922,341	60,907	227,813	224,786	3,027	23,006	22,704	302
	1912	925,576	833,670	67,905	205,191	202,545	2,646	30,166	29,675	491
	1911	963,969	905,264	33,400	182,068	179,789	2,279	16,992	16,520	442
	1910	970,445	962,841	.....	199,787	195,875	3,912	14,586	14,042	544
1909	942,521	931,525	103,380	218,780	215,069	3,711	31,384	30,427	957	
North Carolina.....	1913	3,593,999	3,565,261	5,360	876,359	867,831	8,528	69,575	67,236	2,339
	1912	3,403,996	3,337,253	6,700	824,476	816,297	8,179	83,400	81,220	1,820
	1911	3,353,706	3,216,195	6,160	696,987	691,317	5,670	27,127	25,497	1,630
	1910	3,062,061	2,958,235	.....	658,498	655,058	3,440	31,080	30,516	564
1909	3,010,367	2,934,124	5,452	756,677	753,460	3,217	52,188	51,773	415	
Ohio.....	1913	240	240	17,240	38,459	38,352	107	12,318	12,296	22
	1912	240	240	17,858	33,088	33,043	45	10,594	10,587	7
	1911	.....	.....	17,512	26,326	26,300	26	9,079	9,077	2
	1910	.....	.....	.....	28,304	28,377	17	7,500	7,589	1
1909	.....	.....	16,562	28,222	28,221	1	10,633	10,632	1	
Oklahoma.....	1913	5,712	5,712	.....	9,788	9,788	.....	772	772	.....
	1912	5,712	5,712	.....	7,918	7,918	.....	365	365	.....
	1911	5,712	5,712	.....	6,774	6,774	.....	431	431	.....
	1910	5,756	5,756	.....	6,397	6,397	.....	930	930	.....
1909	5,712	5,712	.....	5,269	5,269	.....	564	564	.....
Pennsylvania.....	1913	249,857	242,053	140,665	76,579	72,562	4,017	10,858	10,414	444
	1912	265,715	246,477	146,208	69,887	65,871	4,016	13,159	11,945	1,214
	1911	280,202	254,120	120,031	67,297	63,008	4,289	8,745	8,308	437
	1910	297,799	278,307	.....	66,885	62,298	4,587	8,288	7,682	606
1909	275,654	264,437	120,037	80,541	75,384	5,157	12,431	11,071	1,360	
Rhode Island.....	1913	2,533,380	2,464,790	3,340	239,060	213,696	25,364	67,832	59,046	8,786
	1912	2,552,743	2,458,650	5,424	229,365	208,685	20,680	70,339	61,714	8,625
	1911	2,526,995	2,499,175	5,364	218,034	196,336	21,698	49,315	41,378	7,937
	1910	2,412,272	2,371,777	.....	219,920	200,583	19,337	50,069	45,630	4,439
1909	2,399,440	2,361,009	7,340	230,425	209,816	20,609	77,815	69,895	7,920	
South Carolina.....	1913	4,536,353	4,409,886	1,400	775,851	773,759	2,092	59,088	58,859	1,099
	1912	4,327,178	4,272,598	1,892	731,318	728,505	2,813	66,550	65,273	1,277
	1911	4,187,317	4,098,621	2,700	618,698	615,685	3,013	25,132	22,664	2,468
	1910	3,833,901	3,760,891	.....	627,708	625,025	2,683	33,955	33,554	401
1909	3,819,149	3,715,894	.....	696,462	693,687	2,775	53,149	52,826	323	
Tennessee.....	1913	271,634	269,102	19,904	81,790	81,782	8	11,280	11,280	.....
	1912	254,278	247,474	17,306	73,441	73,395	46	8,835	8,835	.....
	1911	253,460	238,656	15,748	70,147	70,104	43	4,900	4,880	20
	1910	272,774	250,530	.....	70,229	70,217	12	5,640	5,640	.....
1909	272,856	253,762	25,828	69,653	69,653	.....	9,052	9,052	.....
Texas.....	1913	123,908	110,320	.....	58,354	58,354	.....	5,789	5,789	.....
	1912	114,352	97,556	.....	51,820	51,820	.....	3,311	3,311	.....
	1911	113,100	90,998	.....	41,310	41,310	.....	2,431	2,431	.....
	1910	108,778	100,854	.....	39,052	39,052	.....	1,723	1,723	.....
1909	106,528	98,604	.....	42,210	42,210	.....	3,097	3,097	.....
Vermont.....	1913	136,304	129,304	10,648	12,226	11,104	1,122	1,367	1,199	168
	1912	136,892	116,304	10,564	10,588	9,845	743	2,446	2,041	405
	1911	105,276	105,276	11,152	8,669	8,147	522	834	553	281
	1910	105,184	91,712	.....	10,441	9,721	720	647	519	128
1909	105,184	105,184	15,152	10,210	9,617	593	1,912	1,679	233	
Virginia.....	1913	426,920	426,920	1,044	95,064	95,064	.....	9,903	9,903	.....
	1912	414,148	407,548	2,128	86,177	86,177	.....	7,831	7,831	.....
	1911	372,816	357,816	3,308	77,702	77,700	2	4,770	4,770	.....
	1910	329,174	324,542	.....	70,689	70,657	32	4,154	4,154	.....
1909	315,676	311,644	4,018	84,176	84,176	.....	6,494	6,494	.....
Wisconsin.....	1913	2,160	2,160	2,304	10,239	10,239	.....	1,821	1,821	.....
	1912	2,112	2,112	2,304	8,979	8,979	.....	1,591	1,591	.....
	1911	1,920	1,920	1,968	7,639	7,635	4	1,475	1,475	.....
	1910	13,612	2,112	.....	7,401	7,384	17	1,914	1,912	2
1909	13,612	2,112	4,104	9,105	9,007	8	1,608	1,607	1	
All other states.....	1913	7,360	7,360	8,886	35,785	35,516	269	8,197	8,096	101
	1912	7,360	7,360	13,116	24,618	24,403	215	3,650	3,570	74
	1911	7,360	7,360	12,642	22,167	22,046	121	3,790	3,780	10
	1910	7,360	7,360	.....	19,941	19,911	30	4,998	4,989	9
1909	7,360	7,360	8,136	20,954	20,944	10	6,025	6,011	14	

¹ Statistics of spindles for 1910 relate to Dec. 31, 1909.

² Statistics not available for 1910.

Spindles.—The term "cotton spindles" is applied only to those designed primarily for spinning cotton, regardless of the character of the establishments in which located, and does not include those which consumed a mixture of cotton with other fibers. The number of cotton spindles returned as having been operated in the United States during the year ending August 31, 1913, as shown in Table 4, was 31,519,766, exceeding the number for the previous year by 941,238; or 3.1 per cent. In 1913, 629,851 spindles were returned as idle and as having consumed no cotton whatever during the year, as compared with 1,004,151 in 1912; this reduction indicates an improved condition of the industry. Of the idle cotton spindles reported in 1913, 208,301 were in plants not operated during the year and 421,550 in mills which consumed some cotton. The number of idle spindles included a small number of new spindles which had been installed before the close of the year but which had not been brought into service.

In the total number of cotton spindles, Massachusetts exceeds every other state, having 11,075,684, or 34.5 per cent of the total for the United States in 1913; South Carolina ranks second, with 4,536,353, or 14.1 per cent; North Carolina, third, with 3,593,999 spindles, or 11.2 per cent; Rhode Island, fourth; Georgia, fifth; New Hampshire, sixth; Connecticut, seventh; Maine, eighth; and Alabama, ninth. No other state reported as many as a million spindles. The states showing the largest gains during the year were South Carolina, North Carolina, and Georgia in the order named, the total gain for the three states representing 84.1 per cent of the net gain for the United States. Indiana, Kansas, New Jersey, Pennsylvania, Rhode Island, and Vermont all show losses in the total num-

ber of spindles, although there was no loss in active spindles in these states considered together. The losses in total number of spindles were due in some of these states to the dismantling of establishments which were idle the preceding year. Table 27, page 39, gives the total spindle capacity of all counties in the United States having more than 100,000 cotton spindles each, while on map 2, page 38, is indicated the classification of each county in the eastern part of the country according to the number of cotton spindles.

In addition to the spindles designed primarily to spin cotton, 454,733 spindles were returned in 1913 as having consumed raw cotton mixed with other fibers during the year. The corresponding numbers in 1912, 1911, and 1909 were 500,206, 456,242, and 558,792, respectively. The variation in the number of spindles so used is due to the fact that, in some establishments, spindles employed during one year in spinning cotton mixed with some other fiber use no raw cotton whatever during another year. The states reporting the largest numbers of spindles that consumed raw cotton mixed with other fibers are those which lead in the manufacture of woolen goods and of hosiery and knit goods. Of the total number of such spindles reported, 140,665, or 30.9 per cent, were returned from Pennsylvania; 60,907, or 13.4 per cent, from New York; 53,456 from Massachusetts; and 45,998 from Connecticut.

Ring and mule spindles.—Inasmuch as ring spindles consume about 50 per cent more fiber per spindle than mule spindles, it is interesting to know the number of each kind in use. The following table shows, by states, the number of active ring and mule cotton spindles in the United States in 1904, 1909, 1912, and 1913.

TABLE 5.—NUMBER OF ACTIVE RING AND MULE COTTON SPINDLES, BY STATES, FOR SPECIFIED YEARS: 1904 TO 1913.

STATE.	NUMBER OF ACTIVE COTTON SPINDLES.											
	1913			1912			1909 ¹			1904		
	Total.	Ring.	Mule.	Total.	Ring.	Mule.	Total.	Ring.	Mule.	Total.	Ring.	Mule.
United States.....	31,519,766	27,380,573	4,139,193	30,578,528	26,211,979	4,366,549	28,178,862	23,256,023	4,922,839	23,672,064	18,218,800	5,453,264
Alabama.....	993,580	986,180	7,400	960,416	952,216	8,200	913,503	909,587	3,916	772,727	765,727	7,000
Connecticut.....	1,276,832	857,836	418,996	1,249,593	847,134	402,459	1,276,416	832,830	446,586	1,208,715	715,739	492,976
Georgia.....	2,071,910	2,020,080	51,830	1,945,772	1,877,038	68,734	1,774,987	1,703,071	71,896	1,331,557	1,254,885	76,672
Illinois.....	50,957	36,824	14,133	48,444	32,444	16,000	39,240	23,240	16,000	32,000	16,000	16,000
Indiana.....	90,032	90,032	.....	91,656	91,656	.....	124,104	115,152	8,952	129,292	104,424	24,868
Kentucky.....	94,936	78,416	16,520	92,424	75,504	16,920	85,044	68,124	16,920	81,392	57,572	23,820
Louisiana.....	36,683	34,427	2,256	36,676	34,420	2,256	67,902	63,096	4,806	62,052	56,552	5,500
Maine.....	1,078,394	985,408	92,986	1,047,466	936,570	110,896	1,028,680	867,364	161,316	897,422	678,098	223,724
Maryland.....	154,215	154,215	.....	128,546	128,546	.....	133,302	133,302	.....	136,456	136,456	.....
Massachusetts.....	10,904,016	8,909,019	1,994,997	10,822,771	8,724,925	2,097,846	9,637,601	7,480,902	2,156,699	8,589,671	6,177,227	2,412,444
Mississippi.....	133,788	133,788	.....	132,766	132,766	.....	159,904	159,104	800	128,852	128,852	.....
Missouri.....	31,920	31,480	440	31,840	31,400	440	30,744	30,304	440	14,101	14,101	.....
New Hampshire.....	1,458,115	1,386,912	71,203	1,445,161	1,366,360	78,801	1,325,900	1,169,850	156,050	1,304,476	1,033,721	270,755
New Jersey.....	476,731	195,815	280,916	466,617	191,880	274,737	420,784	107,381	313,403	436,764	87,900	348,864
New York.....	922,341	724,716	197,625	833,670	637,500	196,170	962,841	547,512	415,329	789,520	364,304	425,216
North Carolina.....	3,565,261	3,480,085	79,176	3,337,253	3,268,573	68,680	2,958,235	2,886,453	71,782	1,916,339	1,836,315	80,024
Pennsylvania.....	242,053	142,996	99,057	246,477	135,760	110,717	278,307	139,092	139,245	280,907	146,396	134,511
Rhode Island.....	2,464,790	1,688,672	776,118	2,458,650	1,577,237	881,413	2,371,777	1,496,434	875,343	2,086,802	1,236,564	859,238
South Carolina.....	4,469,886	4,461,926	7,960	4,272,598	4,268,618	3,980	3,760,801	3,732,063	28,828	2,876,796	2,860,884	15,912
Tennessee.....	269,102	258,022	11,080	242,474	235,674	11,800	247,530	237,530	10,000	163,903	153,903	10,000
Texas.....	110,320	110,320	.....	97,556	97,556	.....	97,628	97,628	.....	68,170	68,170	.....
Vermont.....	129,304	119,104	10,200	116,304	106,104	10,200	91,712	75,872	15,840	108,028	80,312	27,716
Virginia.....	423,920	420,800	0,000	407,548	401,488	6,060	324,542	316,970	7,572	201,090	194,006	7,084
All other states.....	67,680	67,440	240	60,850	60,610	240	64,308	63,192	1,116	55,032	55,032	.....

¹In this table the figures for 1909 relate to the calendar year, whereas those for 1909 as shown in Table 4 relate to the year ending August 31.

Of the 31,519,766 active cotton spindles in the United States reported for 1913 only 4,139,193, or 13.1 per cent, were mule spindles. This compares with 4,366,549, or 14.3 per cent, in 1912; 4,922,839, or 17.5 per cent, in 1909; and 5,453,264, or 23 per cent, in 1904, showing a continuous decrease not only in the actual number but also and to a greater degree in the relative number. The tendency to displace mules with frames shows no diminution, as, during the past year, a number of establishments have followed this practice. Because of the ease with which ring spindles can be operated, manufacturers use frames rather than mules whenever it is practicable; in fact, new mules are seldom installed except when very fine filling yarns, soft-twisted knitting yarns, or very coarse yarns made from short-staple cotton or waste are to be spun. The use of mule spindles is largely confined to the New England States, which reported 81.3 per cent of the total number for the country in 1913, most of the remainder being in New York and New Jersey, only 182,722 being returned for the cotton-growing states. Since some yarns requiring special qualities can not be made satisfactorily by the use of ring spindles, there will always be a demand for mule spindles unless difficulties heretofore met with in the use of ring spindles can be overcome.

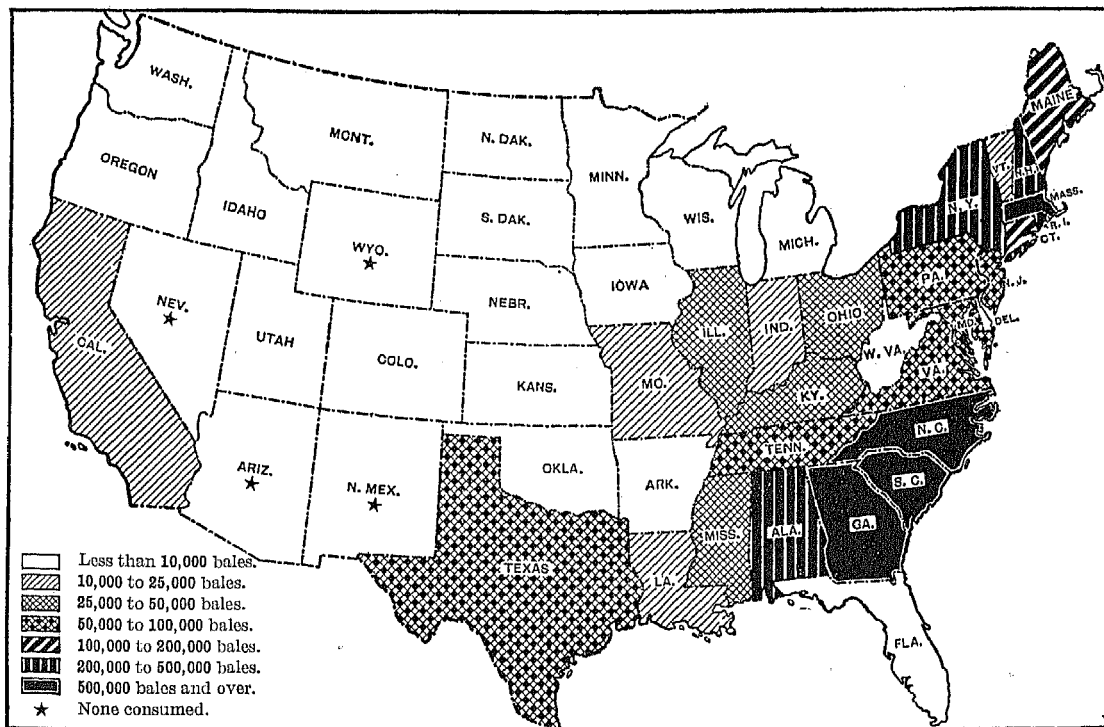
Cotton consumed.—The statistics for cotton consumed, presented in Table 4, cover all establishments reported as using raw cotton or linters, including those which use this raw material in the manufacture of

mattresses, batting, felts, and other articles, together with cotton mills, woolen mills, and knitting factories. The figures are expressed in running bales, except that round bales are counted as half bales and that foreign cotton has been reduced to equivalent 500-pound bales. The quantity of cotton consumed in the United States during the year ending August 31, 1913, was 5,786,330 bales, compared with 5,367,583 bales in 1912, 4,704,978 bales in 1911, 4,798,953 bales in 1910, and 5,240,719 bales in 1909. It is the largest amount ever consumed in a single year, being 418,747 bales larger than that in 1912, the next largest, and 545,611 bales larger than that in 1909, the third largest.

