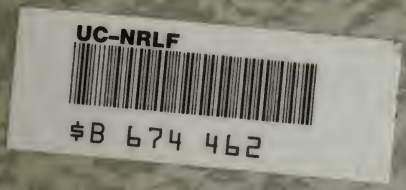

LETTER

FROM

THE SECRETARY OF THE TREASURY,

TRANSMITTING

TABLES AND NOTES

ON THE

CULTIVATION, MANUFACTURE, AND FOREIGN TRADE

OF

COTTON.

APRIL 5, 1836.

Ordered, That 1,000 copies of this document be printed for the use of the Senate.

WASHINGTON:

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1836.

CULTURE, &c. OF COTTON.

TREASURY DEPARTMENT,
February 29, 1836.

SIR: Certain tabular statements and notes on the cultivation and manufacture, together with the imports and exports of cotton, are herewith submitted to the House of Representatives, in compliance with their resolution of the 12th instant:

"*Resolved*, That the Secretary of the Treasury be directed to transmit to this House the tables indicated in a note to his annual report, showing the progress in the cultivation and manufacture of cotton in the United States, and in other countries; also, showing the comparative quantity and value of exports and imports of cotton, and cotton manufactures, in the United States and other countries."

In order that the true character of these tables may be understood, and no expectation as to their contents be formed which an examination of them might disappoint, a brief explanation will be given of their origin, progress, and present state of completion.

They were not commenced till the last year; were at first very limited in their object, and have been attended to since only at a few brief intervals of leisure. In the course of that year, while making official investigations, they were begun, with a view to the collection of such general statistical facts as might

sirable. But as that minuteness did not come within the scope of my original examinations, what I have thus hastily collected and presented must be regarded rather as a few general facts for comparison, and as hints or suggestions, to be followed out by others who enjoy more leisure, than as a full compilation of statistics on the subject of cotton. Yet, in their present imperfect and meager state under some heads, they still contain, under each, it is hoped, a few data which may prove useful, since they bring together, in a condensed and systematic view, many scattered details on a subject very important to the finances of the country at this time, as well as to its future prosperity, in each of the three great branches of national industry—agriculture, commerce, and manufactures.

Any inferences or suggestions on the influence of tariffs upon the growth or manufacture of cotton, or on the propriety of protection to manufactures or other branches of our national interests, which have been so much agitated in former years, were studiously avoided, as not called for by the occasion, or the present condition of the country.

The notes contain numerous illustrations, additional explanations, and facts, which could not be conveniently incorporated into the tables; and some of which are very material for deciding correctly upon the accuracy of the figures and statements contained in the different columns.

The general arrangement of the tables and notes is such as to present, first, the facts and estimates on the growth or the crop of cotton, so far as practicable, for a number of different years, in those countries in the world where it is most cultivated. They exhibit, next, the foreign trade in raw cotton, by giving the exports and imports of it at several periods from and to most of the places abroad where it constitutes an article of much commerce.

The third set of tables shows the amount and condition of the manufacture of cotton, and its consumption at different dates, in most of the countries where it is extensively used; and the last series shows the foreign trade in those manufactures, during a number of years, from and to many of the principal places engaged in it.

A more minute explanation of the contents of each table and its notes is given, for convenience of reference, in the schedule annexed.

With these hasty explanatory remarks,

I have the honor to be,

Very respectfully,

Your obedient servant,

LEVI WOODBURY,

Secretary of the Treasury.

Hon. JAMES K. POLK,

Speaker of the House of Representatives.

SCHEDULE OF THE TABLES AND NOTES.

A, B, and C relate to the crop or growth of raw cotton.

A gives the quantity supposed to be raised in the world at a few different periods, and in each country where it grows.

B gives the quantity computed to be grown at several dates, in each of the Southern and Southwestern States of this Union.

C gives the prices of it here, and in England, for many years; the capital and the number of persons estimated to be employed in growing it, and the value of the whole crop here and elsewhere.

D, E, F, G, H relate to the foreign trade, or the exports and imports of raw cotton.

D gives the exports from the different quarters of the world chiefly engaged in that trade, at a few separate periods.

E gives the exports from most of the important places in the United States whence it is shipped.

F gives the exports from and to most of the countries engaged extensively in this trade.

G gives the imports of it into England, at several dates, and the amount from each of the most important countries raising it.

H gives the imports into France, and whence, as well as the imports into a number of other places.

J, K, L relate to the manufacture and consumption of raw cotton, in several countries.

J gives the amount used and manufactured in most of the countries where raw cotton is much worked up.

K gives the value of the manufactures of it in several countries, and the amount of capital employed in them.

L gives the spindles and number of persons employed in the manufacture, in some places, at different periods.

M, N, O relate to the foreign trade in cotton manufactures.

M gives the exports of them from several countries.

N gives the exports of them from England, and the amounts exported thence to several enumerated places, at different periods, so as to exhibit in the same table the imports of them into the same places from England.

O gives the exports of them from several other countries, and whither.