The average weekly consumption of cotton in the United States during the past year amounted to about 111,000 bales, compared with 103,000 bales in 1912, 90,000 in 1911, 92,000 in 1910, and 101,000 in 1909.

Massachusetts, with 1,332,912 bales, leads all the other states in the quantity of cotton consumed; North Carolina, with 876,359 bales, is second; South Carolina, with 775,851 bales, third; and Georgia, with 648,131 bales, fourth. The largest actual increase in the annual consumption of cotton shown for the period covered by the table is in the cotton-growing states. The consumption in North Carolina increased from 756,677 bales to 876,359 bales, or 15.8 per cent; in South Carolina, from 696,462 bales to 775,851 bales, or 11.4 per cent; and in Georgia, from 540,818 bales to 648,131 bales, or 19.8 per cent.

MAP 1.—CLASSIFICATION OF STATES ACCORDING TO THE QUANTITY OF COTTON CONSUMED: 1913.



In considering the gains shown for the period it should be borne in mind that 1909 was a year of exceptional activity and was marked by a larger consumption than any previous year or either of the two years following. A further consideration in this connection is the increase in the spinning of finer counts in this section of the country.

The importance of the different states as regards the quantity of cotton consumed during the year ending August 31, 1913, is indicated on map 1. On this map the states are classified according to the quantity of cotton and linters consumed, not only in cotton mills, but in all branches of manufacture. It shows those which consumed less than 10,000 bales each; those which consumed from 10,000 to 25,000 bales each; those which consumed from 25,000 to 50,000 bales each; those which consumed from 50,000 to 100,000 bales each; those which consumed from 100,000 to 200,000 bales each; those which consumed from 200,000 to 500,000 bales each; and those which consumed more than 500,000 bales.

Kinds of cotton used.—The statistics as to raw cotton consumed and stocks held in manufacturing establishments for 1911, 1912, and 1913, which are presented in Table 4 and which include both domestic and foreign cotton, are segregated in Table 6 so as to show the consumption of the different kinds of cotton and the amount of each kind held in manufacturing establishments for the United States as a whole and for the group of cotton-growing states and the group of all other states separately.

TABLE 6.—Quantity of the several kinds of raw cotton consumed and of stocks held in manufacturing establishments: 1911, 1912, and 1913.

[Quantities are given in running bales, except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. Linters are included.]

KIND AND LOCALITY.	RAW COTTON CONSUMED DURING YEAR ENDING AUGUST 31 (BALES).			STOCKS HELD IN MANUFACTURING ESTABLISHMENTS ON AUGUST 31 (BALES).		
	1913	1912	1911	1913	1912	1911
United States...	5,786,330	5,367,583	4,704,978	778,158	870,640	542,191
Domestic—						
Upland.....	5,195,614	4,820,827	4,258,750	619,200	709,495	398,065
Sea-island...	54,778	94,856	64,237	18,525	23,753	19,280
Linters.....	303,009	238,237	206,561	60,454	52,622	43,422
Foreign—						
Egyptian....	201,269	180,465	147,192	70,859	77,029	70,678
Peruvian....	10,341	8,539	8,903	1,044	1,482	1,456
Indian.....	2,412	6,842	9,793	673	3,806	3,909
Other.....	18,907	11,817	9,542	7,403	2,459	5,381
Cotton-growing states...	2,960,518	2,712,223	2,328,487	234,509	241,611	191,114
Domestic—						
Upland.....	2,834,732	2,609,300	2,230,225	210,883	224,730	83,103
Sea-island...	12,696	11,112	7,987	2,604	1,918	655
Linter.....	98,775	76,345	78,352	15,325	11,508	11,380
Foreign—						
Egyptian....	10,051	12,557	6,578	4,053	2,767	4,644
Peruvian....	6	—	—	—	—	—
Indian.....	475	255	2,092	353	4	222
Other.....	3,783	2,555	2,253	1,227	686	510
All other states...	2,825,812	2,655,360	2,376,491	543,649	629,035	441,077
Domestic—						
Upland.....	2,360,882	2,217,458	2,028,525	408,317	484,765	314,962
Sea-island...	42,082	83,744	56,250	15,801	21,837	18,625
Linters.....	204,234	161,892	127,209	45,129	41,114	31,442
Foreign—						
Egyptian....	191,218	167,908	140,614	66,806	74,262	66,034
Peruvian....	10,335	8,539	8,903	1,040	1,482	1,456
Indian.....	1,937	6,557	7,701	320	3,802	3,687
Other.....	15,124	9,202	7,289	6,176	1,773	4,871

Of the total consumption of cotton in the United States during the year ending August 31, 1913, 5,195,614 bales were upland, 54,778 bales sea-island, 232,929 bales foreign, and 303,009 bales linters. In the cotton-growing states the consumption was 2,960,518 bales, and in all other states 2,825,812 bales, 1913 being the second consecutive year in which the consumption in the cotton-growing states has exceeded that in all other states.

Nearly all of the cotton consumed in the United States is domestic upland cotton. The term "upland" is applied to all cotton produced in this country except sea-island cotton and linters, and includes the long-staple varieties which are constituting a larger proportion of the total production than formerly. The manufacturers in the cotton-growing states use very little sea-island or foreign cotton, having consumed only 27,011 bales of both kinds combined in 1913. In all other states the consumption of foreign cotton amounted to 218,614 bales, and of sea-island 42,082 bales. More than one-half of the sea-island cotton consumed in the United States was reported from Massachusetts and Rhode Island. North Carolina, New Jersey, and Georgia follow in the order of quantity used. Establishments engaged in the manufacture of thread and those which spin yarns designed for that purpose report the largest consumption of this kind of cotton.

A very large proportion of the foreign cotton consumed in the United States is Egyptian. In this country it is used principally for mercerizing and for other processes that give a high finish to cloth; in the manufacture, without dyeing, of balbriggan underwear and lace curtains in which the écreu shade is desired; and in the manufacture of sewing thread and other similar articles which require a long fiber of great strength and for which no other type of cotton except sea-island has yet proved suitable. Egyptian cotton is said to be freer from trash and short fibers than American cotton, and for this reason, to yield less waste in combing and carding. Rough Peruvian cotton is used, to some extent, for mixing with wool in the making of woolen textiles, while Indian and Chinese cotton are used, to a very limited extent, for mixing with the American upland cotton in the manufacture of the cheaper grades of goods.

"Linters," the short fiber obtained by the cotton-seed oil mills from reginning cotton seed before extracting the oil, enters into many lines of manufacture in which otherwise it would be necessary to use a better grade of cotton. It is used in upholstering and in the manufacture of mattresses, comforts, batting, cushions, wadding, and pads; for mixing with shoddy and for making low-grade yarns, wrapping twine, cheap rope, and lamp and candle wicks; for making absorbent cotton; and in the manufacture of gun cotton, niter powder, and writing paper. In the United States the greatest quantity is consumed in the

manufacture of mattresses, felts, and batting. The quantity of this cotton consumed during the year was 303,009 bales, compared with 238,237 bales in 1912, and 206,561 in 1911.

Growth of the cotton industry since 1840.—Table 7 shows the production and consumption of cotton in the United States and the number of active cotton spindles for specified years from 1840 to 1913.

TABLE 7.—PRODUCTION AND CONSUMPTION OF COTTON AND NUMBER OF ACTIVE COTTON SPINDLES IN THE UNITED STATES, BY SECTIONS, FOR SPECIFIED YEARS: 1840 TO 1913.

[The quantities are given in running bales, except those for production in 1850, 1860, and 1870, which are in equivalent 400-pound bales, and those for consumption from 1840 to 1870, and for foreign cotton which are in equivalent 500-pound bales. Linters are included.]

YEAR.	Cotton produced (bales). ¹	COTTON CONSUMED (BALES).				ACTIVE COTTON SPINDLES.			
		United States.	Cotton-growing states.	New England states.	All other states.	United States.	Cotton-growing states.	New England states.	All other states.
1913	14,000,863	5,786,330	2,960,518	2,210,813	614,909	31,519,766	12,227,226	17,311,451	1,981,089
1912	16,109,340	5,387,583	2,712,223	2,108,360	547,000	30,578,628	11,582,869	17,139,945	1,855,714
1911	11,965,962	4,704,073	2,328,487	1,911,092	465,399	29,522,597	11,084,623	16,610,981	1,626,993
1910	10,386,209	4,798,953	2,292,333	2,016,386	490,234	28,266,862	10,494,112	15,785,080	2,037,664
1909	13,432,131	5,240,719	2,553,797	2,144,448	542,474	28,018,305	10,429,200	15,591,851	1,997,254
1908	11,325,882	4,539,090	2,187,096	1,894,835	457,159	27,508,422	10,200,093	15,329,333	1,975,186
1907	13,305,265	4,984,936	2,410,993	2,073,355	509,588	26,375,101	9,527,904	14,912,517	1,934,710
1906	10,725,602	4,909,279	2,373,577	2,059,900	476,802	25,250,096	8,994,898	14,407,580	1,847,648
1905	13,697,310	² 4,278,980	² 2,140,151	² 1,753,282	² 385,547	23,687,495	7,631,331	14,202,971	1,853,193
1900	9,507,786	3,873,165	1,523,168	1,009,498	440,499	19,472,232	4,367,688	13,171,377	1,936,107
1890	7,472,511	2,515,400	538,895	1,502,177	477,337	14,384,180	1,870,288	10,934,297	1,879,595
1880	6,755,359	³ 1,570,344	³ 188,748	³ 1,129,498	³ 252,008	³ 10,659,435	³ 561,360	³ 8,632,087	³ 1,459,988
1870	3,011,096	706,616	68,702	551,250	176,064	7,132,415	327,871	5,498,308	1,306,230
1860	5,387,052	845,410	93,553	567,403	184,454	5,235,727	324,052	3,858,962	1,052,713
1850	2,469,093	575,506	75,140	430,603	66,763	3,998,022	264,571	2,658,536	774,915
1840	2,063,915	236,525	71,000	158,708	6,817	2,284,631	180,927	1,597,394	506,310

¹ Relates to crop of preceding year.

² Does not include foreign cotton.

³ Cotton mills only.

These statistics of consumption and active spindles measure the growth of cotton manufacturing. Since 1890 the number of spindles in the United States has more than doubled, while the quantity of cotton consumed in 1913 was the largest returned for a single year, being 5,786,330 bales, more than twice as large as that for 1890.

The most significant fact brought out by this table is the rapid growth of the industry in the cotton-growing states. In 1880 there were only 561,360 active cotton spindles in these states, and the quantity of cotton consumed was 188,748 bales. In 1913 12,227,226 spindles were operated, and the quantity of cotton consumed was 2,960,518 bales. Between 1900 and 1913 the consumption in these states increased 94.4 per cent, while in the New England states it increased only 15.8 per cent, and in all other states 39.6 per cent. The consumption of cotton in 1900 in the cotton-growing states amounted to 39.3 per cent of the total for the country, compared with 49.3 per cent for the New England states, and 11.4 per cent for all other states. For the year ending August 31, 1913, the consumption of cotton in the cotton-growing states formed 51.2 per cent of the total for the country; that in the New England states, 38.2 per cent; and that in all other states, 10.6 per cent. Of the total number of spindles operated during 1913, 38.8 per cent were in the cotton-growing states, 54.9 per cent in the New England states and 6.3 per cent in all other states.

A very large proportion of the cotton produced in the United States is exported. The latest available infor-

mation concerning the industry in the important manufacturing countries, including statistics of spindles and of cotton consumed, is presented on pages 29 to 36. In addition, statistics of imports and exports of raw cotton and of cotton manufactures for the most important countries are presented on page 37.

STOCKS OF COTTON.

The quantity of baled cotton held in the United States on August 31, 1913, as shown in Table 1, was 1,598,438 bales, as compared with 1,776,885 bales in 1912, 1,375,031 bales in 1911, 1,040,040 bales in 1910, 1,483,585 bales in 1909, 1,236,058 bales in 1908, and 1,514,567 bales in 1907. The amount reported in 1913 was the largest reported for any year, with the exception of 1912, since these statistics were first collected by the Bureau of the Census, in 1905. Considering the fact that the crops of 1911 and 1912 were the two largest ever produced in the United States, it seems remarkable that there was not more cotton on hand on August 31, 1913. The demands for domestic consumption and for export were so large, however, that the amount held on that date was not greatly above the average. A considerable part of the cotton on hand August 31, 1913, was from the crop of 1913, a larger amount of which was ginned prior to September 1 than of any other crop. Comparative statistics of stocks held in manufacturing establishments on August 31 are shown in Table 4, by states, for the years 1909 to 1913. These stocks amounted to 778,158 bales in 1913, 870,646 bales in 1912, 542,191 bales in 1911, 533,232 in 1910, and 907,097 in 1909, while in 1907

they amounted to 1,016,738, the largest amount for any year since the inauguration of these reports by the Census Office.

The quantities of cotton held on August 31 in independent warehouses and in other public storage places and "elsewhere," as shown in Table 1, vary considerably from year to year. The comparatively large amounts thus held in the last three years were due chiefly to the extraordinarily large ginnings prior to September 1 in Texas. Stocks held in public storage places on August 31, 1913, amounted to 495,280 bales, Texas alone returning 240,468 bales, or nearly one-half of the total for the country.

PERIODICAL REPORTS.

Statistics concerning the quantity of cotton consumed, imported, exported, and on hand, and the number of active consuming cotton spindles are now collected and published monthly by the Bureau of the Census. This work is done in compliance with an act of Congress approved July 22, 1912. Prior to the enactment of this law the bureau collected the sta-

tistics of cotton consumed and cotton on hand for periods ending with August, October, December, and February.

These statistics are auxiliary to those of cotton ginned, and are intended to furnish reliable information as to the movement of cotton, which will be of value to the producer in disposing of his cotton and in planning for the succeeding crop, as well as to the manufacturer in purchasing his supplies.

Monthly reports of cotton consumed, imported, exported, and on hand.—The collection and publication of the monthly reports of cotton consumed, imported, exported, and on hand and of active consuming cotton spindles, authorized in the act approved July 22, 1912, was inaugurated with the beginning of the cotton year, September 1, 1912. Table 8 presents these statistics for each month during the year ending with August, 1913, showing separately for the groups of cotton-growing states and all other states the quantities of cotton consumed and on hand in manufacturing establishments and the number of active cotton spindles.

TABLE 8.—COTTON CONSUMED, IMPORTED, EXPORTED, AND ON HAND, AND ACTIVE CONSUMING COTTON SPINDLES, BY MONTHS: SEPTEMBER, 1912, TO AUGUST, 1913.

[Quantities are given in running bales, except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. Linters are included.]

MONTH.	COTTON CONSUMED (BALES).			COTTON ON HAND (BALES).			Cotton imported (bales).	Cotton exported (bales).	ACTIVE COTTON SPINDLES (NUMBER).			
	Total.	In cotton-growing states.	In all other states.	In manufacturing establishments.		In independent warehouses and other public storage places.			Total.	In cotton-growing states.	In all other states.	
				In cotton-growing states.	In all other states.							
1912.												
September.....	436,161	223,541	212,020	205,314	508,592	1,386,346	8,930	729,859	29,775,039	11,502,636	18,272,403	
October.....	513,060	253,468	250,002	450,851	458,138	2,821,315	10,571	1,515,746	30,030,733	11,582,060	18,448,673	
November.....	475,511	248,308	232,203	763,040	577,972	3,370,715	9,452	1,734,087	30,072,579	11,610,173	18,462,406	
December.....	445,275	225,178	220,097	940,706	764,499	3,235,364	24,846	1,301,394	30,153,747	11,619,899	18,533,848	
1913.												
January.....	533,743	271,504	262,239	917,712	995,281	2,657,048	52,022	900,931	30,359,843	11,740,465	18,619,378	
February.....	471,213	239,061	231,252	897,007	1,084,294	2,250,899	34,039	530,911	30,536,486	11,757,852	18,778,634	
March.....	485,573	250,213	235,390	849,573	1,081,949	1,831,316	27,889	372,073	30,575,028	11,853,142	18,721,886	
April.....	503,990	261,327	242,663	746,308	1,000,082	1,386,873	20,776	534,581	30,572,108	11,911,333	18,660,775	
May.....	509,320	261,389	247,981	612,371	892,450	938,854	13,820	468,929	30,556,177	11,918,309	18,637,868	
June.....	466,512	243,093	223,419	492,593	792,722	660,237	8,019	223,921	30,046,121	11,954,524	18,091,597	
July.....	486,992	248,455	238,537	302,967	666,987	410,887	9,495	140,710	30,022,654	11,969,736	18,052,918	
August.....	458,980	239,091	219,889	234,509	543,649	495,280	7,785	257,168	30,602,282	11,973,633	18,628,649	

The quantity of cotton consumed, as shown in the table, varies from month to month. The larger amounts for some months, however, may be accounted for, in part, by the fact that a number of establishments, among them some of the largest in the country, report for a four-week or a five-week period instead of for the calendar month, so that the figures for these months cover a five-weeks' consumption in the case of a considerable number of establishments. The consumption both in the cotton-growing states and in all other states shows a general increase during the 12-month period covered by the table. The number of active cotton spindles has shown for each month a gain over the preceding month in the cotton-growing states, while in all other states the same condition prevailed from September to February. The

smaller numbers for June and July were due, in part, to the closing down of some establishments for extensive repairs.