P is the last of the tables, and merely presents an exhibit of the dates of the most important changes in the growth, manufacture, and foreign trade of cotton, within the period chiefly referred to in the other tables.

INTRODUCTORY NOTE.

In the subsequent tables the quantity of raw cotton has been computed in pounds, and when stated in the weights of other countries by the authors referred to, the edition (1831) of Kelly's Cambist has been followed as a guide about the contents of the kilogramme, maud, picul, &c. The prices and values, when found in the denominations of foreign currencies, have also generally been reduced to dollars and cents, computing the pound sterling at $4.80; and the statements of all considerable quantities and amounts have usually been made only in millions and large fractions of millions. This has been done for convenience and uniformity, and was supposed to be sufficient, if not better, for the comparative and general purposes contemplated in the original formation of the tables.

As most persons in conversation, and most authors, speak of "bales" or "bags," rather than pounds of cotton, whether referring to the crop, the manufacture, or the exports and imports of it, some further explanation may be proper, to show why the term has not been employed in the statements contained in any of these tables.

It was early discovered, in the preparation of them, that many contradictions and errors happened, from the uncertain quantity indicated by different persons in the use of those terms, and which might be obviated by always making the statements in pounds, and giving in a note the amount computed to be contained in bales and bags in different countries, so that the pounds could, when desirable, be converted again readily into bales or bags. By pursuing this course of using only the term pounds, the great object of comparison between the quantities of cotton grown or manufactured or exported, at different periods, and in different countries, could also be more clearly and quickly accomplished.

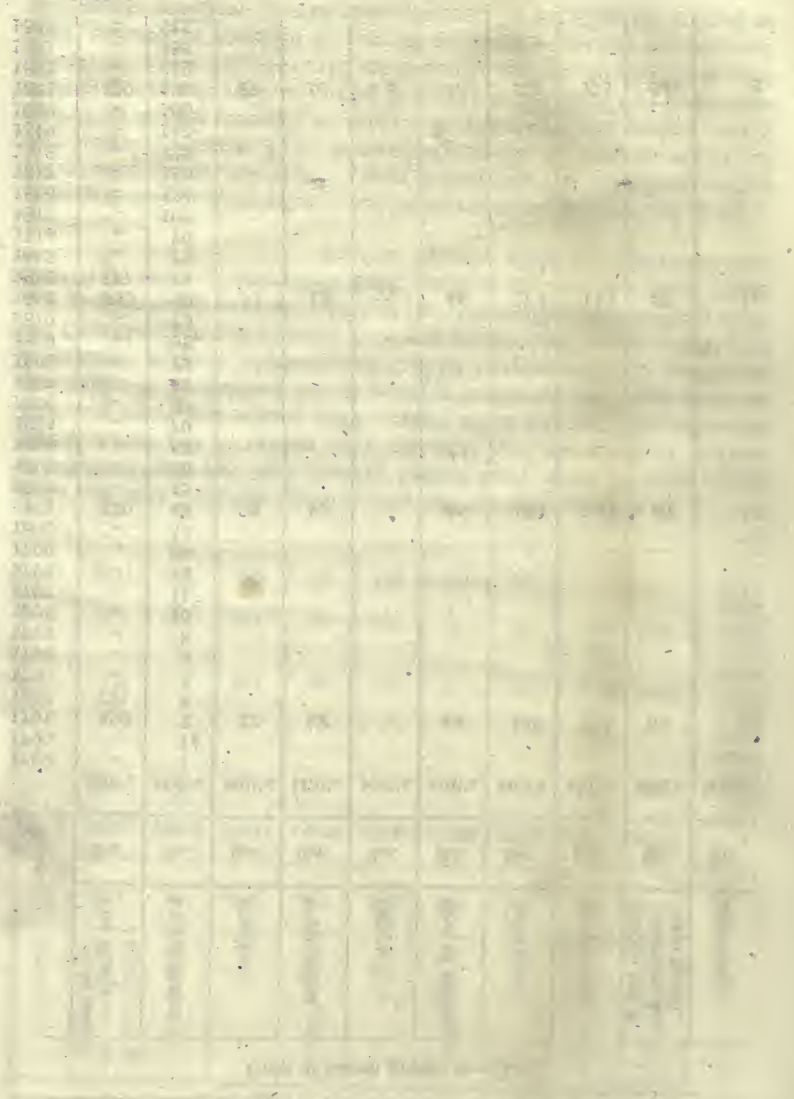
In illustration of these remarks, and to furnish the quantity usually contained in each bale, bag, &c., it appears that, in 1790,

the bale or bag in the United States was computed at only 200 pounds. (See Treasury report, 15th February, 1791.) In the Atlantic States it is now estimated often at 300 and 325 pounds, but in those on the Gulf of Mexico, at 400 and 450 pounds. Those used at Lowell, in 1831, contained, on an average, 361 pounds. (Pitkin's Statistics, page 527, note.)

At Liverpool the Sea-island bale was, a few years ago, estimated at 280 pounds, and the Upland at 320. The bales imported into France are estimated at 300 pounds each, by Baines's History of Cotton, page 525. In 1824 all the bales imported into Liverpool averaged 266 pounds, and increased yearly, till in 1832 they weighed, on an average, 319 pounds, (McCulloch, page 441.) Though on the previous page he considers from 300 to 310 pounds a fair average; and Burns, cited on same page, makes it 310 pounds in 1832. The Egyptian bale contained once only 90 pounds; the Brazilian, 180 pounds; (Pitk., 485;) the West Indian, 350 pounds; and the Colombian bale or quintal, 101 pounds. (Cyclop. of Com.) In 1832, Burns says the average of the United States bale or bag imported into England, was 345 pounds; Brazilian, 180 pounds; Egyptian, 220; West Indian, 300 pounds; East Indian, 330 pounds. (See McCulloch, 441.)

The amount of our own exports does not depend on computations from any of these data, but on the actual weight in pounds, sworn to at the custom-house.

By the last annual report of the Liverpool market, made in January, 1836, it appears that the bales have so altered in their quantity, that the estimate of the present bales or bags is—for the Upland, 321 pounds; for Orleans and Alabama, 402 pounds; for Sea-island, 322 pounds; for Brazil, 173 pounds; for Egyptian, 218 pounds; for East India, 360 pounds; and for West India, 230 pounds. As improvements are made in pressing and packing closer, to save something in the expense of bagging and freight, the constant tendency has been here to increase the weight in a bale.



A.

COTTON—RAW.

Crop of cotton grown in—[1]

Years.	The World.	United States.	Brazil.	West Indies.	Egypt.	Rest of Africa.	India.	Rest of Asia.	Mexico and S. America, except Brazil.	Elsewhere.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.
1789	–	1								
1790	–	1½								
1791	490	2	22	12	–	46	130	190	68	20
1792	[2]	3								
1793	–	5								
1794	–	8								
1795	–	8								
1796	–	10								
1797	–	11								
1798	–	15								
1799	–	20								
1800	–	35								
1801	520	48	36	10	–	45	160	160	56	15
1802	–	55								
1803	–	60								
1804	–	65								
1805	–	70								
1806	–	80								
1807	–	80								
1808	–	75								
1809	–	82								
1810	–	85								
1811	555	80	35	12	1/12	44	170	146	57	11
1812	[3]	75								
1813	–	75								
1814	–	70								
1815	–	100								
1816	–	124								
1817	–	130								
1818	–	125								
1819	–	167								
1820	–	160								
1821	630	180	32	10	6	40	175	135	44	8
1822	–	210								
1823	–	185								
1824	–	215								

A.—COTTON—RAW—Continued.

Crop of cotton grown in—[1]

Years.	The World.	United States.	Brazil.	West Indies.	Egypt.	Rest of Africa.	India.	Rest of Asia.	Mexico and S. America, except Brazil.	Elsewhere.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.
1825	–	255								
1826	–	350								
1827	–	270								
1828	–	325								
1829	–	365								
1830	–	350								
1831	820	385	38	9	18	36	180	115	35	4
1832	–	390								
1833	–	445								
1834	900	460	30	8	25⅓	34	185	110	35	13
1835										
[12]			[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]

[1.] It will be seen by the phraseology adopted, that the crop given against each year is that grown, and not that brought to market in the year, and that the year meant in the table is the calendar, and not the fiscal year. This course has been pursued as more appropriate when applied to the *raising* of a crop; but in selling it, "the crop of 1835," for example, is often spoken of by others, when that which grew in 1834 is the crop alluded to. This explanation will enable all to make their comparisons in the mode most convenient to them, and will remove some apparent contradictions between certain authors.

[2.] In forming an estimate of the whole crop of cotton grown in the world in any particular year, I have found no precedent to aid me except for the single year of 1834, when evidence was given before the Chamber of Peers, in France, that it probably amounted to about 460 millions of pounds. But this computation was so deficient, assigning none to Mexico, and none to South America or Africa, except to Brazil 24 millions of pounds, and to Egypt 20 millions of pounds, and only 60 millions of pounds

to India, and 350 millions of pounds to the United States, and the balance of 6 millions of pounds to the West Indies, that no safe reliance could be placed on it as correct for the whole known world. My own course has been to ascertain from all attainable sources the exports in raw cotton of each country; to add to those the probable amount consumed at home and not exported, looking to the climate of the place, the habits of its population, and the scattered facts on this point found in respectable authors, and then to compute therefrom the whole quantity grown. Another general test of the correctness of one of my conclusions, viz., that the whole crop in the world has quite doubled in the last half century, and now equals 900 millions of pounds, though the estimate before named is only 460 millions of pounds, exists in the fact, that a greater increase than this has happened in the crop of the United States alone; and though, in some other countries, a diminution has occurred in the exports of cotton from various causes, which need not here be detailed, yet the use of it has probably been reduced in no country; and in many, within that period, it has, from greater cheapness, by improvements in machinery and steam, with its healthfulness, compared with other clothing, largely increased, and in some been for the first time introduced. Supposing that in warm climates, and in a population not highly civilized, as in Turkey, two pounds of cotton per head for each person are yearly consumed, (see Urquhart on Turkey, page 150,) and in the south of China and India, not over one and a half pounds to each person, and in the places near or under the equator, still less; and that, in more civilized countries where cotton is used, as in England, France, and the United States, from eight to twelve pounds per head are consumed; and supposing that only a little more than half the population of the globe, estimated at four hundred and fifty millions, use cotton, the consumption would, on an average at only two pounds per head, be quite equal to the estimated crop for the whole world. For some years past it is supposed that the consumption of cotton has been greater than the crop, and hence, that the old stocks on hands have been more exhausted, and a larger portion of the new crop called for early. (See table I.) This has sustained the price, and required an augmented crop of at least 20 millions of pounds per annum. See *post*, and evidence before the French Chambers, February, 1835.