The stocks of cotton on hand naturally increased during the ginning season, reaching their highest point for the manufacturing establishments in December in cotton-growing states and in February in all other states, while the quantity in independent warehouses and other public storage places was largest at the close of November. This table does not show the quantity of cotton held "elsewhere," that is, cotton other than that in manufacturing establishments and in public storage places. The American crop is handled by a large number of agencies. Roughly, there are 1,700,000 growers, 30,000 ginner, 2,600 public storage places, 2,100 cotton-consuming

establishments, and numerous transportation companies, local buyers, merchants, and others who handle more or less cotton during the season. In order to obtain complete statistics concerning the stocks of cotton, it would be necessary to consult all of these. It is manifestly impracticable to obtain monthly reports from so many agencies, and the Bureau of the Census has therefore adopted the plan of securing individual reports of the quantity of cotton on hand

at the end of each month in manufacturing establishments and in independent warehouses, compresses, and other public storage places.

Comparative data for specified periods.—The following table shows comparative statistics of the supply and distribution of cotton in the United States as reported for the six-month period ending with February and two-month periods ending with October, December, and February.

TABLE 9.—SUPPLY AND DISTRIBUTION OF COTTON IN THE UNITED STATES FOR SPECIFIED PERIODS: 1910 TO 1913.

[Quantities are given in running bales, except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. Linters are included.]

PERIOD.	SUPPLY OF COTTON (BALES).				DISTRIBUTION OF COTTON (BALES).									
	Total.	Stocks held at beginning of period.	Ginnings. ¹	Imports less re-exports.	Total.	Exports.	Consumption.		Stocks at end of period.					
							In cotton-growing states.	In all other states.	In cotton-growing states.	In all other states.	In manufacturing establishments.	In independent warehouses and other public storage places.	Elsewhere.	
Sept. 1 to end of Feb.:														
1912-13.....	15,276,489	1,776,885	13,359,928	139,676	15,276,489	6,803,528	1,456,950	1,418,013	897,007	1,084,294	2,250,800	1,365,798		
1911-12.....	16,781,751	1,375,031	15,338,052	68,668	16,781,751	8,007,814	1,294,509	1,273,596	732,382	809,673	2,280,995	2,382,692		
1910-11.....	12,788,572	1,040,040	11,612,951	135,581	12,788,572	6,337,068	1,186,347	1,215,685	583,512	941,440	1,787,006	730,614		
1909-10.....	11,575,330	1,483,585	9,997,967	93,778	11,575,330	4,599,682	1,232,689	1,306,710	668,998	1,024,100	1,903,350	830,801		
Sept. 1 to Oct. 31:														
1912.....	9,934,611	1,776,885	8,138,287	19,439	9,934,611	2,245,605	476,099	472,222	450,851	458,138	2,821,315	3,009,481		
1911.....	10,585,259	1,375,031	9,199,608	10,620	10,585,259	2,433,909	393,334	384,050	417,561	365,619	2,756,531	3,834,855		
1910.....	8,045,904	1,040,040	6,992,942	12,982	8,045,904	2,003,389	357,007	393,533	355,476	340,048	2,428,136	2,168,285		
Nov. 1 to Dec. 31:														
1912.....	10,812,187	6,739,785	4,038,183	34,219	10,812,187	3,126,081	468,486	452,300	940,706	764,499	3,235,364	1,824,751		
1911.....	11,735,797	7,373,966	4,346,007	15,734	11,735,797	2,916,395	431,677	427,877	681,701	651,782	3,067,041	2,959,234		
1910.....	9,077,214	5,291,945	3,738,562	46,707	9,077,214	2,529,596	408,151	414,980	610,569	741,800	3,067,221	1,304,817		
Jan. 1 to end of Feb.:														
1913.....	8,034,796	6,765,320	1,183,458	89,018	8,034,796	1,431,842	511,465	493,491	897,007	1,084,294	2,250,800	1,365,798		
1912.....	9,794,509	7,959,848	1,792,347	42,314	9,794,509	2,657,510	469,588	461,669	732,382	809,673	2,280,995	2,382,692		
1911.....	6,681,826	5,724,487	881,447	75,892	6,681,826	1,804,983	421,099	407,172	583,512	941,440	1,787,006	730,614		

¹ The total production of linters for the crop is ascertained at the March 1 canvass, and the entire amount is included only for the specified periods ending with February.

The total supply of cotton for each period was ascertained by combining the stocks of cotton at the beginning of the period with the ginnings and net imports during the period. The distribution shows the quantity of cotton consumed during the period, the amount exported and that held in manufacturing establishments and in independent warehouses and other public storage places. The difference between the sum of these items and the total supply is taken as measuring the quantity of stocks held elsewhere.

The supply of cotton for the six-month period ending with February, 1913, amounted to 15,276,489 bales, as compared with 16,781,751 bales in 1912, 12,788,572 bales in 1911, and 11,575,330 bales in 1910. Of the total supply for the six months ending with February, 1913, 6,803,528 bales, or 44.5 per cent, were exported;

2,874,963 bales, or 18.8 per cent, were consumed in the United States; and 5,597,998 bales, or 36.7 per cent, remained in the country at the close of the period.

Cotton consumed during each month, by states.—The following table presents statistics as to the monthly consumption of cotton in the United States in the two divisions of the country and in each of the important cotton-consuming states from September, 1912, to August, 1913.

As previously stated, the monthly totals of cotton consumed are affected somewhat by some establishments reporting for a period of four or five weeks instead of for the calendar month. The large amounts returned for October and January may be ascribed to this practice.

SUPPLY AND DISTRIBUTION OF COTTON, 1913.

TABLE 10.—COTTON CONSUMED DURING EACH MONTH, BY STATES: SEPTEMBER, 1912, TO AUGUST, 1913.

[Quantities are given in running bales, counting round as half bales, except foreign cotton which is in equivalent 500-pound bales. Linters are included.]

STATE.	COTTON CONSUMED (BALES) DURING—												
	Total.	1912				1913							
		Septem-ber.	October.	Novem-ber.	Decem-ber.	January.	Febru-ary.	March.	April.	May.	June.	July.	August.
United States.....	5,786,330	436,161	513,060	475,611	445,275	533,743	471,213	485,573	503,990	509,320	466,512	486,992	458,980
Cotton-growing states.....	2,960,518	223,541	253,458	243,308	225,178	271,504	230,961	250,213	261,327	261,389	243,093	248,455	239,091
All other states.....	2,826,812	212,620	259,602	232,203	220,097	262,239	231,252	235,360	242,663	247,931	223,410	238,537	219,889
Alabama.....	209,924	22,569	26,583	23,567	22,423	28,675	23,835	24,696	25,696	27,201	24,204	25,332	25,143
Connecticut.....	145,477	11,264	14,020	11,932	11,851	13,662	12,025	11,545	12,357	12,603	10,983	11,410	11,816
Georgia.....	648,131	47,822	54,504	52,881	49,458	59,647	53,153	54,023	56,843	58,280	52,971	54,867	53,682
Maine.....	175,271	12,270	15,961	14,205	13,160	16,388	14,688	15,206	14,874	15,614	14,043	14,384	14,478
Maryland.....	73,589	5,327	6,483	6,046	5,850	6,846	5,905	6,531	6,731	6,145	5,796	6,085	5,844
Massachusetts.....	1,332,912	99,379	121,724	112,530	105,778	130,246	106,620	111,164	115,734	114,851	101,674	111,345	101,858
New Hampshire.....	305,897	23,119	29,789	24,348	23,110	26,682	27,602	25,175	23,365	29,522	25,623	27,754	19,775
New Jersey.....	64,912	4,872	5,586	4,812	5,131	5,691	5,097	5,391	5,801	5,841	5,379	5,670	5,741
New York.....	227,813	18,031	20,006	17,554	17,487	19,628	18,574	19,225	19,905	19,544	18,629	20,161	19,036
North Carolina.....	870,359	60,582	73,097	73,128	64,543	80,183	72,181	74,923	77,980	77,253	72,447	73,428	70,614
Pennsylvania.....	70,579	6,601	6,787	5,971	5,844	6,574	6,322	6,392	6,916	6,552	6,188	6,145	6,287
Rhode Island.....	239,060	17,192	21,712	19,476	18,116	22,049	19,651	19,917	21,054	20,436	19,790	20,437	19,230
South Carolina.....	775,851	59,230	66,539	62,201	60,498	70,374	62,585	66,173	69,349	68,276	64,759	65,304	66,503
Tennessee.....	81,790	6,003	7,666	6,775	6,413	7,570	5,799	7,018	7,293	6,875	6,583	6,977	6,818
Virginia.....	95,064	6,986	8,444	8,253	6,881	8,837	7,802	7,958	8,720	8,336	7,920	7,701	7,226
All other states.....	367,731	28,914	34,150	31,742	28,732	30,691	29,365	30,230	31,366	31,991	29,523	30,092	30,929

The monthly consumption of linter cotton and of foreign cotton is given in Table 11.

TABLE 11.—Linter and foreign cotton consumed during each month: September, 1912, to August, 1913.

[Linter cotton is given in running bales and foreign cotton in equivalent 500-pound bales.]

MONTH.	LINTER COTTON CONSUMED (BALES).			FOREIGN COTTON CONSUMED (BALES).		
	United States.	Cotton-growing states.	All other states.	United states.	Cotton-growing states.	All other states.
Total.....	303,000	98,775	204,234	232,920	14,315	218,604
1912.						
September.....	24,579	8,548	16,031	18,890	1,202	17,687
October.....	29,182	10,053	19,129	23,298	1,338	21,960
November.....	26,711	9,423	17,288	18,180	1,022	17,157
December.....	22,706	8,360	14,346	20,168	1,299	18,869
1913.						
January.....	24,049	9,183	14,866	24,738	1,360	23,378
February.....	23,118	7,763	15,355	21,379	1,387	19,992
March.....	23,118	7,350	15,768	20,617	1,245	19,372
April.....	25,484	7,104	18,380	21,075	1,315	19,760
May.....	27,327	7,843	19,484	19,636	1,084	18,552
June.....	25,355	7,372	17,983	15,837	1,220	14,617
July.....	24,750	7,486	17,264	15,482	987	14,495
August.....	26,630	8,290	18,340	13,615	836	12,779

Cotton stocks on specified dates.—The following table distributes, by states, the cotton on hand in manufacturing establishments and in independent warehouses and other public storage places at the close of each month during the year ending August 31, 1913. It does not include cotton in transit, in private warehouses, gineries, and oil mills, or that in possession of buyers, merchants, and producers.

The segregation of stocks shown in the statement is based upon location rather than ownership. For instance, cotton in warehouses owned and operated in conjunction with the mills is classed as in manufacturing establishments, while cotton in independent warehouses comprises all cotton stored in such warehouses, regardless of its ownership. There were in the hands of manufacturers on February 28, practically the close of the ginning season, 1,981,301 bales of cotton. This was the largest amount held at the close of any month. The average monthly consumption of cotton for the year being 482,194 bales, the mill stocks on that date would afford a supply for about four months.

SUPPLY AND DISTRIBUTION OF COTTON, 1913.

19

TABLE 12.—COTTON ON HAND IN MANUFACTURING ESTABLISHMENTS AND IN INDEPENDENT WAREHOUSES AND OTHER PUBLIC STORAGE PLACES AT THE CLOSE OF EACH MONTH, BY STATES: SEPTEMBER, 1912, TO AUGUST, 1913.

[Quantities are given in running bales, except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. Linters are included.]

STATE AND CLASS OF HOLDER.	COTTON ON HAND (BALES).											
	1912				1913							
	Sept. 30.	Oct. 31.	Nov. 30.	Dec. 31.	Jan. 31.	Feb. 28.	Mar. 31.	Apr. 30.	May 31.	June 30.	July 31.	Aug. 31.
In manufacturing establishments, total.....	713,906	908,989	1,341,012	1,705,205	1,912,993	1,981,301	1,931,522	1,746,390	1,504,821	1,285,315	1,029,954	778,158
In cotton-growing states.....	205,314	450,851	763,040	940,706	917,712	897,007	849,573	746,308	612,371	492,693	362,967	234,609
In all other states.....	508,592	458,138	577,972	764,499	995,281	1,084,294	1,081,949	1,000,082	892,450	792,722	666,987	543,649
In independent warehouses and other public storage places, total.....	1,386,346	2,821,315	3,370,715	3,235,364	2,657,048	2,250,899	1,831,316	1,386,873	938,854	650,237	410,887	495,280
In cotton-growing states.....	1,284,284	2,718,742	3,265,488	3,000,220	2,450,307	2,046,029	1,615,792	1,175,560	792,861	520,970	327,287	451,173
In all other states.....	102,062	102,573	105,227	136,135	206,651	204,870	212,554	211,313	145,993	120,267	83,600	44,107
Alabama:												
In manufacturing establishments.....	17,902	47,774	81,137	100,599	99,138	98,220	95,457	87,348	70,758	55,416	40,443	23,850
In independent warehouses, etc.....	104,760	242,546	300,431	319,881	269,799	223,027	177,180	128,213	83,690	50,323	27,030	35,760
Arkansas:												
In manufacturing establishments.....	414	1,432	1,934	1,776	1,668	2,245	1,634	1,485	1,181	967	763	637
In independent warehouses, etc.....	35,258	164,479	199,125	183,424	148,902	125,172	102,071	70,000	48,732	30,444	18,864	7,920
Connecticut:												
In manufacturing establishments.....	33,799	27,654	30,463	40,055	55,433	61,529	64,021	64,003	60,182	58,331	52,637	46,926
Georgia:												
In manufacturing establishments.....	34,436	90,510	162,765	209,050	205,408	196,793	186,653	165,437	132,616	100,783	74,192	41,693
In independent warehouses, etc.....	219,321	500,466	657,109	631,920	514,416	420,264	295,415	259,910	172,297	111,434	67,069	78,708
Louisiana:												
In manufacturing establishments.....	186	550	1,125	1,178	1,097	1,390	1,569	695	670	350	259	320
In independent warehouses, etc.....	66,712	211,368	273,514	251,551	155,271	112,479	101,567	38,914	31,656	23,756	16,902	15,301
Maine:												
In manufacturing establishments.....	24,786	22,373	28,452	44,504	61,275	64,860	65,340	60,479	56,361	48,605	38,767	27,769
Massachusetts:												
In manufacturing establishments.....	262,221	228,184	279,937	369,929	490,141	529,915	514,468	464,010	412,530	368,361	309,091	250,057
In independent warehouses, etc.....	7,051	9,518	13,405	21,612	26,415	29,672	25,570	25,941	25,796	21,731	16,698	10,898
Mississippi:												
In manufacturing establishments.....	1,813	3,405	4,668	5,258	5,072	6,227	4,850	4,068	2,879	2,781	2,332	1,467
In independent warehouses, etc.....	62,182	201,227	269,265	262,323	210,241	172,780	136,787	84,377	55,646	32,521	22,373	17,174
New Hampshire:												
In manufacturing establishments.....	54,113	47,827	73,206	103,800	128,735	136,372	133,966	122,852	104,769	88,417	71,129	58,412
New Jersey:												
In manufacturing establishments.....	15,296	14,683	16,427	16,900	19,933	22,222	27,335	27,589	22,419	21,375	18,924	17,012
In independent warehouses, etc.....	(1)	(1)	(2)	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
New York:												
In manufacturing establishments.....	23,124	31,814	54,473	64,837	74,670	72,287	68,501	61,469	52,083	41,952	31,058	23,006
In independent warehouses, etc.....	37,732	80,309	72,035	81,081	131,602	124,862	134,915	130,194	73,112	56,795	39,800	14,536
North Carolina:												
In manufacturing establishments.....	75,719	144,181	224,908	271,170	262,548	250,572	241,461	206,413	170,230	136,084	103,793	69,875
In independent warehouses, etc.....	15,158	22,477	40,255	54,117	58,840	55,812	57,622	49,536	36,233	29,283	20,485	8,248
Ohio:												
In manufacturing establishments.....	8,532	6,844	8,329	11,516	13,856	17,008	20,002	19,749	18,693	17,169	14,049	12,318
In independent warehouses, etc.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Oklahoma:												
In manufacturing establishments.....	76	663	955	863	975	1,173	1,019	1,563	1,353	1,382	1,125	772
In independent warehouses, etc.....	49,987	165,727	166,414	117,511	80,124	49,842	25,530	16,991	12,062	6,557	3,319	2,058
Pennsylvania:												
In manufacturing establishments.....	9,612	9,392	10,971	14,532	19,691	21,064	20,976	19,910	18,265	16,018	13,693	10,858
In independent warehouses, etc.....	1,737	2,013	3,508	6,018	8,005	9,875	10,717	9,466	9,031	8,485	7,549	6,270
Rhode Island:												
In manufacturing establishments.....	57,627	52,443	53,820	68,201	96,121	118,294	122,617	117,174	108,720	96,025	82,470	67,832
In independent warehouses, etc.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
South Carolina:												
In manufacturing establishments.....	55,747	124,931	218,356	257,053	241,081	235,142	216,343	189,064	154,542	124,779	90,856	59,988
In independent warehouses, etc.....	37,383	91,073	139,648	173,539	166,116	160,371	152,889	120,066	101,759	75,439	44,059	25,771
Tennessee:												
In manufacturing establishments.....	5,292	11,456	24,686	32,581	32,479	32,219	30,279	28,519	24,328	20,540	15,726	11,280
In independent warehouses, etc.....	8,453	105,310	153,713	197,376	182,911	166,005	134,642	92,032	52,829	27,306	14,136	10,022
Texas:												
In manufacturing establishments.....	3,761	9,587	15,244	19,123	21,427	21,615	21,194	18,684	15,347	12,435	8,640	5,789
In independent warehouses, etc.....	661,602	947,163	1,061,868	834,545	594,936	495,713	379,817	269,687	158,885	107,261	66,865	240,468
Virginia:												
In manufacturing establishments.....	4,636	8,414	10,831	28,448	32,023	35,167	32,699	27,439	23,827	18,818	13,323	9,903
In independent warehouses, etc.....	13,303	30,046	45,385	60,645	59,654	57,018	51,861	45,116	36,013	32,782	23,777	6,310
All other states:												
In manufacturing establishments.....	24,814	24,872	32,325	43,676	50,222	56,987	60,820	58,440	53,068	48,727	45,788	38,785
In independent warehouses, etc.....	15,647	47,603	35,140	39,821	49,720	48,007	44,833	55,430	40,213	36,030	21,961	15,908

1 Included in "All other states."

Linter and foreign cotton on hand at the close of each month in manufacturing establishments and in independent warehouses and other public storage places are given in the following table:

TABLE 13.—Linter and foreign cotton on hand in manufacturing establishments and in independent warehouses and other public storage places at the close of each month: September, 1912, to August, 1913.