[3.] The crop as well as the export of cotton of the United States, from 1809 to 1815, was sensibly diminished by means of our commercial restrictions and war, and the crop of other coun-

tries was increased to supply the place of ours in foreign consumption. Our crop has been computed with more care and from better data, than the crop of other portions of the world. From 1821 to 1834 it has been estimated by others much lower than in the table, and as follows:

Years.	*Mill's of lbs.*	*Years.*	*Mill's of lbs.*
1821	111	1828	213¾
1822	121½	1829	255¾
1823	136	1830	292
1824	152¾	1831	311⅔
1825	169¾	1832	296¼
1826	211⅔	1833	360
1827	285	1834	320¼

The above is from Marshall's tables on the trade, manufactures, &c. of England, page 110. In McCulloch's Commercial Dictionary, page 434, Reuss's tables, page 270, and Baines's History of Cotton, page 303, similar statements are made, but they are manifestly too low, as being often less in quantity than our exports; and they may differ occasionally from being founded on the exports of a particular year, as 1825, and which were chiefly made up of the smaller crop grown in a previous year, as in 1824. They are incorrect even then, as our crop for many calendar years has been from 50 to 90 millions of pounds more than the exports of each succeeding fiscal year; this last being composed of the growth of the previous calendar year, with a small portion of it brought to market from the 1st of August to the first of October omitted, and a like portion of the subsequent calendar year included. The 50 to 90 millions of pounds are the quantity consumed at home, and which quantity lessens in amount as we go back to the periods when our manufactures were fewer, and when we consumed in them some cotton of foreign growth. See another estimate in the 3d volume of the Parliamentary Reports, (1833,) page 89. Another difference may arise from the bale made up here being abroad computed often at only 300 pounds, (see on this *ante* and *post.*) The crop in the United States in 1834 was injured in the northern parts of the cotton-growing States; but so much new land was put into cultivation, that the whole exports were a little larger, and the home consumption is presumed also to have been more. The crop for the year 1835 has likewise been more seriously injured in the same quarters; but the exports of it since September, have, from early ripening, high prices, &c., been larger than either of the two previous years, and some think the whole

crop was larger, while it is believed by a few that the whole crop will turn out to be somewhat less, though not so much as apprehended, the increase of lands in cultivation has been so great. February 17, 1836, the exports ascertained, on the Atlantic, had been 377,420 bags; but to same time in 1835, only 340,379; and in 1834, only 309,976. For a view of our power in the United States to grow more cotton, see table B, note [2.]

[4.] The crop of Brazil is computed on its ascertained exports at different periods to England and elsewhere, and a home consumption in a small ratio to its population. (See table on exports.) It has been diminished of late years by importing cotton manufactures for home consumption, as in 1833 and '4, from England largely. See tables N and O, and notes, and Pitkin, 384 and '5, where are more details. Cotton was first planted or cultivated in Brazil in 1781, for exportation. Smithers' History of Liverpool.

[5.] The crop of the West Indies is estimated in a similar manner; after deducting from their exports the probable portion of cotton brought there from the Spanish Main, and thence re-exported. In 1812, it is said that the crop of all the West Indies did not exceed 5½ millions, (Colquhoun 378;) and chiefly in Barbadoes, Bahama islands, Dominico, and Granada; 4 Humboldt's Per. Nar. 123 to '5, and notes. But this is believed to have been underrated. England now exports there largely of cotton manufactures. See 1833 and 1834, table N, and notes; and the United States export there some of them yearly, as well as France. All this tends to diminish the crop raised for home consumption, and probably that for export. See exports of Mfts. table O. Cotton was grown first in 1776, at St. Domingo, for export. 2 v. Hist. of Colom. But earlier in other islands, and they furnished a large part of English wants before 1785; Edin. Cyclop. Art. "Cotton." In 1789, Hayti, alone, exported over 7 millions of pounds; about 2½ millions of pounds in 1801, and since that, less than 1 million of pounds yearly. See a table in McCulloch, 926. In 1824, a little over 1 million of pounds, and in 1832 about 1½ million. See McCulloch, 927.

[6.] The supposed crop of Egypt, in former years, is predicated on the authority of the Dictionary of Spanish Commerce and Finance, vol. 3, page 29. On her exports, (see exports,) and for 1834, the New Monthly Magazine for September, 1835. She imported cotton from Smyrna and Greece till within twenty

years. See below, note 9th. By the last advices her crop grown in 1835 is said to be short, not exceeding 18 or 20 millions of pounds.

[7.] The crop of the rest of Africa is computed from her exports from Morocco, Gambia, &c., and the habits and number of her population, and her soil and climate, where cotton is indigenous, and has always been grown in many sections since first discovered. McCulloch, Dic. 436. Of late she imports on the eastern side fewer cotton goods from India, and more there and on the western side from England and the United States. See for 1833 and '4, from Eng. table N, and notes. See exports from the United States, table O. In the island of Mauritius, in 1806, nearly two millions of pounds of cotton were raised, but it fell off gradually till, in 1831, little or none was produced. 4 Montgomery's Hist. of British Col., page 209. See table N, note [10.]

[8.] In India, the estimate rests on her exports and vast population, long clothed chiefly in cotton of her own growth. McCulloch, Dic. 437. The Isle of Bourbon produced it of a quality almost equal to the Sea-island. London Encyclop. Art. "Cotton." See her exports, table D. But of late years her exports of manufactured goods have declined, and her importations of them from England alone exceed $10,000,000 yearly. See exports of manufactures from England and the United States, table N and O, and evidence on the East India Company, 1832, appendix, page 287; and on the growth and use of cotton in the islands of the Indian archipelago, see 1 Crawford, History, 177, 207, and 449; 2 Crawford, 350. It is believed that the cultivation of cotton for export is on the increase; labor is so low, and the trade of India having become more free. The estimates for the crop in India are probably not high enough, rather than being too large. See exports, table E and F, and supplement to Cyclop. Brit. "Cotton."

[9.] The rest of Asia, including China, Japan, Persia, Arabia, and Turkey, from the mildness of its climate, great population, and customary clothing, is supposed not to be computed too high. In 1766, it was grown much about Smyrna. See Postlethwait's Dictionary, "Cotton." Only about six millions of pounds in 1834, near Smyrna, and most of that was shipped to Marseilles and Trieste. McCulloch, page 1069.

The cultivation of cotton, in China, began about the 13th century, for purposes of manufacture, though before raised in

gardens for ornament. The crop increased rapidly, and was very large, probably much beyond the amount assigned in this column, till 1785 to 1790, when it began to be considerably discontinued for the purpose of raising grain, during and in consequence of famine. Much has since been imported from India, though now in the small statistical knowledge attainable on this point as to China, she may raise more cotton than the large amount computed for her, in connexion with Japan, Cochin-China, &c. Supplement to Cyclop. Brit. "Cotton." See exports of raw cotton, table D. Travellers and merchants see but little of China usually, except the south parts and the seaboard; and if in the great use of silk, furs, &c. in the colder portions, it is considered that 100 millions of her population use cotton, and from their poverty only 1½ pounds each, the whole amount would be 150 millions of pounds yearly in China alone.

[10.] This crop in South America and Mexico rests on similar principles, as the chief clothing was cotton when the country was first discovered by the Spaniards. It is now often of superior quality. (See Humboldt's Per. Nar. page 202.) The exports since have been considerable. (See exports.) But of late years the crop must be less, as Mexico, as well as Peru and Chili imports now from England yearly many cottons, besides what they get from the United States and elsewhere. (See exports of manufactures.) Cotton began to be cultivated for export in Caraccas in 1782. The saw gin is not yet used, but wooden rollers. 2 Hist. of Colomb. The plant is found indigenous, (Mollier's travels in Colombia, page 121; 4 Humb. Per. Nar. 123.) In Hall's Colombia, page 27, it is said only about four millions of pounds are grown in that Government yearly. This is too small an amount. Cultivated in Surinam since 1735. Smithers' Hist. of Liverpool, page 131.

[11.] This column includes some remote islands, and the south of Spain, Italy, and Greece, and their islands, with the Canaries, where cotton was formerly more raised, and still is considerably. See as to Spain and Italy, 2 Chaptal on French industry, page 6. From Italy and Egypt, in 1825, when cotton was very high, over 23¾ millions of pounds were exported. McCulloch, 949. Some has been raised in New South Wales. McCulloch, Dict. of Com. 436; Smithers' Hist. of Liverpool, page 126; and the cultivation is said to be resumed in Italy. Though some exports were formerly described as from Portugal, little or no cotton grew there; and the exports of it thence came chiefly from Brazil.

[12.] Some confusion has arisen from the different use or application of the word "cotton." It is said to be a word of Arabic origin (Smithers' History of Liv. 115;) but the application sometimes of the word "linen," and at others of the word "woollen," to the vegetable of three or four general varieties, and which produces the wool or down now called "cotton," has led to some mistakes about its growth and use formerly in certain countries, which it is now difficult to correct. McCulloch's Dict. of Com. 436 and '8. Baines, 287 and '96, note 66. But it was probably grown and used largely in ancient times in Arabia, as well as India, America, and Africa, except perhaps in Egypt, where linen, it is supposed, chiefly superseded it, and can now be detected, but no cotton, in the clothing of the mummies, by the joints in the fibres of the stalk of the flax, being visible with a microscope, whereas the fibres of cotton from the pod have no joints. See Thompson's paper in Baines's appendix. London Encyclop. article "Cotton," contra. The kind of cotton chiefly cultivated now, and especially in the United States, is not the tree or shrub, but the annual and herbaceous varieties. London Encyclop. art. "Cotton."