[Linter cotton is given in running bales and foreign cotton in equivalent 500-pound bales.]

MONTH.	LINTER COTTON ON HAND AT CLOSE OF MONTH (BALES).		FOREIGN COTTON ON HAND AT CLOSE OF MONTH (BALES).	
	In manufacturing establishments.	In independent warehouses, etc.	In manufacturing establishments.	In independent warehouses, etc.
1912				
September.....	41,423	10,208	79,340	1,248
October.....	37,744	15,451	63,234	944
November.....	45,992	33,188	54,990	766
December.....	61,810	36,157	56,940	788
1913				
January.....	76,447	35,038	74,451	2,193
February.....	87,335	33,280	83,696	2,943
March.....	93,054	40,790	99,364	2,516
April.....	93,083	46,208	98,823	2,655
May.....	85,034	43,281	96,157	2,639
June.....	81,845	40,877	90,654	2,329
July.....	72,393	29,148	82,571	2,794
August.....	60,454	27,378	79,979	2,838

COTTON EXPORTS.

Exports of cotton, by customs districts.—As stated on page 7, the exports of domestic raw cotton represent 54.2 per cent of the total distribution for the year ending August 31, 1913. The following table shows the amount exported, by customs districts, for the years ending August 31, 1909 to 1913, inclusive.

The exports of domestic raw cotton from the United States in 1913 amounted to 8,800,966. All but 16.3 per cent of the cotton exported during the year is credited to ports within the cotton-growing states, as only 1,431,580 bales were exported from ports in other states.

Galveston, with 3,884,735 bales, ranks first among the districts in 1913 in exports of cotton, followed by New Orleans, with 1,350,336 bales; Georgia, with 1,048,006; New York, with 615,418 bales; and North

Carolina, with 317,831 bales. The combined exports for the first three districts named amount to 6,283,077 bales and represent 71.4 per cent of the total for the country.

TABLE 14.—Exports of domestic raw cotton from the United States, by customs districts, for the year ending August 31: 1909 to 1913.

[Compiled by the Bureau of Foreign and Domestic Commerce, Department of Commerce.]

CUSTOMS DISTRICTS.	EXPORTS (RUNNING BALES).				
	1913	1912	1911	1910	1909
Total.....	8,800,966	10,681,758	7,781,414	6,339,028	8,574,024
Maine and New Hampshire.....	7,953	12,280	6,298	6,923	8,271
Massachusetts.....	159,583	196,779	109,921	106,309	166,735
New York.....	615,418	655,078	744,479	734,230	463,540
Philadelphia.....	62,264	90,482	68,177	62,558	69,939
Maryland.....	84,512	130,466	119,584	57,717	128,474
Virginia.....	79,070	21,666	16,010	6,810	36,653
North Carolina.....	317,831	502,426	383,112	298,595	408,209
South Carolina.....	228,482	249,864	125,985	116,006	82,759
Georgia.....	1,048,006	2,158,827	1,109,958	969,680	1,204,265
Florida.....	125,099	216,424	124,056	144,513	199,460
Mobile.....	143,147	357,110	219,429	167,938	327,185
New Orleans.....	1,350,336	1,600,927	1,519,023	1,193,922	1,957,466
Sabine.....	138,642	199,857	205,943	142,351	163,294
Galveston.....	3,884,735	3,700,237	2,761,529	2,130,524	3,176,890
Laredo.....	59,713	4,782	491	1,927	6,116
Eagle Pass.....			50	620	1,420
El Paso.....			144	916	2,405
Arizona.....	325	700	955	1,025	499
San Francisco.....	262,917	211,778	84,955	60,169	82,528
Oregon.....	3,716		500	200	300
Washington.....	104,506	213,825	57,249	33,802	79,128
Dakota.....	520	4	39	665	265
Minnesota.....	908	753	274	177	277
Duluth and Superior.....	50				
Michigan.....	91,021	122,472	100,612	79,939	94,614
Ohio.....		350			
Buffalo.....	8,049	5,462	6,014	2,060	2,078
St. Lawrence.....	8,037	16,024	3,185	4,800	4,430
Western Vermont.....	2,885	2,536	5,234	4,025	2,725
Eastern Vermont.....	19,177	20,788	22,118	20,350	20,245
Porto Rico.....	61	131	90	157	208

Net receipts of cotton, by ports.—The term "net receipts of cotton," as here employed, means the amount of domestic cotton received which has not been transhipped from some other port, and already included in the latter's receipts. These statistics must not be confused with those of exports. They include large quantities of cotton carried in the coastwise trade to New England and other Northern states and consumed in this country, as well as cotton carried to other ports and then exported. The statistics of such net receipts for the principal cotton-handling ports are presented in Table 15.

TABLE 15.—NET RECEIPTS OF RAW COTTON AT PRINCIPAL COTTON PORTS FOR THE YEAR ENDING AUGUST 31, FOR SPECIFIED YEARS: 1875 TO 1913.

[Compiled from Commerce and Finance of the United States.]

PORT.	NET RECEIPTS OF COTTON (RUNNING BALES).											
	1913	1912	1911	1910	1909	1905	1900	1895	1890	1885	1880	1875
Galveston.....	4,035,114	3,727,958	2,948,354	2,501,412	3,657,156	2,879,336	1,710,263	1,659,099	860,112	463,463	480,352	354,927
Port Arthur and Texas City.....	805,313	786,355	527,989	163,778	241,628	(1)	(1)	(1)	(1)	(1)	(1)	(1)
New Orleans.....	1,436,959	1,662,098	1,608,208	1,315,328	2,093,232	2,689,520	1,867,153	2,584,115	1,973,571	1,529,592	1,504,654	993,481
Mobile.....	230,699	384,239	250,921	255,665	393,911	329,556	340,646	263,187	261,957	237,071	358,971	320,822
Pensacola.....	125,633	216,114	125,343	138,234	166,616	195,151	(3)	(1)	(1)	(1)	(1)	(1)
Brunswick.....	240,500	425,462	218,946	227,301	325,127	199,193	94,278	(1)	(1)	(1)	(1)	(1)
Savannah.....	1,309,864	2,386,302	1,462,152	1,365,825	1,520,105	1,877,343	1,088,807	944,410	956,517	728,087	741,018	606,727
Charleston.....	310,293	416,013	286,528	228,728	210,574	225,366	265,523	425,487	327,079	507,802	464,332	412,931
Wilmington.....	342,953	548,122	410,182	312,511	409,656	375,383	282,360	234,621	134,916	94,054	78,876	76,601
Norfolk and Newport News.....	722,803	862,217	593,681	587,363	649,162	841,174	432,727	472,540	404,056	545,418	590,032	387,279
Baltimore.....	84,661	125,893	119,104	85,526	104,836	72,427	101,648	(1)	(1)	(1)	(1)	(1)
Philadelphia.....	8,326	3,972	515	2,581	6,848	13,645	36,238	(1)	(1)	(1)	(1)	(1)
New York.....	15,326	6,961	14,790	40,706	19,181	33,798	119,215	187,794	176,502	99,200	229,426	179,163
Boston.....	46,222	63,112	39,093	14,792	19,430	83,644	118,891	(1)	(1)	(1)	(1)	(1)

¹ Not shown separately.

² Includes receipts of Pensacola.

³ Included in receipts of Mobile.

The three most important cotton ports from the standpoint of net receipts, and of exports as well, are, in the order of their importance, Galveston, New Orleans, and Savannah, and their net receipts during the year ending August 31, 1913, amounted to 6,778,937 bales, or 48.1 per cent of the total quantity of cotton produced in the country from the crop of 1912. The relatively large net receipts at Galveston in recent years are due largely to the increase in cotton production in Texas and Oklahoma and to some extent to increased transportation facilities.

Exports of cotton, by countries to which exported.—The annual exports of domestic raw cotton from 1821 to 1913, by countries to which exported, and the total value of these exports, are shown in the table on page 22. The quantities are given in equivalent 500-pound bales.

The figures in Table 16 are in equivalent 500-pound bales and cover the fiscal year ending June 30, while those in Table 14 are in running bales, counting round as half bales, and relate to the year ending August 31. Table 16 shows the development of the export trade in raw cotton to the several countries. The total quantity exported during the year

ending June 30, 1913, amounted to 8,724,572 bales of 500 pounds each, valued at \$547,357,195. Of this cotton 3,563,216 bales, or 40.8 per cent, went to the United Kingdom; 2,350,761 bales, or 26.9 per cent, to Germany; and 1,014,834 bales, or 11.6 per cent, to France—these three countries taking almost four-fifths of the total quantity exported.

The marked variations from year to year in the quantities of cotton exported to Japan may be attributed in part to irregularity in the supply of Indian cotton upon which the Japanese mills chiefly rely for their raw material. The exports to "all other countries" include cotton to India and to China, in which countries American cotton is used, to some extent, for mixing with short fiber native cotton and in the manufacture of goods requiring a longer staple cotton. The figures in Table 16 show only in part the ultimate destination of the cotton exported, as large quantities of it are reexported from the countries to which it was exported in the first instance. For example, the imports of American cotton into Bombay during the year ending August 31, 1912, were more than 200,000 bales, whereas the total amount exported direct to India was only 86,017 bales.

SUPPLY AND DISTRIBUTION OF COTTON, 1913.

TABLE 16.—EXPORTS OF DOMESTIC COTTON—VALUE AND QUANTITY, WITH DISTRIBUTION OF THE QUANTITY BY COUNTRIES TO WHICH EXPORTED: 1821 TO 1913.

[Compiled from Commerce and Navigation of the United States. The statistics of exports differ slightly since 1865 from those shown in Table 22 because of a difference in the years to which they relate. The figures of this table are for fiscal years.]

Table with columns: YEAR, Total value, Total, United Kingdom, Germany, France, Italy, Spain, Belgium, Russia, Austria-Hungary, Netherlands, All other Europe, Japan, Canada, Mexico, All other countries. Rows list years from 1913 down to 1821 with corresponding values.

1 Included with Netherlands.

2 Includes exports to Belgium.

This page was inadvertently omitted during scanning.

SUPPLY AND DISTRIBUTION OF COTTON, 1913.

square yards, valued at \$14,928,599, were exported during the year. Nearly three-eighths of this quantity was sent to China, other countries in the order of the amount taken being Aden, British East Africa, India, Canada, Chile, Colombia, Philippine Islands, and Turkey. Dyed, colored, and printed cloths to the value of \$12,578,109 were exported during the year. The most important customer for these was the Philippine

Islands, but large quantities were also sent to the West Indies, Central and South America, and Canada. Of the other cotton goods exported, Canada was the largest customer, taking very large proportions of the clothing and other wearing apparel, and of "All other manufactures of cotton." The United Kingdom and Germany took large quantities of waste, while almost one-half of the total exports of yarn went to Canada.

TABLE 19.—EXPORTS OF DOMESTIC MANUFACTURES OF COTTON, BY COUNTRIES TO WHICH EXPORTED, FOR THE YEAR ENDING JUNE 30, 1913.

[Compiled by the Bureau of Foreign and Domestic Commerce, Department of Commerce.]

COUNTRY.	Total value.	EXPORTS OF DOMESTIC MANUFACTURES OF COTTON.										Yarn (value).	All other manufactures of cotton (value).
		Cloths.						Clothing and other wearing apparel.		Cotton waste.			
		Unbleached.		Bleached.		Dyed, colored, or printed.		Knit goods (value).	All other (value).	Pounds.	Value.		
		Yards.	Value.	Yards.	Value.	Yards.	Value.						
Total.....	\$53,743,977	213,189,764	\$14,928,599	39,495,028	\$3,161,526	192,044,459	\$12,578,109	\$2,613,806	\$8,445,377	78,624,075	\$4,449,481	\$718,423	\$6,848,656
Europe:													
United Kingdom.....	4,782,758	1,257,400	260,553	158,974	20,689	1,052,602	136,882	1,041,498	807,253	32,279,112	2,007,519	9,802	492,562
Germany.....	1,304,519	46,920	12,939	3,164	512	123,600	13,801	30,834	100,977	17,900,757	1,003,260	297	142,399
Turkey (including Asiatic Turkey).....	516,074	6,378,660	425,718	199,506	19,095	394,019	33,804	1,569	12,354	.....	.....	.....	23,534
Belgium.....	532,461	.....	.....	2,384	597	.....	.....	8,841	60,569	11,769,069	402,446	.....	60,008
Italy.....	221,206	1,190	220	.....	.....	.....	.....	16,350	10,250	1,346,719	114,265	.....	30,181
Netherlands.....	161,108	7,473	2,505	.....	.....	2,000	100	33,044	40,029	2,524,205	69,075	197	15,558
France.....	177,763	11,390	2,199	2,033	293	19,032	1,874	17,795	12,493	1,618,311	109,553	40	33,216
Russia (including Asiatic Russia).....	21,960	1,983	204	1,562	187	25,890	2,376	4,224	2,506	.....	.....	.....	12,463
Spain.....	58,247	6,988	699	.....	.....	.....	.....	1,682	962	474,888	49,166	.....	5,738
All other Europe.....	200,520	752,258	80,723	42,260	5,406	80,439	8,265	5,408	45,124	118,899	2,481	.....	53,113
North America:													
Canada.....	10,536,412	9,714,205	779,084	4,948,230	491,778	13,314,484	1,321,377	434,551	3,231,141	8,568,998	544,662	350,087	3,383,732
Mexico.....	1,064,892	443,080	109,406	562,881	80,849	1,651,973	159,984	41,294	380,689	151,374	10,275	1,035	275,360
Panama.....	1,122,185	726,585	71,407	500,115	44,834	3,874,441	229,155	98,506	513,663	475,631	32,871	1,145	130,604
San Salvador.....	407,820	4,702,641	253,706	101,825	9,427	2,277,982	128,197	270	8,703	9,951	803	.....	6,765
Honduras.....	609,506	2,553,930	140,796	913,329	77,896	4,842,324	332,286	10,236	99,051	26,528	1,451	122	37,668
Guatemala.....	427,445	1,954,712	120,576	549,040	49,354	2,696,966	185,660	5,801	38,658	24,985	1,713	.....	25,683
Nicaragua.....	349,401	421,458	38,352	237,707	21,405	2,658,542	167,700	4,825	92,207	17,715	1,232	12	23,668
Costa Rica.....	293,262	1,489,140	86,901	93,739	7,206	2,347,997	135,217	5,269	37,960	28,611	2,054	880	17,775
British Honduras.....	135,123	284,092	19,902	205,990	18,464	614,103	42,555	3,343	31,521	13,118	738	8	18,557
Cuba.....	2,903,395	2,781,608	321,245	3,031,900	206,141	16,260,400	1,004,988	185,444	617,708	801,674	58,556	2,916	506,387
Haiti.....	1,465,690	1,031,438	67,554	1,104,531	75,781	18,036,019	1,243,664	1,395	57,950	12,126	928	.....	18,418
Santo Domingo.....	980,076	1,914,652	114,753	1,218,384	86,851	10,025,684	675,517	18,143	54,656	33,821	2,410	40	33,706
British West Indies.....	953,639	2,746,907	226,729	1,377,672	25,771	7,165,725	476,229	33,823	145,338	35,444	2,673	602	42,474
Dutch West Indies.....	104,531	157,606	13,857	169,018	10,948	959,654	54,909	2,090	9,728	8,806	711	90	12,198
Danish West Indies.....	28,302	26,742	3,627	9,036	888	129,642	8,791	2,395	9,414	12,463	1,058	.....	2,129
French West Indies (including Miquelon).....	19,625	24,022	4,000	18,053	1,248	93,797	6,880	.....	1,116	2,699	251	.....	6,120
Bermuda.....	68,410	5,607	580	31,544	3,399	67,223	5,241	18,943	23,011	2,318	212	140	16,884
South America:													
Chile.....	808,674	8,346,412	537,105	1,870,722	129,032	280,214	23,269	17,583	34,252	27,782	2,123	18,050	47,260
Colombia.....	1,453,774	7,281,696	379,911	795,938	51,130	18,310,123	905,706	3,879	44,275	36,084	2,643	32,242	33,988
Brazil.....	386,368	140,453	27,375	167,106	27,372	828,183	65,300	10,925	156,180	33,048	2,016	10,766	79,034
Argentina.....	540,796	1,377,733	167,268	35,552	3,313	116,089	9,419	30,907	171,379	5,683	463	88,813	69,234
Venezuela.....	376,314	1,854,264	197,317	207,967	15,463	1,806,674	131,325	374	3,336	40,883	3,302	58	25,139
Guiana.....	77,569	249,180	20,472	33,508	2,824	757,675	44,141	1,358	4,035	2,537	131	.....	6,408
Uruguay.....	146,344	263,021	34,679	8,629	674	38,654	2,922	25,825	45,907	2,525	190	3,393	32,754
Peru.....	198,331	1,000,554	68,719	209,476	14,692	556,487	42,072	11,196	45,005	28,446	1,631	.....	15,025
Ecuador.....	218,233	281,676	19,773	264,740	21,371	2,379,853	136,910	188	16,228	20,438	1,513	295	21,956
Bolivia.....	205,645	2,788,745	166,752	1,135,248	66,962	755,609	52,387	1,790	5,936	6,963	538	.....	1,280
Paraguay.....	3,261	9,026	1,139	.....	.....	12,421	1,243	254	150	.....	.....	.....	476
Asia and Oceania:													
China.....	5,796,984	78,161,164	5,373,877	25,597	2,732	2,275,086	208,376	120,875	67,845	.....	.....	1,685	21,594
Aden.....	1,433,950	24,680,270	1,433,113	10,225	827	.....	.....	.....	10	.....	.....	.....	.....
British India.....	1,276,076	12,935,236	1,103,148	989,223	84,858	541,603	40,850	9,202	25,384	.....	.....	.....	12,634
Japan.....	109,286	38,544	8,077	111,381	13,245	5,576	518	2,188	12,720	4,019	256	.....	72,276
Hongkong.....	545,410	824,442	133,598	263,066	23,620	1,028,711	107,007	72,066	12,863	.....	.....	168,678	27,578
British Australasia.....	1,813,058	4,913,467	397,702	1,463,285	143,933	3,323,371	350,274	131,222	662,567	6,700	591	7,070	119,609
Philippine Islands.....	7,077,165	6,745,700	500,873	16,994,879	1,260,253	69,519,129	4,016,150	97,933	426,191	139,731	12,720	13,297	749,698
All other Asia and Oceania.....	116,514	73,626	12,075	65,643	6,543	591,745	44,035	2,868	33,831	5,210	553	.....	16,609
Africa:													
British East Africa.....	805,517	15,174,654	796,221	112,300	7,040	15,000	790	3	85	.....	.....	.....	1,378
British South Africa.....	298,291	62,582	12,167	70,473	13,837	118,517	13,852	39,336	209,833	2,054	153	163	8,950
All other Africa.....	424,027	6,536,756	373,012	193,310	12,786	69,055	6,551	6,202	15,728	.....	.....	.....	9,748

The imports of cotton manufactures into the United States for the year ending June 30, 1913, by countries from which imported are shown in Table 20.