B.

COTTON—RAW.

Crop grown in--[1]--[2]

Years.	Virginia.	North Carolina.	South Carolina.	Georgia.	Florida.	Alabama.	Tennessee.	Mississippi.	Louisiana.	Arkansas.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill'n.
1789										
1790										
1791	–	–	1½	½						
1792										
1793										
1794										
1795										
1796										
1797										
1798										
1799										
1800										
1801	5	4	20	10	–	–	1			
1802										
1803										
1804										
1805										
1806										
1807										
1808										
1809										
1810										
1811	8	7	40	20	–	–	3	–	2	
1812										
1813										
1814										
1815										
1816										
1817										
1818										
1819										
1820										
1821	12	10	50	45	–	20	20	10	10	
1822										
1823										
1824										
1825										

B.—COTTON—RAW—Continued.

Crop grown in--[1]—[2]

Years.	Virginia.	North Carolina.	South Carolina.	Georgia.	Florida.	Alabama.	Tennessee.	Mississippi.	Louisiana.	Arkansas.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill'n.
1826	25	18	70	75	2	45	45	30	38	¼
1827										
1828										
1829										
1830										
1831										
1832										
1833	13	10	73	88	15	65	50	70	55	¾
1834	10	9½	65½	75	20	85	45	85	62	½
1835										
[4]			[3]							

[1.] I have not been able to find any official returns of either the General or the State Governments, which give the crops of cotton in each State. The present table has, therefore, been compiled from the best data in my power: such as the foreign exports of cotton from each State, the exports coastwise, the quantity supposed to be exported from each not grown within its limits, and the amount yearly consumed within its limits. Many mistakes are made abroad, and some at home, by considering all the exports of each State as its own crop, or by computing the whole foreign exports as the whole crop, or by estimating all the bales in the United States alike, and only at 300 pounds on an average. See such mistakes in Reuss's Tables on American Trade, 270, and Parliamentary Evidence on Manufactures, A. D. 1832.

But it is well known in this country, that the exports from New Orleans, both foreign and domestic, are composed in part of the crops of Louisiana, Arkansas, Tennessee, Mississippi, and Alabama. Part of the crops in each of those States is consumed at home, part is exported coastwise to the Northern States, and the crops of the southwestern portion of Mississippi, and

the southern portion of Alabama, are chiefly exported from Mobile. In addition to some of the above remarks, applicable to the other cotton-growing States, it is proper to add, that part of the crop of Georgia is exported from Florida, and part from South Carolina; part of Florida from Alabama; and part of North Carolina from Virginia.

For an explanation of some of the fluctuations in our exports in certain years, see table A, note [3].

[2.] From data given under the head of "Capital," in table C, note [3], it will be seen that, in producing the whole cotton crop of the United States, only about two millions of acres of land are cultivated. In table D it appears that all the foreign exports of cotton in the world do not probably exceed 535 millions of pounds, and of which the United States now export about 384 millions of pounds; a large portion of the residue is from the remotest parts of Asia, very little of it now coming to Europe. But if necessary or profitable, we could raise the whole of the other 150 millions, by putting into cultivation only about 500,000 acres more cotton land, and employing less than 100,000 more field hands in this branch of industry.

But supposing that Asia, from her distance and habits, continues to use chiefly her own raw cotton, that the increase of population in the United States should continue much as heretofore, and that the countries in Europe and elsewhere, now supplied with cotton manufactures made chiefly from our crops, should increase in population, or in the use of cotton, as fast as the United States does in population alone, and there would be required to supply the increased annual demand only about 21 millions of pounds more of raw cotton, or the product in the United States of less than 70,000 acres more each year. This has been nearly our average increase of crops in the last ten years. See table and note in extract from annual Treasury report. It has required about 11,000 more field laborers a year, or only $\frac{1}{10}$th the annual increase of our whole population. But we probably have now, not in cultivation, more acres of land suitable for cotton, than would be sufficient to raise all the cotton now grown in the world; as that would require only three to five millions of acres. Hence, it must be obvious that there is good cotton land enough in the United States, and at low prices, easily to grow, not only all the cotton wanted for foreign export in the world, but to supply the increased demand for it, probably, for ages.

The only preventive, of which there is much likelihood,

seems to be in the augmented price of such labor as is usually devoted to this culture; so that it may not be possible to raise the crop at so low a rate as to keep possession of the European market against all competition.

In getting possession of that market so fully and rapidly heretofore, (as shown in the extracts from the last annual report,) the United States have been much aided by the good quality of their cotton, the low price of land, and the great improvements in cleaning cotton by Whitney's cotton gin since 1793. One person is able to perform with it in a day the work of 1,000 without it. Cox's Digest of Manufactures, page 667; Gales and Seaton's documents, 2d volume. Besides these advantages, the unusual industry and enterprise of our population, and its freedom from taxation compared with the people of most other countries, and the wide extent of our commerce, have promoted our unprecedented progress. Baines's History, 301; 5 Malte Brun, page 193.

The old mode of cleaning it by wooden rollers, and with the bow by hand, is still used in India and Colombia, and it is there sown broad-cast instead of in drills, and much neglected afterwards. Baines 64: see 3 Crawford's history, 350.

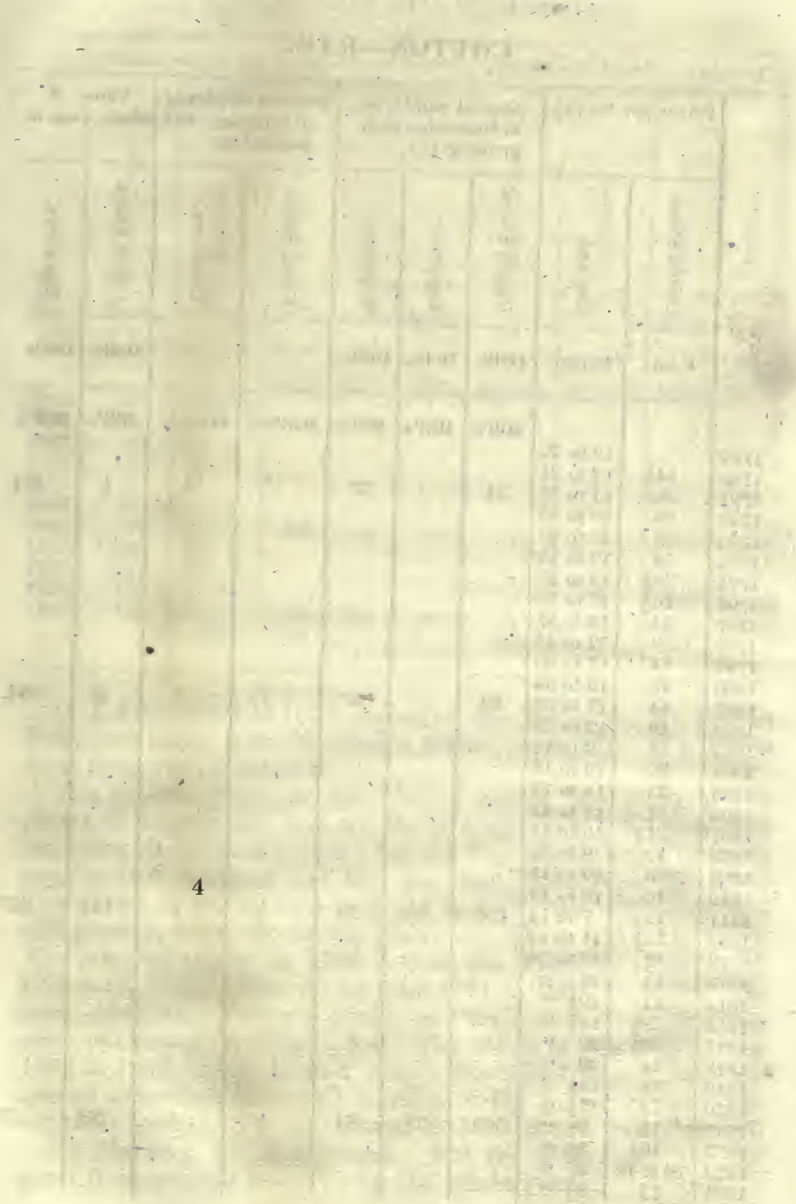
The great vibrations in the prices per pound of raw cotton grown in the United States, are very striking, as exhibited in table C. The influence of these on the sales of public land and our revenue, from both them and the imports of foreign merchandise, has been briefly examined in the last annual report, extracts from which are annexed. The further influence of these on the prosperity of the South, on the rise in the value of their slave property, and on the great profits yielded by all their capital invested in growing cotton, must be very apparent to every careful observer. The single fact, that in no year has the price been but a fraction below 10 cents per pound, or a rate sufficient to yield a fair profit, while it has, at times, been as high as 29, 34, and even 44, and been on an average over 16 cents per pound since 1802, and over 21 since 1790, is probably without a parallel, in showing a large and continued profit. Further details on these and similar considerations must be left to other persons and other occasions. [See table C, note 3.]

[3.] In South Carolina, Georgia, and Florida, the Sea-island cotton (supposed to have come originally from Persia, and in 1786 from Bahama to the United States) succeeds; but grows there to perfection only in certain districts near the seacoast. During the last 30 years the average annual crop has been be-

tween 9 and 11 million pounds. See exports and prices, and a table in Seybert, 152–3: Smithers, 132. But the quality of a part of it is inferior. McCulloch, 436. It has taken the place in Europe of the fine cotton from the isle of Bourbon. London Encyclopedia, article "cotton;" and is superior to that. Supplement to Cyclop. Brit. "cotton."