The total value of cotton manufactures imported into the United States during the year ending June 30, 1913, amounted to \$63,935,983. The United Kingdom,

Germany, France, and Switzerland, in the order named, contributed the largest amounts, these four countries furnishing 95 per cent of the total. The value of laces, edgings, embroideries, and the like was \$35,776,301. Switzerland led in these goods, followed by France, Germany, and the United Kingdom.

Cloths imported during the year amounted to 43,637,361 square yards, valued at \$7,757,928. Of this the United Kingdom furnished 31,298,292 yards, or 72 per cent of the total, and France more than one-half of the remainder. During the year thread and

yarn valued at \$4,449,254 were imported, nearly all of which came from the United Kingdom. The imports of knit goods amounted to \$3,089,411, practically the entire amount coming from Germany, Switzerland being next in importance.

TABLE 20.—IMPORTS OF COTTON MANUFACTURES, BY COUNTRIES FROM WHICH IMPORTED, FOR THE YEAR ENDING JUNE 30, 1913.

[Compiled by the Bureau of Foreign and Domestic Commerce, Department of Commerce.]

COUNTRY.	IMPORTS OF COTTON MANUFACTURES.											
	Total value.	Cloths.						Clothing, ready-made, and other wearing apparel.		Laces, edgings, embroideries, etc. (value).	Thread and yarn (value).	All other manufactures of cotton (value).
		Dyed, colored, stained, etc.		Bleached.		Unbleached.		Knit goods (value).	All other clothing (value).			
		Square yards.	Value.	Square yards.	Value.	Square yards.	Value.					
Total.....	\$63,635,983	27,669,013	\$5,107,156	11,651,671	\$2,131,127	4,316,677	\$519,645	\$3,089,411	\$4,287,543	\$35,776,301	\$4,449,254	\$8,575,546
Europe:												
United Kingdom.....	20,361,396	20,306,589	3,473,294	7,351,835	1,108,801	3,039,888	401,438	75,925	174,713	7,352,077	3,754,209	4,020,939
Germany.....	16,406,123	1,747,784	340,189	243,067	58,427	53,694	13,185	2,764,054	2,376,454	7,549,308	488,961	2,815,575
France.....	12,264,492	3,037,301	939,340	2,871,706	775,127	306,801	70,992	96,988	1,518,229	7,997,624	17,924	848,268
Switzerland.....	11,546,075	132,195	24,559	1,013,872	102,568	233,532	31,954	135,497	7,935	10,680,079	184,173	319,320
Austria-Hungary.....	600,780	242,393	40,887	72,124	15,610	625	64	416	62,185	300,867	406	180,345
Belgium.....	465,001	78,707	12,009	1,439	270	529	78	6	20,289	321,233	2,647	107,869
Italy.....	337,895	37,320	5,050	52	7	-----	-----	73	7,455	265,643	2	59,065
Spain.....	88,779	193,066	46,533	229	65	673	132	302	11,502	27,835	-----	2,320
Turkey (including Asiatic Turkey).....	509,749	-----	-----	-----	-----	-----	-----	-----	622	486,590	-----	22,237
All other Europe.....	152,678	212	81	116	26	42	7	15,295	1,761	109,235	46	26,227
America:												
Canada.....	19,802	1,261	227	133	21	324	40	87	7,115	4,187	656	7,559
Mexico.....	21,932	20,838	1,083	38	5	650	100	154	3,093	13,003	16	4,478
All other America.....	10,649	172	29	44	28	-----	-----	86	1,611	8,371	-----	524
Japan.....	1,029,086	1,809,252	222,304	96,212	9,973	20,029	1,638	255	79,756	566,146	214	148,800
China.....	56,174	-----	-----	62	21	-----	-----	178	8,491	43,852	-----	3,632
British India.....	31,150	-----	-----	25	2	-----	-----	-----	1,762	28,065	-----	1,321
All other countries.....	34,132	1,943	401	717	186	90	17	5	4,270	22,186	-----	7,667

The value of the export and the import trade in cotton manufactures with the leading countries is shown in Table 21 for 1900 and for consecutive years from 1905 to 1913.

The value of cotton manufactures exported during the year ending June 30, 1913, \$53,743,977, was the largest for any year shown in the table, exceeding that in 1906, the next largest, by \$799,944. The large amount for 1906, as well as that for 1905, was due to the extraordinary trade with China during those years, the exports of cotton goods to that country having reached the value of \$29,814,075 in the later year. These two years of active trade were immediately followed by a decided shrinkage of the trade with China, which reached its lowest mark in 1908, when the total value of cotton goods exported to all countries was less than 50 per cent of the corresponding amount for 1906. Since 1908, however, there has been each year an increase over the preceding one, to meet an increasing demand for American cotton manufactures in nearly all the countries of the world. How-

ever, manufacturers of cotton goods in the United States have largely confined their activities to the home market. The value of the cotton goods manufactured in the country in 1909, as returned at the census of 1910, exclusive of hosiery and knit goods, the manufacture of which might be deemed a branch of the cotton industry, amounted to more than \$628,000,000, while the value of the exports of cotton goods for the fiscal year 1909 amounted to \$31,878,566, or only about 5 per cent of the total manufactured. The values of imports of cotton goods do not show so much variation from year to year either in the aggregate or in the totals of the countries from which imported. The table shows that for the period covered by it the United Kingdom, Germany, France, and Switzerland have furnished very large proportions of the total value of such goods imported, and, while it is evident that France has made the greatest gain, both relative and actual, no radical differences are shown for any of these countries as between consecutive years.

SUPPLY AND DISTRIBUTION OF COTTON, 1913.

TABLE 21.—VALUE OF EXPORTS AND IMPORTS OF COTTON MANUFACTURES, BY COUNTRIES TO WHICH EXPORTED OR FROM WHICH IMPORTED, FOR THE YEAR ENDING JUNE 30: 1900 AND 1905 TO 1913.

[Compiled by the Bureau of Foreign and Domestic Commerce, Department of Commerce.]

COUNTRY.	1913	1912	1911	1910	1909	1908	1907	1906	1905	1900
EXPORTS.										
Total.....	\$53,743,977	\$50,769,511	\$40,851,918	\$33,398,072	\$31,878,666	\$26,177,758	\$32,305,412	\$52,944,033	\$40,666,080	\$24,003,657
Europe:										
United Kingdom.....	4,782,758	3,946,923	3,511,690	2,857,025	2,092,212	2,487,349	2,274,014	2,042,377	1,446,409	1,250,729
Germany.....	1,304,519	933,429	927,166	896,351	1,035,235	1,140,332	1,185,492	971,647	601,541	385,683
All other Europe.....	1,889,399	1,594,826	1,055,002	979,590	738,992	972,741	965,549	654,353	383,692	270,220
America:										
Canada.....	10,536,412	8,590,398	6,474,722	5,242,511	3,712,506	3,279,519	3,507,446	3,587,567	3,030,341	2,691,992
Mexico.....	1,064,892	988,263	797,617	772,127	646,488	869,244	934,010	821,302	880,074	958,889
Central America.....	3,434,742	3,945,437	3,417,774	2,511,625	2,456,345	2,363,424	2,636,691	2,260,618	2,052,298	1,176,142
British West Indies (including Bermuda).....	1,022,049	1,329,675	967,547	819,124	950,376	687,311	836,047	713,885	650,382	435,949
Cuba.....	2,903,395	3,090,262	2,235,350	1,644,498	1,906,964	1,585,376	1,608,653	1,507,473	1,330,260	612,252
Haiti.....	1,465,690	1,756,755	1,510,425	1,220,200	1,258,197	742,978	617,659	822,815	524,860	745,693
Other North America.....	1,138,534	1,112,072	999,611	762,347	579,181	577,516	828,737	452,468	650,342	556,290
Brazil.....	386,368	308,712	413,184	388,760	265,177	373,545	548,367	636,374	823,120	436,118
Chile.....	808,674	805,125	1,001,591	666,133	490,016	616,814	989,059	898,155	764,408	531,131
Colombia.....	1,453,774	1,162,092	980,984	892,886	823,216	624,587	874,813	693,021	896,143	310,360
Peru.....	198,331	227,607	176,323	168,476	104,760	132,409	155,792	112,797	157,202	113,332
Venezuela.....	376,314	498,079	449,254	289,707	346,443	319,937	430,160	429,645	438,094	335,294
All other South America.....	1,281,848	1,142,989	1,011,898	903,874	1,005,291	692,939	843,830	920,684	1,105,467	956,556
Asia and Oceania:										
China.....	5,796,984	7,471,103	5,412,849	5,817,392	8,067,472	3,413,248	5,965,331	29,814,075	28,017,190	8,804,778
British India.....	1,276,076	979,850	715,174	732,184	760,677	296,807	684,090	655,346	486,843	524,419
British Australasia.....	1,813,058	1,694,068	1,773,201	962,154	979,440	1,039,426	1,229,627	1,285,085	1,079,179	622,228
Aden.....	1,433,950	2,026,394	1,067,382	404,413	1,312,265	998,736	1,095,713	1,634,134	1,140,875	(1)
Philippine Islands.....	7,077,165	5,277,192	4,305,518	2,936,398	1,050,042	836,845	1,646,874	403,896	850,244	(1)
All other Asia and Oceania.....	771,210	613,115	681,955	690,710	605,024	711,534	813,339	862,092	1,761,726	1,835,346
Africa.....	1,527,835	1,275,145	966,201	699,407	682,747	415,141	733,419	782,224	580,350	1,039,707
IMPORTS.										
Total.....	63,935,983	63,509,574	64,056,473	66,473,143	62,010,286	68,379,781	73,704,036	63,943,322	48,919,936	41,296,239
Europe:										
United Kingdom.....	20,361,396	19,400,725	19,747,868	20,365,696	19,951,548	22,421,517	22,971,167	19,446,227	15,089,333	17,110,583
Germany.....	16,406,123	15,384,519	15,689,422	16,707,993	14,859,770	18,030,650	18,212,631	16,459,615	14,332,703	8,893,297
France.....	12,264,492	11,694,388	11,189,892	11,820,515	11,959,565	11,069,509	15,309,899	13,038,126	8,701,626	5,623,340
Switzerland.....	11,516,075	13,902,623	14,088,217	15,463,607	13,533,057	14,478,062	16,280,363	12,578,536	9,728,717	8,975,580
Belgium.....	465,061	554,375	484,744	522,323	558,374	685,846	561,670	458,557	354,214	321,893
Austria-Hungary.....	600,780	615,410	604,556	659,844	490,658	280,236	293,965	218,974	113,833	107,123
Italy.....	337,895	319,025	199,036	125,661	66,399	182,792	237,065	97,520	41,281	16,093
Spain.....	88,779	104,482	109,488	57,965	49,027	84,811	62,252	86,952	57,400	2,747
Turkey (including Asiatic Turkey).....	509,749	582,899	271,834	156,228	96,564	89,552	69,637	43,725	42,796	68,355
All other Europe.....	152,678	121,867	97,566	115,709	80,937	59,011	151,029	132,716	52,952	10,634
America:										
Canada.....	19,892	19,108	46,788	21,470	10,877	20,912	48,496	10,467	19,429	6,527
Mexico.....	21,932	56,248	42,716	39,765	29,414	28,787	40,720	39,110	44,164	33,323
All other America.....	10,649	7,501	15,788	10,441	4,775	4,347	4,966	2,074	2,465	1,460
Japan.....	1,029,086	665,926	490,177	292,651	236,062	305,270	333,881	316,278	292,736	71,066
China.....	56,174	30,819	31,641	16,306	11,180	29,028	21,853	14,657	25,618	25,073
British India.....	21,150	34,237	28,255	44,789	21,084	44,036	43,811	67,872	50,441	47,742
All other countries.....	34,132	21,722	18,485	61,880	61,492	9,385	25,525	31,917	30,179	8,418

¹ Included in "Other Asia and Oceania."² Includes exports to Hawaii, valued at \$584,398.

Production, consumption, exports, and imports of cotton.—Table 22 shows the production of cotton, average net weight of bale, value per pound, consumption, domestic exports, and net imports of raw cotton from 1790 to 1912, thus presenting a complete record of the cotton trade for the United States.

TABLE 22.—PRODUCTION, CONSUMPTION, EXPORTS, AND NET IMPORTS OF RAW COTTON, FOR THE UNITED STATES: 1790 TO 1912.

Production.—The production statistics relate, when possible, to the year of growth, but when figures for the growth year are wanting, those for a commercial crop which represents the trade movement have been taken. The statistics of production for the years 1790 to 1898, inclusive, have been compiled from publications of the United States Department of Agriculture; for the years 1899 to 1912, inclusive, and for other dates, when available, census figures are used.

Price of upland cotton.—For the years 1902 to 1912, inclusive, the price per pound shown for upland cotton represents the average price of the average grade marketed in New Orleans prior to April 1 of the following year; for the years 1890 to 1901, inclusive, it is the average price of middling cotton on the New Orleans Cotton Exchange; and for the years 1790 to 1889, inclusive, it is taken from reports of the United States Department of Agriculture.

Consumption.—The statistics of consumption for the years 1790 to 1894, inclusive, have been compiled from publications of the United States Department of Agriculture, and those for the years 1895 to 1903, inclusive, from the reports of Latham, Alexander & Co. Census figures are used for the years 1904 to 1911, inclusive, and for other dates when available. The statistics relate to the 12 months during which the crop of the specified year was chiefly marketed, and not to the calendar year specified.

Domestic exports and net imports.—For the years 1790 to 1819, inclusive, the statistics have been taken from American state papers, and for the years 1820 to 1910 from the reports on Commerce and Navigation of the United States, published by the Bureau of Foreign and Domestic Commerce, Department of Commerce. For the years 1790 to 1842, inclusive, the statistics of exports relate to the 12 months beginning with October 1 of the specified year; for 1843 to 1886, inclusive, to the 12 months beginning with July 1; and for 1887 to 1911, inclusive, to the 12 months beginning with September 1. The statistics of imports relate to the same period as the statistics of consumption.

PRODUCTION.					Consumption			Exports of domestic cotton			PRODUCTION.			Consumption			Exports of domestic cotton			Net imports																																											
YEAR.	Running bales, counting round as half bales.	Equivalent 500-pound bales, gross weight.	Average net weight of bale (lbs.).	Average price per pound, upland cotton (cents).	(equivalent 500-pound bales).	(equivalent 500-pound bales).	(equivalent 500-pound bales).	YEAR.	Running bales, counting round as half bales.	Equivalent 500-pound bales, gross weight.	Average net weight of bale (lbs.).	Average price per pound, upland cotton (cents).	(equivalent 500-pound bales).	(equivalent 500-pound bales).	(equivalent 500-pound bales).	YEAR.	Running bales, counting round as half bales.	Equivalent 500-pound bales, gross weight.	Average net weight of bale (lbs.).	Average price per pound, upland cotton (cents).	(equivalent 500-pound bales).	(equivalent 500-pound bales).	(equivalent 500-pound bales).																																								
1912	14,030,863	14,313,015	486	12.0	5,630,835	9,190,093	225,460	1840	2,469,093	1,075,274	429	12.3	575,500	1,270,763	485	1912	14,030,863	14,313,015	486	12.0	5,630,835	9,190,093	225,460	1840	2,469,093	1,075,274	429	12.3	575,500	1,270,763	485	1912	14,030,863	14,313,015	486	12.0	5,630,835	9,190,093	225,460	1840	2,469,093	1,075,274	429	12.3	575,500	1,270,763	485	1912	14,030,863	14,313,015	486	12.0	5,630,835	9,190,093	225,460	1840	2,469,093	1,075,274	429	12.3	575,500	1,270,763	485

¹ Equivalent 400-pound bales.

² Excess of exports of foreign cotton over total imports.

Exports of domestic cotton, by months.—In compliance with an act of Congress approved July 22, 1912, the bureau published statistics regarding the exports of cotton, by months, showing the amounts separately for the more important countries. The following table presents the statistics for the twelve months ending August 31, 1913:

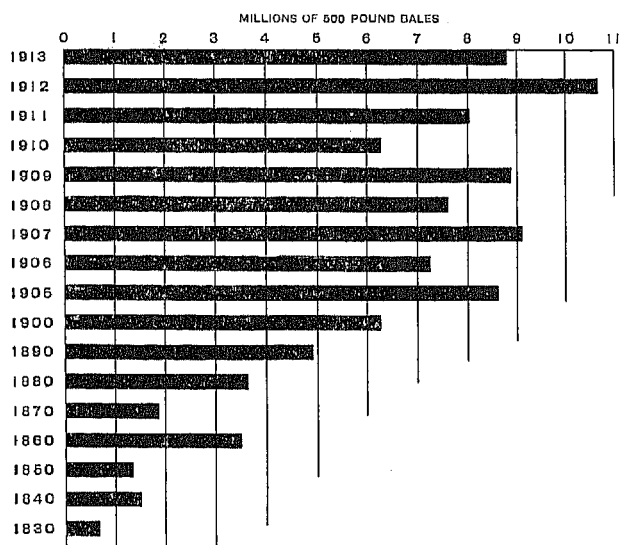
TABLE 17.—*Exports of domestic cotton, by countries to which exported, by months: September, 1912, to August, 1913.*

[Running bales, counting round as half bales.]

MONTH.	EXPORTS OF DOMESTIC COTTON (BALES) TO—					
	Total.	United Kingdom.	Germany.	France.	Italy.	All other countries.
Total for year ending Aug. 31.	8,800,960	3,559,258	2,404,397	1,022,642	496,499	1,318,170
1912.						
September.....	729,859	345,290	163,449	103,060	36,901	81,159
October.....	1,515,746	638,780	430,744	239,515	63,006	143,101
November.....	1,734,687	764,928	464,058	263,582	51,756	190,363
December.....	1,391,394	610,386	384,345	165,573	57,056	174,034
1913.						
January.....	900,931	355,837	240,087	97,818	49,871	157,318
February.....	530,911	166,726	159,817	26,991	47,450	129,927
March.....	372,073	97,185	128,019	14,561	44,847	87,461
April.....	534,506	208,963	133,024	19,899	38,338	134,372
May.....	468,966	164,871	126,574	23,643	41,440	112,438
June.....	223,921	88,906	60,804	7,935	27,077	39,199
July.....	140,710	39,898	40,548	7,132	24,589	28,543
August.....	257,172	77,488	72,928	52,933	13,568	40,255

The development of the export trade in domestic raw cotton from 1830 to 1913 is graphically represented by the accompanying diagram.

DIAGRAM 2.—*Exports of domestic cotton for specified years: 1830 to 1913.*



Exports of sea-island cotton.—Statistics of exports of sea-island cotton, by countries to which exported, are given in the following table for the years 1906 to 1913 and for selected years since 1885. It should be understood that these exports are included in the general

statistics of exports of domestic cotton shown in the other tables of this report.

TABLE 18.—*Exports of sea-island cotton, by countries to which exported, for the year ending August 31, for specified years: 1885 to 1913.*

YEAR.	EXPORTS OF SEA-ISLAND COTTON (EQUIVALENT 500-POUND BALES) TO—				
	Total.	United Kingdom.	France.	Germany.	All other countries.
1913.....	10,003	6,368	3,211	259	165
1912.....	20,192	14,821	4,905	178	288
1911.....	17,797	12,818	4,077	482	420
1910.....	22,748	18,154	4,074	520	.....
1909.....	19,654	13,589	5,070	426	569
1908.....	25,587	17,874	7,112	413	188
1907.....	15,252	11,056	3,925	185	86
1906.....	31,624	23,870	6,787	838	120
1900.....	30,240	30,131	5,193	796	120
1895.....	30,455	26,350	3,878	36	101
1890.....	18,568	16,853	1,420	169	126
1885.....	13,708	11,950	1,560	13	185

The production of sea-island cotton from the crop of 1912, according to returns of ginners, was 73,777 bales, equivalent to 28,180,000 pounds, or 56,360 bales of 500 pounds each. Assuming that the exports of this cotton for a year ending August 31 are from the crop of the preceding growth year, then nearly 18 per cent of the crop of 1912 was exported, as compared with 21 per cent of the previous year's crop, 25 per cent of the crop of 1910, 31.2 per cent of the crop of 1909, and 37.6 per cent of the crop of 1907. The United Kingdom took more than three-fifths of the entire amount exported during the year ending August 31, 1913, and France nearly one-third. The quantity consumed in the United States during the year amounted to 54,778 running bales, or 41,839 equivalent 500-pound bales, which, added to the quantity exported, 10,003 bales, indicates a slight increase in stocks of this kind of cotton as compared with those at the end of the previous year.

EXPORTS AND IMPORTS OF COTTON MANUFACTURES.

Closely related to the consumption of cotton in the domestic manufacture of cotton goods is the foreign trade in these fabrics. For this reason it is believed that statistics of this trade will lend interest to the report. Accordingly the following tables, compiled by the Bureau of Foreign and Domestic Commerce, of this department, showing the exports and imports for the last fiscal year, are presented. Table 19 gives the statistics of exports by classes of goods and by countries to which exported.

The value of cotton goods of domestic manufacture exported during the fiscal year 1913 amounted to \$53,743,977. More than one-half of this amount is accounted for by the exports of cotton cloth, which amounted to 444,729,241 square yards, valued at \$30,-668,234. Unbleached cloths, aggregating 213,189,754

WORLD'S CONSUMPTION AND STOCKS OF COTTON, AND TRADE IN COTTON AND ITS MANUFACTURES.

The manufacture of textiles from cotton antedates history, its use for this purpose having been observed by the earliest visitors to both India and America. Until comparatively recent years, however, its manufacture was limited, owing to the small quantity of the fiber available. The world's production of cotton in 1791, according to the report of Hon. Levi Woodbury, Secretary of the Treasury, submitted to Congress in 1836, amounted to less than 1,000,000 bales, of which quantity two-thirds was produced in India and other countries in Asia. Smaller amounts were produced in Mexico, Brazil, the West Indies, and other American countries. Much the larger part of this cotton, which was usually separated from the seed by hand, was consumed in the homes of the people, only a small part of it being available for factory use, as the term is now understood.

With the invention and improvement of machinery for the spinning and weaving of textile fibers the demand for cotton rapidly increased. No considerable development in this branch of the industry took place, however, until after the invention of the cotton gin, which effected the separation of the lint from the seed by machinery. After the introduction of this machine, which occurred in 1793, the cultivation of cotton in the United States made rapid progress and this product became available for factory use both in this country and in Europe.

Few other industries, if any, have made as great progress during the past century as has the manufacture of cotton. This is brought out forcibly when the world's production of cotton for mill consumption from the crop of 1912, which amounted to more than 21,000,000 bales, is compared with the total estimated production in 1811, which was only 1,100,000 bales, and only a small portion of which was available for factory use. The greatest increase in the industry, however, has come about in the last 30 years. During this time the number of spindles has increased from approximately 80,000,000 to 143,398,000 and the quantity of cotton consumed from less than 9,000,000 bales to 21,542,000 bales.

Formerly the manufacture of cotton was confined largely to England and a few localities in other countries. In recent years, however, not only has the industry

increased wonderfully in these established centers but it has been extended until, at the present time, there are very few countries without some cotton mills. The spinning of cotton by power-driven machinery has been introduced into China, Turkey, Brazil, and, to a less extent, into Indo China, Australia, Egypt, and a number of countries in South and Central America. To present accurate statistics covering the industry throughout the world is well-nigh impossible, but reliable data are available for all of the important cotton manufacturing countries.

Table 23, page 30, shows, by countries, the number of active cotton spindles and the mill consumption of cotton throughout the world in 1900 and 1913. This table has been compiled from a number of sources, and, while absolute accuracy is not claimed for all of the figures, it is believed they closely approximate the facts. The number of active cotton spindles in the world, as shown in the table, was 105,681,000 in 1900 and 143,398,000 in 1913, the increase during the period being 37,717,000 spindles, or 35.7 per cent. In addition to the spindles shown above for 1913, there were in the United States 629,851 spindles that were inactive during the year. No definite information as to the number of inactive spindles in other countries is available, but it is probable that the total number of inactive spindles in the world was not far from 2,000,000, which would make the total number of spinning spindles at the close of the year in excess of 145,000,000.

The world's consumption of cotton for the year ending August 31, 1913, has been placed at 21,542,000 bales, as compared with 20,587,000 in 1912, 19,013,000 bales in 1911, 18,321,000 bales in 1910, and 19,397,000 bales in 1909. These figures, however, do not represent the total consumption of cotton, for in a number of countries large quantities are used which do not enter into commercial channels and can not be estimated with any certainty. Neither do they include, except for the United States, all cotton consumed in manufacture, as they relate more specifically to cotton used in cotton mills and do not include all cotton used for mixing with wool or other fibers, nor cotton used in the manufacture of felts, batting, absorbent cotton, etc.

TABLE 23.—World's active cotton spindles and mill consumption of raw cotton: 1900 and 1913.

[The statistics for the United States were collected by the Bureau of the Census. Those for other countries have been compiled from a number of sources. Among them are Ellison's Annual Review of the Cotton Trade, Liverpool; the Commercial and Financial Chronicle, New York; Cotton Facts, New York; reports of the International Federation of Master Cotton Spinners' and Manufacturers' Associations, Manchester; and statistics furnished by Mitsui & Co., Osaka, Bombay Cotton Trade Association, Bombay, and E. T. Craig, Mexico City.]

COUNTRY.	Year ending August 31—	Active cotton spindles.	Mill consumption of cotton (bales). ¹
Total.....	1913 1900	143,398,000 105,681,000	21,542,000 15,177,000
United States:			
Cotton-growing states.....	1913 1900	12,227,000 4,368,000	2,960,000 1,523,000
All other states.....	1913 1900	19,293,000 15,104,000	2,826,000 2,350,000
Europe:			
United Kingdom.....	1913 1900	55,653,000 45,500,000	4,440,000 3,330,000
Germany.....	1913 1900	11,186,000 8,000,000	1,800,000 1,400,000
Russia.....	1913 1900	9,213,000 7,500,000	1,700,000 1,350,000
France.....	1913 1900	7,400,000 5,500,000	1,025,000 700,000
Austria-Hungary.....	1913 1900	4,900,000 3,300,000	820,000 675,000
Italy.....	1913 1900	4,600,000 1,940,000	800,000 475,000
Spain.....	1913 1900	2,000,000 2,615,000	350,000 400,000
Belgium.....	1913 1900	1,492,000 920,000	240,000 170,000
Switzerland.....	1913 1900	1,398,000 1,550,000	110,000 125,000
Sweden.....	1913 1900	534,000 360,000	115,000 85,000
Portugal.....	1913 1900	480,000 230,000	75,000 60,000
Netherlands.....	1913 1900	479,000 300,000	83,000 70,000
Denmark.....	1913 1900	90,000 40,000	25,000 15,000
Norway.....	1913 1900	75,000 35,000	11,000 10,000
Other European countries.....	1913 1900	200,000 130,000	30,000 42,000
India.....	1913 1900	6,084,000 4,945,000	1,762,000 1,162,000
Japan.....	1913 1900	2,300,000 1,274,000	1,372,000 700,000
China.....	1913 1900	930,000 550,000	398,000 200,000
Brazil.....	1913 1900	1,200,000 450,000	285,000 85,000
Canada.....	1913 1900	855,000 550,000	125,000 110,000
Mexico.....	1913 1900	500,000 470,000	110,000 125,000
All other countries.....	1913 1900	300,000 50,000	80,000 15,000

¹ The quantities for the United States are given in running bales, except that round bales are counted as half bales and foreign cotton in equivalent 500-pound bales. Linters are included. For other countries the quantities are given in equivalent 500-pound bales.

With the exception of those for the United States, the statistics for the consumption of cotton are given in equivalent 500-pound bales. Because it is not

known how much foreign-grown cotton reported for countries other than the United States is expressed in net-weight bales and how much in gross-weight bales, it is impracticable to reduce the consumption figures to a net-weight basis. Assuming, however, that the statistics as to the consumption in foreign countries have been returned in net-weight bales and reducing those of the United States to the same unit, the world's factory consumption would be 21,392,000 bales of 500 pounds net. The world's commercial production of cotton from the crop of 1912 is estimated at 21,457,000 bales of 500 pounds net. On this basis the mill consumption of cotton during the year ending August 31, 1913, was practically the same as the commercial crop of 1912. This, however, does not take into account the use of cotton in foreign countries for purposes other than spinning, to which reference has been made. Thus the crop of 1912, while short of the record crop of 1911 by less than 350,000 bales, failed to provide for the increased consumption of the year 1913, and consequently entailed a reduction in the stocks on hand at the end of the year as compared with those carried over from the preceding year. New mills are under construction in a number of countries, and it is probable that the requirements of the mills for the year ending August 31, 1914, will equal, if not exceed, those for the past year.

The relative importance of the several countries in the production and consumption of cotton is shown in Diagram 3, on page 31.

UNITED STATES.

The year 1913 was one of remarkable activity for the American mills. No serious troubles of any kind were encountered, and, with the exception of a scarcity of labor in some sections, the year was a very satisfactory one. As compared with the totals of 1912, active spindles increased almost 1,000,000; spindles idle continuously throughout the year decreased 375,000; and cotton consumed increased 419,000 bales, indicating a greatly improved condition in the industry. The domestic demand for cotton wares was good and the export trade, while comparatively small, expanded somewhat. A detailed presentation of statistics relative to cotton spindles and cotton consumption for the United States appears in earlier pages of this report.

EUROPE.

The season of 1912-13, like that of the preceding year, was, on the whole, a profitable one for the European mills. The commitments for the future delivery of goods and the extraordinary stocks of cotton carried over from the previous season insured

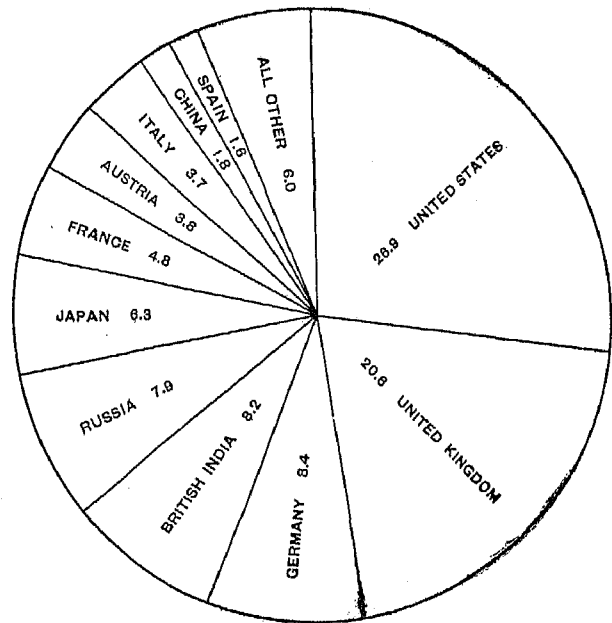
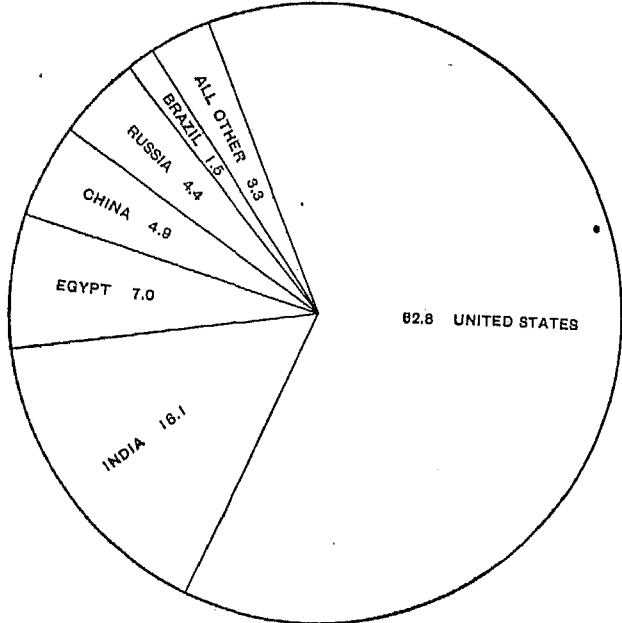
profitable operation for at least a portion of the year. These stocks, together with the large crop of 1912, provided an ample supply of the raw material. Thus the season opened and progressed with varying success in the several countries of Europe according to local conditions and developments. The year

in the United Kingdom was an unusually good one and Germany also experienced a good year. In some countries labor troubles interfered to some extent, while the wars in southeastern Europe had a very injurious effect on the industry in some of the less important countries and depressed it somewhat in others.

DIAGRAM 3.—RELATIVE IMPORTANCE OF THE SEVERAL COUNTRIES IN THE PRODUCTION AND CONSUMPTION OF COTTON.

Proportion of world's mill supply of cotton contributed by each country (growth of 1912).

Proportion of total consumption, by countries (year ending August 31, 1913).



United Kingdom.—As shown in Table 23, there were 55,653,000 active spindles in the United Kingdom in 1913, compared with 45,500,000 in 1900, the increase during this period having been 22.3 per cent, while the quantity of cotton consumed increased from 3,330,000 bales in 1900 to 4,440,000 in 1913, or 33.3 per cent. The spindles operated in the United Kingdom during the past year constituted 38.8 per cent of all the active cotton spindles in the world, but the quantity of cotton consumed by them formed only 20.6 per cent of the total. The percentage of cotton consumed, however, fails to convey a proper idea of the place the country holds in the cotton-manufacturing industry of the world, because the goods made in the United Kingdom are on the average of a much finer grade and higher value than those produced elsewhere.

There are several reasons for this remarkable development in the manufacture of cotton goods in the United Kingdom. A damp climate does away with the necessity for artificially humidifying the air. The proximity of coal and iron mines provide the factories with cheap fuel and to a degree with cheap machinery. Superior facilities for transporting prod-

ucts to all parts of the world are of special advantage in establishing and maintaining markets for them. But more far reaching, probably, than any of these is the fact that England was the first beneficiary in a series of inventions of textile machinery by Kay, Hargreaves, Arkwright, Crompton, Cartwright, and others. The inventions of these men practically revolutionized the industry and enabled England to advance in it more rapidly than any other country.

The manufacture of cotton goods in the United Kingdom is centered in Lancashire, of which Manchester is the chief city. This district alone, according to recent publications, has 48,481,431 spindles and 786,206 looms. In this locality also the industry is specialized to a higher extent than elsewhere. Here not only establishments but communities as well largely confine their activities to a single kind of product, and in some instances to a product of a single standard. For instance, spinning is carried on chiefly in Oldham, Bolton, Ashton, and Rochdale, and weaving in Blackburn, Preston, Burnley, and Nelson. Further, fine yarns are generally spun in Bolton and medium yarns in Oldham. Bleaching, dyeing, and printing are, as a rule, also carried on in separate establishments.

These practices result in the special training of operatives and tend toward greater efficiency, uniformity of product, and economy of operation.

Only about 20 per cent of the total quantity of cotton goods manufactured in the United Kingdom is consumed in the country. The exports of these goods, as shown in Table 26, amounted to \$595,584,160 in 1911 and were widely distributed. India furnishes the greatest market for these goods, other important countries in this respect being China, Turkey, Egypt, Australia, Dutch East Indies, Argentina, and the United States.

Practically every country in which cotton is grown contributes to the supply of the English mills, although the main reliance is on the United States, which furnishes about 85 per cent of the total. Egypt and Brazil furnish most of the remainder, with relatively small amounts from India, Peru, and other countries.

Germany.—In the number of active spindles and in the quantity of cotton consumed, Germany ranks first among the countries of continental Europe and third among the countries of the world, being exceeded only by the United States and the United Kingdom. According to Table 23, the number of cotton spindles in Germany increased from 8,000,000 in 1900 to 11,186,000 in 1913, or 39.8 per cent. The increase in the consumption of cotton in the 13 years was 400,000 bales, or 28.6 per cent.

The importance of this industry to the country is well illustrated by the fact that raw cotton is the largest single import and cotton manufactures the largest class of exports. In 1911, according to Table 26, Germany imported 1,957,759 bales of cotton and exported 163,353 bales, thus leaving 1,794,406 bales available for consumption. As considerable quantities of the coarser goods are manufactured in this country, some low-grade cottons can be utilized and the imports of Indian and other inferior cottons are comparatively large, about one-eighth of the total being of these varieties. In the use of Egyptian cotton Germany is exceeded only by the United Kingdom and the United States. The trade in cotton manufactures is growing, the values of imports and exports in 1911 being \$45,230,948 and \$114,108,624, respectively, the excess of exports over imports being \$68,877,676.

Russia.—According to the latest reports available, the number of cotton spindles in Russia is 9,213,000, and the estimated consumption of cotton 1,700,000 bales of 500 pounds each. These figures show an increase of 22.8 per cent in spindles and 25.9 per cent in the quantity of cotton consumed since 1900. The industry was affected somewhat during the past year by labor disturbances, particularly at Lodz, and by the war in the Balkans. More than half of the cotton consumed in Russian mills is now grown in the Asiatic provinces of that country. Some Egyptian cotton is consumed, while practically all of the remainder is American.

France.—As measured by the number of active cotton spindles and the quantity of cotton consumed, France ranks fourth among the European countries in the manufacture of cotton goods. During the period covered by Table 23, the number of active spindles increased 34.5 per cent and the consumption of cotton 46.4 per cent. About one-fifth of the total number of spindles in the country are employed on Egyptian cotton and the remainder chiefly on American. The low average in the quantity of cotton consumed per spindle is due to the fact that about four-sevenths of the total are mule spindles, which do not consume as much cotton as ring spindles. During the past year the state of the industry in France, on the whole, was hardly satisfactory and there was practically no increase in the spinning capacity of the mills. As shown in Table 26, the value of cotton goods imported into France during 1911 was \$16,540,486 and the value of those exported was \$67,789,127, the balance of trade in these goods being \$51,248,641 in favor of France.

Austria-Hungary.—The war in the Balkans had a very depressing effect upon the cotton-manufacturing industry in Austria-Hungary, interfering not only with obtaining new business but with making deliveries in Turkey and the Balkan states on old contracts. This state of affairs resulted in the accumulation of stocks in the hands of manufacturers and merchants and necessitated curtailment. The number of active spindles in Austria-Hungary in 1913 was 4,909,000, an increase of 48.8 per cent since 1900. During this period the annual consumption of cotton increased from 675,000 bales to 820,000, or 21.5 per cent.

Italy.—From the standpoint of growth in cotton-manufacturing machinery, Italy presents the most interesting example of any of the European countries for the period covered by the table, the number of spindles having increased from 1,940,000 to 4,600,000. A few years ago the mills became very active in the installation of new machinery, which accounts for this relatively large showing. It seems, however, that such rapid enlargement of equipment was ill advised, as the industry has, for two years at least, fallen far short of being satisfactory. There has been practically no increase in equipment during the past two seasons, and the condition of the industry became such as to cause anxiety among the mill owners and to call for serious consideration. As a result, a combination of the owners of about four-fifths of all the spindles in the country was formed during the past year and action taken toward standardizing prices and subsidizing establishments in order to restrict output.

Other European countries.—In addition to those already named, the manufacture of cotton is an important industry in a number of other European countries, among which may be mentioned the following: Spain, with 2,000,000 active spindles; Belgium, with 1,492,000; Switzerland, with 1,398,000; Sweden, with

534,000; Portugal, with 480,000; the Netherlands, with 479,000; Denmark, with 90,000; and Norway, with 75,000. The relative position of some of these countries in the manufacture of cotton and in the trade in cotton goods may be seen from Tables 23 and 26.

INDIA.

Although cotton has been produced and consumed in India from time immemorial, its manufacture, as a factory industry, properly dates from 1854, with the building of a successful cotton mill in Tardeo, near Bombay. Since then the industry has had a steady growth and the indications are that it will continue to increase. India is gradually increasing the production of cotton, as well as improving the fiber. It also has an almost inexhaustible supply of cheap labor. These, when taken into consideration with the fact that India leads all other countries as a market for cotton goods, justify the belief that the industry in this country will eventually reach large proportions. At the present time the industry is largely centered in the Bombay presidency, where nearly three-fourths of the total number of spindles in the country are located. New mills, however, are being built in other sections of the country, but the largest increase is being shown in the established center. Since 1900 the number of active cotton spindles in the country has increased from 4,945,000 to 6,084,000 and the quantity of cotton consumed from 1,162,000 bales of 500 pounds each to 1,762,000 bales. In addition, it is estimated that 360,000 bales are used each year in manufacture outside of mills. The yarns produced in Indian mills are mainly 10's to 20's, as the cotton produced in the country is, as a rule, very coarse and harsh and not suitable for the manufacture of finer counts. Some American cotton is imported and used in the production of the finer yarns, but the necessity for this may be overcome by the growing of cotton with a longer staple. According to Table 26, the value of cotton manufactures imported into India during the year ending March 31, 1912, amounted to \$160,927,139, while the exports, which were largely made up of yarns, were valued at \$50,210,889. A large part of the yarns exported was sent to China, where they are used in the manufacture of cloth on hand looms.

JAPAN.

Table 23 shows that the number of cotton spindles in Japan in 1913 was 2,300,000 compared with 1,274,000 in 1900, and that the quantity of cotton consumed increased from 700,000 bales in 1900 to 1,372,000 bales in 1913. The large consumption of cotton per spindle is due to the fact that the mills are usually operated day and night and are, for the most part, equipped with ring spindles, which consume considerably more cotton than mule spindles. The industry in Japan is less susceptible to unusual con-

ditions in the supply of cotton than it is in many other countries. Low freight rates and proximity to China, the great market for Japanese yarns and cloth, facilitate the exportation of the finished products and give Japan an advantage in competition with other countries.

The principal source of the cotton supply is India, although the importation of Chinese cotton is important and increasing. The imports from the United States for a number of years have averaged about 200,000 bales annually, but during the fiscal year ending June 30, 1913, they amounted to 374,802 bales. As shown in Table 26, the value of cotton manufactures imported into Japan in 1911 was \$7,775,497, while the exports of such goods were valued at \$34,049,389.

According to a report by Consul General Sammons, the exports of cotton goods in 1912 amounted to \$44,303,365. Cotton tissues to the value of nearly \$11,000,000 and yarns to the value of nearly \$24,000,000 went to China, supplanting, in a large measure, American and British goods.

CHINA.

The demand for cotton yarn for weaving on hand looms has led to a comparatively large increase in the cotton-mill industry in China. The number of cotton spindles in mills in that country increased from 550,000 in 1900 to 930,000 in 1913, and the estimated quantity of cotton consumed from 200,000 bales to 398,000 bales during the same period. These figures relate only to the consumption of cotton in mills and do not include that spun or otherwise used in the homes of the people. This home industry, for which no data are available, is said to reach large proportions, and large quantities of cotton are produced and consumed in the country without reaching commercial channels.

China is, next to India, the most important market for cotton goods. The imports of yarn alone for the year 1910 amounted to 304,329,600 pounds and for 1911 to 248,016,700 pounds. The yarns imported ranged in fineness from 10's to 32's, the numbers most in demand being 12's, 14's, 16's, and 20's. The imports of Indian yarns in 1911, consisting mostly of 10's, 16's, and 20's, amounted to 141,101,700 pounds, or more than half of the total imported. Most of the remainder of the yarns were Japanese and consisted principally of 16's and 20's.

BRAZIL.

Notwithstanding the fact that cotton is indigenous to Brazil, its manufacture on a factory basis has never assumed great proportions. The number of spindles active during the past year has been estimated at 1,200,000 and the quantity of cotton consumed at 285,000 bales of 500 pounds each. These figures show a large increase, when compared with those for

1900, at which time the number of spindles was placed at 450,000 and the cotton consumption at 85,000 bales.

According to a report of Julius G. Lay, consul general, cotton weaving is the most important manufacturing industry in Brazil, the annual production of cloth being more than 250,000,000 yards. The value of cotton textiles produced in Brazil during 1911 amounted to \$46,522,333, while the value of such goods imported that year was \$25,569,333. Practically all of the coarser goods consumed in Brazil are now manufactured in the country, and the production of the finer grades is being extended.

All of the cotton used in the industry is Brazilian.

CANADA.

As shown in Table 23, the number of spindles in Canada increased from 550,000 in 1900 to 855,000 in 1913, or 55.5 per cent, and the quantity of cotton consumed from 110,000 bales in 1900 to 125,000 bales in 1913. The industry in this country participated in the general improvement shown in other countries. According to Table 26, the value of cotton manufactures imported during the year ending March 31, 1912, was \$21,330,862, of which about one-third was supplied by the United States.

MEXICO.

The cotton industry in Mexico during the past year has been in a demoralized state and the trade at a low ebb, due to the continued disturbed political condition of the country. The demand for the products of the Mexican mills has accordingly decreased greatly, while importations of cotton goods have likewise declined. No accurate data as to the quantity of cotton consumed and the number of spindles active during the year are available.

The cotton mills are required to make semiannual reports, which are checked by Government inspectors. According to these reports, there were 148 mills active during the fiscal year ending June 30, 1912. Of these, 9 were engaged in spinning only; 119 in spinning and weaving; 11 in spinning, weaving, and printing; 3 in printing only; and 6 in the manufacture of hosiery and knit goods. The total number of spindles was 762,149 and the total number of looms 27,019. There were 14,128,366 pieces of cloth of about 30 yards each manufactured during the year and the total quantity

of cotton consumed was 146,180 bales of 500 pounds net, of which 15,565 bales were American, 304 bales Egyptian, and the remainder Mexican. The number of spindles active during the year ending August 31, 1913, has been estimated at 500,000 and the consumption at 110,000 bales.

OTHER COUNTRIES.

Among other countries of relatively small, though increasing, importance in the manufacture of cotton goods, Asiatic Turkey, Indo-China, and some of the South American countries should receive consideration in a study of the world's progress in the industry.

STOCKS OF COTTON IN FOREIGN COUNTRIES.

Owing to the interest attaching to cotton because of its importance in international trade and in the industrial world, there are a number of individuals and associations engaged in compiling and publishing statistics regarding this staple. These statistics, as a rule, are limited to the more important cotton centers and to cotton afloat, and full data for the world are not available.

Among the compilers of these reports may be mentioned the International Federation of Master Cotton Spinners' and Manufacturers' Associations, which includes leading organizations of cotton manufacturers in the important cotton-spinning countries. The federation collects information direct from the mills as to actual stocks of cotton on hand at the close of August and of February. Owing to the fact that the furnishing of the information is voluntary, and to the further fact that the mills are very widely scattered, there are always some establishments which fail to furnish the data at all, while the returns of some others are delayed beyond the date of publication. As a result the data are incomplete and comparisons based upon the statistics shown are materially affected and this fact should be given full consideration.

Table 24 (p. 35), compiled from the reports of the federation published September 30, 1913, shows, by countries, for the years 1909 to 1913, inclusive, the total estimated number of spinning spindles, the number of spinning spindles in the establishments from which returns were actually received, and the number of bales of the several kinds of cotton on hand, on August 31, in the establishments reporting.

SUPPLY AND DISTRIBUTION OF COTTON, 1913.

TABLE 25.—Stocks of cotton on hand at selected ports and cotton afloat to Great Britain and the Continent on the Friday nearest the end of August: 1909 to 1913.

PORT AND YEAR.	Total.	Ameri- can.	Brazil- ian.	Egypt- ian.	Peru- vian.	All other.
	STOCKS OF COTTON HELD (RUNNING BALES) ON THE FRIDAY NEAREST THE END OF AUGUST.					
Europe:						
Liverpool—						
1913.....	573,150	375,550	70,620	47,810	31,650	47,520
1912.....	594,800	466,270	32,600	32,310	36,830	29,790
1911.....	402,200	236,350	43,220	41,540	36,950	44,140
1910.....	331,080	244,440	13,900	22,370	16,890	33,480
1909.....	835,960	743,200	11,790	28,460	35,030	17,480
London—						
1913.....	5,837					5,837
1912.....	11,165					11,165
Bremen—						
1913.....	105,000	103,000				2,000
1912.....	213,000	210,000				3,000
Havre—						
1913.....	81,700	71,500				10,200
1912.....	100,100	95,200				4,900
Other continental ports—						
1913.....	60,250	28,660		2,110		29,480
1912.....	52,750	30,530		1,960		20,260
Bombay:						
1913.....	594,000					594,000
1912.....	454,000					454,000
1911.....	421,000					421,000
1910.....	404,000					404,000
1909.....	172,000					172,000
Alexandria:						
1913.....	64,532			64,532		
1912.....	46,065			46,065		
1911.....	42,132			42,132		
COTTON AFLOAT AUGUST 31 (RUNNING BALES).						
To Great Britain:						
1913.....	61,000	25,000	5,000	8,000	14,000	9,000
1912.....	83,000	42,000	13,000	8,000	7,000	13,000
1911.....	87,000	61,000	3,000		16,000	7,000
To the Continent:						
1913.....	165,000	79,000		2,000		84,000
1912.....	128,000	70,000		2,000		56,000
1911.....	166,000	138,000		2,000		26,000

A comprehensive statement of the world's stocks of cotton on August 31, 1913, would be most interesting and valuable as showing the total quantity carried over from the preceding year. Reliable data are lacking, however, for some of the holdings, particularly those in the less important countries. In order to afford some idea regarding the amount carried over, information from various sources has been assembled

in the following statement, which presents the data under certain general headings, together with the several sources of information:

Stocks of cotton August 31, 1913.

LOCATION.	Quantity (running bales ¹).	Source of information.
Mill stocks:		
United States.....	778,000	Bureau of the Census.
Europe.....	2,475,000	New Orleans Cotton Exchange.
India, Japan, Canada, Brazil, and Mexico (partial).	1,154,000	International Federation of Master Cotton Spinners' and Manufacturers' Associations.
Stocks in public storage places in United States.		
United Kingdom.....	495,000	Bureau of the Census.
Port stocks:		
In other European countries.....	579,000	Liverpool Cotton Association.
Bombay.....	247,000	Liverpool Cotton Association.
Alexandria.....	594,000	The Cotton Gazette, Liverpool.
	65,000	The Cotton Gazette, Liverpool.
Cotton afloat:		
To United Kingdom.....	61,000	Liverpool Cotton Association.
To other European countries.....	165,000	Liverpool Cotton Association.
Stocks held elsewhere in United States (estimated).	325,000	Bureau of the Census.

¹ Except foreign cotton in the United States, which is in equivalent 500-pound bales.

The figures in the above statement represent a very large percentage of the total holdings of baled cotton on August 31, 1913. They include only partial figures, however, for mill stocks in India, Japan, Canada, Brazil, and Mexico, as given in Table 24, and do not account for such stocks in China and the other less important manufacturing countries outside of Europe; nor do they include for countries outside of the United States and Europe stocks other than those in mills, with the exception of the port stocks at Bombay and Alexandria. The statement, accordingly, fails to this extent to make a complete presentation of the quantity of cotton on hand on August 31, 1913.

IMPORTS AND EXPORTS OF COTTON AND COTTON MANUFACTURES.

Table 26 shows for the more important countries which import or export cotton or its manufactures,

the trade in cotton and cotton goods, showing separately the amounts for cloth, yarn and thread, and all other manufactures of cotton, as well as the total value.

TABLE 26.—IMPORTS AND EXPORTS OF RAW COTTON AND OF COTTON MANUFACTURES, FOR SELECTED COUNTRIES.

[Compiled by the Bureau of Foreign and Domestic Commerce, Department of Commerce. Owing to many differences in the methods employed by the several countries in classifying their imports and exports of cotton manufactures and in presenting statistics for the same, it is very difficult, if not impracticable, to harmonize the results so as to present strictly comparable statistics. The statistics relate to the calendar year, except those for the United States, Cuba, and Mexico, which are for the fiscal year, and those for Canada, Siam, and India, which relate to the year ending March 31.]

COUNTRY.	Year.	Raw cotton (equivalent 500-pound bales).	VALUE OF COTTON MANUFACTURES.				COUNTRY.	Year.	Raw cotton (equivalent 500-pound bales).	VALUE OF COTTON MANUFACTURES.			
			Total.	Cloth.	Yarn and thread.	All other.				Total.	Cloth.	Yarn and thread.	All other.
IMPORTS.						IMPORTS—contd.							
Austria-Hungary....	1911	941,884	\$13,995,504	\$2,526,723	\$7,205,208	\$4,263,573	Siam.....	1911	726	\$4,383,297	\$2,160,562	\$405,002	\$1,817,643
Belgium.....	1911	605,525	53,871,021	14,791,973	11,502,975	27,576,073	India.....	1912	109,884	160,927,139	139,229,171	13,518,024	8,179,344
Bulgaria.....	1910	3,167	4,938,520	2,149,439	2,120,178	668,903	French Indo-China..	1909	17,267	8,804,840	5,679,035	2,741,277	434,528
France.....	1911	1,537,573	16,540,486	1,823,657	5,084,585	9,632,244	Dutch East Indies..	1910	41	(³)	17,271,086	(³)	(³)
Germany.....	1911	1,957,759	45,230,948	6,800,850	23,535,344	14,804,754	Philippine Islands..	1911	1,401	9,124,434	6,210,754	1,167,689	1,745,991
Greece.....	1910	9,343	3,103,676	2,400,595	250,415	452,666	.....	1911	80	22,732,770	20,390,157	1,596,608	735,924
Italy.....	1911	837,182	10,102,672	2,123,605	1,217,693	6,761,374	Algeria.....	1909	503	10,023,144	9,253,630	235,922	1,133,592
Netherlands.....	1910	431,661	23,715,645	7,047,304	16,202,289	466,055	Tunis.....	1911	59	2,764,817	2,377,941	169,892	216,984
Norway.....	1910	17,878	3,664,874	(¹)	890,618	2,774,256	Other French Africa	1910	49	14,606,710	13,140,723	364,750	1,182,231
Portugal.....	1910	72,133	4,144,617	2,639,718	310,872	1,194,027	British South Africa.	1911	.....	15,095,083	7,846,857	(¹)	7,248,220
Roumania.....	1910	1,270	12,201,960	5,831,415	3,945,058	2,425,487	Other British Africa.	1910	.....	14,293,393	4,140,812	271,137	9,881,414
Russia.....	1910	870,753	14,967,122	5,425,010	5,428,202	4,113,910	German Africa.....	1909	.....	3,381,738	2,794,323	76,607	510,548
Servia.....	1910	.....	3,055,038	1,234,373	1,414,383	406,282	EXPORTS.						
Spain.....	1911	398,666	3,542,145	931,790	414,491	2,195,864	Austria-Hungary....	1911	56,576	18,153,373	11,412,503	4,015,346	2,725,524
Sweden.....	1910	91,247	6,334,976	2,350,757	1,312,024	2,672,195	Belgium.....	1911	292,480	62,367,303	13,901,660	12,806,059	35,538,684
Switzerland.....	1911	107,738	17,285,044	6,863,902	3,087,755	6,733,387	France.....	1911	439,713	67,789,127	33,433,390	3,114,248	31,241,489
United Kingdom....	1911	4,414,176	54,892,743	13,474,039	1,934,215	39,484,489	Germany.....	1911	163,353	114,108,624	34,406,232	14,086,982	65,615,410
Canada.....	1912	145,588	21,330,862	9,932,313	939,223	10,459,326	Italy.....	1911	347	42,003,541	29,273,084	6,742,613	5,987,844
Cuba.....	1910	2,505	9,699,186	7,701,307	350,605	1,647,274	Netherlands.....	1910	158,575	26,369,009	24,062,005	2,298,678	8,326
Mexico.....	1911	5,809	7,036,656	2,820,959	1,426,495	2,789,202	Russia.....	1910	252	13,155,995	12,956,914	199,081	.....
United States.....	1912	219,560	63,506,574	7,760,729	4,028,127	51,717,718	Switzerland.....	1911	.....	52,206,307	5,951,944	3,209,161	43,045,202
Argentina.....	1911	362	34,314,484	22,366,104	3,006,070	8,852,310	United Kingdom....	1911	582,361	595,584,160	442,282,334	76,258,011	77,043,815
Brazil.....	1909	2,211	15,032,953	8,669,100	2,553,458	3,810,395	United States.....	1912	11,072,605	50,769,511	31,388,998	599,593	18,780,020
Chile.....	1911	759	14,398,329	5,540,410	1,510,668	7,347,251	India.....	1912	1,637,912	50,210,889	21,674,570	27,644,807	801,512
Peru.....	1909	.....	2,571,824	2,008,497	168,332	394,995	Japan.....	1911	1,080	34,049,389	9,816,079	20,065,914	4,167,395
China.....	1911	10,976	96,120,451	58,943,028	33,520,033	3,657,390	Egypt.....	1911	1,315,009	14,745	4,226	939	9,580
Japan.....	1911	1,061,765	7,775,497	7,023,753	570,830	180,914							
Korea.....	1910	920	5,774,616	4,631,663	913,185	229,768							

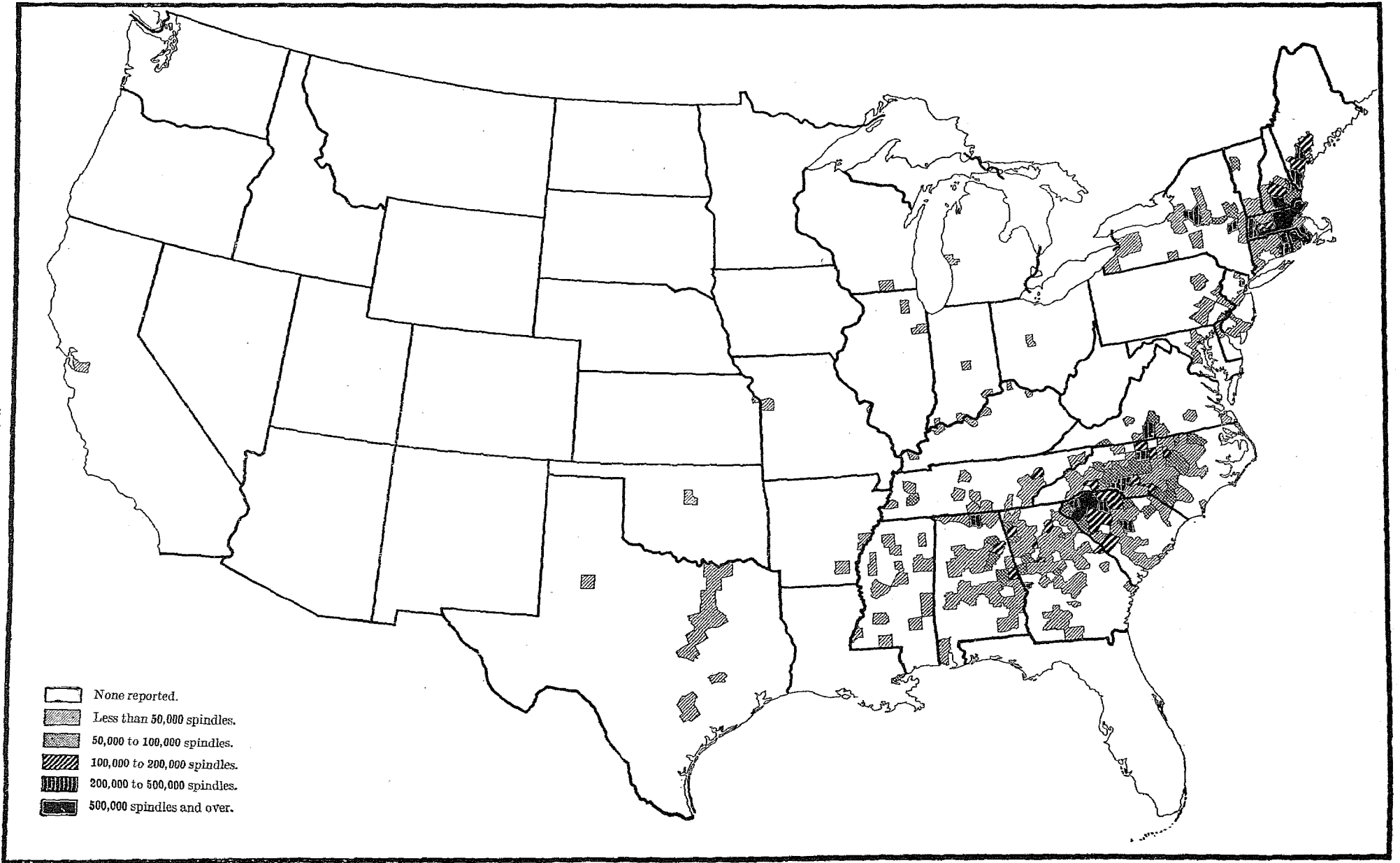
¹ Included in "All other."

² Exclusive of 20,176,800 pounds of cotton in the seed.

³ Not available.

MAP 2.—CLASSIFICATION OF COUNTIES ACCORDING TO THE NUMBER OF COTTON SPINDLES: 1913.

(88)



LOCALIZATION OF THE COTTON INDUSTRY IN THE UNITED STATES.

The development of the cotton-manufacturing industry in the United States, which is one of the remarkable achievements of the country, properly dates from the introduction of the Arkwright machinery in 1790, although as early as 1775 a spinning jenny of 24 threads was put in operation in Philadelphia.

In the cotton-mill industry water-power facilities more than any other factor have determined the location of the mill centers of the United States. For many years after the establishment of the industry water power was used almost exclusively to operate the machinery, although small mills were sometimes operated by animal power. As late as 1870 more than two-thirds of the power used in the industry was water power.

In a report made by the Secretary of the Treasury to Congress in 1810, the number of cotton mills erected up to the close of the previous year, including 25 then building, was given as 87. The 62 then in operation were using 31,000 spindles. The total number of mills comprised 25 in Rhode Island, including 7 under construction; 15 in Massachusetts, including 5 under construction; 6 in Connecticut; 4 in Pennsylvania; 6 in New York; 5 in Maryland; 6 in New Hampshire; 6 in Kentucky; 4 in Vermont; 2 in New Jersey; 2 in Delaware; and 1 each in Maine, Virginia, South Carolina, Georgia, Tennessee, and Ohio. Of these 87 mills, all those in Kentucky, South Carolina, Georgia, Tennessee, and Ohio, 2 in Pennsylvania, and 1 each in Delaware and Maryland were operated by animal power.

Table 7, page 15, shows the development of the cotton-mill industry in the different sections of the country, by decades, since 1840. As shown by this table, the industry has increased in recent years more rapidly in the Southern states than in the other sections of the country. This rapid growth may be ascribed principally to two causes—(1) a large supply of labor which, though practically untrained in textile work, has been utilized profitably, particularly in the manufacture of the coarser yarns and fabrics, and since it has become more skilled, in the manufacture of finer goods; and (2) the development of the extensive water-power resources of this section. The practice of generating electricity at large hydroelectric plants and distributing it to cotton mills and other industrial enterprises has grown rapidly. It is asserted that the cost per horsepower of installing a hydroelectric plant

is usually less than that of installing a steam plant, and that the cost of operation is also less for the hydroelectric plant.

The importance of the cotton-spinning industry in certain localities is shown by the following table. This table gives the total number of spindles in each county having more than 100,000 producing cotton spindles, the counties being arranged in the order of their importance in this respect.

TABLE 27.—Counties in the United States having more than 100,000 cotton spindles each, arranged in order of number of spindles: 1913.

COUNTY.	Spindles (number).	COUNTY.	Spindles (number).
Bristol, Mass.	7,093,704	Pickens, S. C.	205,588
Providence, R. I.	1,590,478	Gulford, N. C.	203,260
Middlesex, Mass.	1,119,692	Fulton, Ga.	198,070
Hillsborough, N. H.	904,369	Greenwood, S. C.	194,768
Spartanburg, S. C.	805,123	Aiken, S. C.	186,548
Hampden, Mass.	744,874	Kennebec, Me.	185,636
Windham, Conn.	744,664	Richmond, Ga.	181,160
Essex, Mass.	730,612	Laurens, S. C.	179,856
Greenville, S. C.	715,670	York, S. C.	178,584
Worcester, Mass.	624,680	Durham, N. C.	162,304
Kent, R. I.	587,304	Rockingham, N. C.	159,616
Anderson, S. C.	565,648	Newberry, S. C.	159,592
Berkshire, Mass.	491,990	Cherokee, S. C.	154,164
Gaston, N. C.	478,934	Hampshire, Mass.	144,840
New London, Conn.	473,506	Chambers, Ala.	138,500
Oneida, N. Y.	405,018	Rutherford, N. C.	137,920
Androscoggin, Me.	397,798	Alamance, N. C.	136,338
York, Me.	392,072	Calhoun, Ala.	128,911
Stratford, N. H.	308,200	Merrimack, N. H.	128,876
Union, S. C.	293,488	Richmond, N. C.	122,833
Muscogee, Ga.	270,800	Cumberland, Me.	122,440
Albany, N. Y.	265,086	Floyd, Ga.	119,524
Cabarrus, N. C.	252,920	Philadelphia, Pa.	117,693
Pittsylvania, Va.	247,072	Spalding, Ga.	112,252
Richland, S. C.	244,812	Baltimore city, Md.	110,896
Essex, N. J.	232,291	Knox, Tenn.	109,544
Mecklenburg, N. C.	219,538	Chester, S. C.	106,656
Bristol, R. I.	213,116	Stanly, N. C.	104,336
Madison, Ala.	211,902	Hall, Ga.	102,492

In the 58 counties in the United States which had more than 100,000 cotton spindles, the total number of such spindles was 25,928,648, or 80.6 per cent of the aggregate for the country. Of these counties, 3, with a total of 9,812,874 spindles, or 30.5 per cent of the aggregate for the United States, had more than 1,000,000 spindles each; 9, with 6,422,944, or 20 per cent of the aggregate, had 500,000 but less than 1,000,000 each; 19, with 5,808,491, or 18 per cent of the aggregate, 200,000 but less than 500,000 each; and 27, with 3,884,339, or 12.1 per cent of the aggregate, 100,000 but less than 200,000 each. Of the 58 counties, 13 are in South Carolina, 10 in North Carolina, 7 in Massachusetts, 6 in Georgia, 4 in Maine; 3 each in Alabama, New Hampshire, and Rhode Island; 2 each in Connecticut and New York; and 1 each in Maryland, New Jersey, Pennsylvania, Tennessee, and Virginia.

Bristol County, Mass., with 7,093,704 cotton spindles, led all other counties, having 64 per cent of the total spindle capacity for Massachusetts, 40.3 per cent of the total for New England, and 22.1 per cent of the total for the United States. The industry was established in this county at an early date, and the county has long maintained a leading position. Fall River, the most important city in the United States from a cotton manufacturing standpoint, is located in this county, as well as the cities of New Bedford and Taunton, and a number of towns largely engaged in the manufacture of cotton. Providence County, R. I., with 1,599,478 cotton spindles, held second place in number of cotton spindles, and Middlesex County, Mass., with 1,119,692 cotton spindles third. In the Southern states, Anderson, Greenville, and Spartanburg Counties, in the western part of South Carolina, are the only ones with more than 500,000 cotton spindles each, Spartanburg County having the largest number, 805,123. In North Carolina, Gaston County, with 478,934 spindles, ranked first; in Georgia, Muscogee, with 270,860; in Virginia, Pittsylvania, with 247,072; in Alabama, Madison, with 211,902; and in Tennessee, Knox, with 109,544.

Further illustration of the localization of the cotton-manufacturing industry in the United States is

afforded by map 2, which gives a classification of all the counties in the country according to spindle capacity and brings out the concentration of the industry in well-defined sections. On it are indicated counties having less than 50,000 cotton spindles each; those having from 50,000 to 100,000 each; those having from 100,000 to 200,000 each; those having from 200,000 to 500,000 each; and those having more than 500,000 each.

The relative standing of any county in the cotton manufacturing industry as a whole depends largely upon whether the factories are devoted to spinning only, or to both spinning and weaving. In some counties the mills make a specialty of spinning yarn which is used elsewhere, while in others practically all the yarn spun is used in the county, and in still others the operations are largely confined to weaving and otherwise using yarns spun elsewhere. This last condition is particularly applicable to Philadelphia County, Pa., one of the leading counties in the United States in textile manufacture. This county ranks low in respect to the number of cotton spindles, but, because of the use of cotton yarn in weaving cotton fabrics and in the carpet and woolen industries and in the manufacture of hosiery, it is said to be the greatest market for cotton yarn in the country.