[4.] The growth of cotton in the United States began as early as 1787, even of the Sea-island, and of other kinds earlier still, in small quantities. McCulloch, 440, says it began soon after the close of the war of the Revolution, though not exported till 1790.

T. Cox, cited in Rees's Cyclopedia, in article "United States," says cotton was raised here in gardens before 1786, but not by planters as a crop, and before 1787 we never exported a bale. [He means of our own growth, it is presumed. See table F, note 6.] We exported a little before 1787, viz: 1785, five bags; and in 1786 six bags; which Smithers' history of Liverpool, page 129, supposes was grown here, but see table F, note 9.



C.

COTTON—RAW.

Years.	Prices per lb. [1]		Capital employed in connexion with growing.[3]			Persons employed in growing, and dependent.		Value of whole crop in	
	United States.	England.	United States.	Egypt.	Brazil.	United States.	Elsewhere.	United States.	Elsewhere.
	Cents.	Pence.	Dolls.	Dolls.	Dolls.			Dolls.	Dolls.
			Mill's.	Mill's.	Mill's.	Mill'ns.	Mill'ns.	Mill's.	Mill's.
1789	–	12 to 22							
1790	14½	12 to 21							
1791	26	13 to 30	3⅓	–	33	1/20	1	⅛	40½
1792	29	20 to 30							
1793	32	13 to 22							
1794	33	12 to 18							
1795	36½	15 to 27							
1796	36½	12 to 29							
1797	34	12 to 37							
1798	39	22 to 45							
1799	44	17 to 60							
1800	28	16 to 36							
1801	44	17 to 38	80	–	50	1/10	⅞	8	39⅓
1802	19	12 to 38							
1803	19	8 to 15							
1804	20	10 to 18							
1805	23	14 to 19							
1806	22	12 to 15							
1807	21½	10 to 14							
1808	19	9 to 30							
1809	16	10 to 18							
1810	16	10 to 19							
1811	15½	7 to 14	134	1/10	58	⅐	⅞	12½	37
1812	10⅓	11 to 14							
1813	12	16 to 26							
1814	15	28 aver.							
1815	21	20½ "							
1816	29⅓	18¼ "							
1817	26½	20 "							
1818	34	20 "							
1819	24	13½ "							
1820	17	11⅓ "							
1821	16	9½ "	300	3⅓	83	⅓	⅞	29¾	37
1822	16½	8¼ "							
1823	10 & 12	8¼ "							
1824	15	8½ "							

C.—COTTON—RAW—Continued.

Years.	Prices per lb. [1]		Capital employed in connexion with growing.[3]			Persons employed in growing, and dependent.		Value of whole crop in	
	United States.	England.	United States.	Egypt.	Brazil.	United States.	Elsewhere.	United States.	Elsewhere.
	Cents.	Pence.	Dolls.	Dolls.	Dolls.			Dolls.	Dolls.
			Mill's.	Mill's.	Mill's.	Millions.	Millions.	Mill's.	Mill's.
1825	21	11½ aver.							
1826	11	6¾ "							
1827	9½	6½ "							
1828	10¼	6¾ "							
1829	10	5¾ "							
1830	10	6⅞ "							
1831	9¼	5⅝ "	650	30	58	¾	⅘	38½	29¼
1832	10	6⅝ "							
1833	11	7⅜ "							
1834	13	8½ "	–	–	–	–	–	76	36½
1835	16½	12½ "	800	31	50	1	⅘ to 1		
		[2]	[3]			[4]		[5]	

[1.] From 1802 to 1826, inclusive, the prices for the United States are taken from Marshall's tables, page 110. Since that date, from official returns.

The prices, given for the United States, are those at the places of exportation, and are the average during the year, and including all kinds of cotton: but the Sea-island cotton is worth usually two hundred and fifty per cent. more than the other kinds (see below in note 2;) and formerly the difference was still greater, when the amount grown elsewhere was not so large. The price of cotton for 1790 is from the Treasury report, 15th February, 1791. The prices from 1791 to 1801, inclusive, are from Almy and Brown's books, at Providence, deducting one cent. per pound for freight, &c. The prices of raw cotton from 1789 to 1802, in the United States, fluctuated largely, and are quoted somewhat differently in some of the prices current during those years. See the United States Gazette and Pennsylvania Mercury for that period. But the differences are not great if an average be taken for the whole year.

Where rich lands and labor were low, as in Mississippi and Alabama a few years ago, two cents per pound for cotton in the seed, or eight cents when cleaned, would pay expenses. It is supposed to be a profitable crop in the Southwestern States at ten cents per pound. In Baines's history of cotton, page 316, it is stated that the planter can make a profit at six cents per pound.

In India the Bengal cotton of inferior quality, it is said, can be raised for three cents per pound, and delivered in England for five cents. See evidence on East India Company, 1832, page 286, appendix; Smithers' history of Liverpool, 116. It has since been said that it will cost five cents per pound to deliver it on the wharves at Bombay. It sold in India in 1831 and 1832 at eight to nine cents per pound. See McCulloch's Dictionary, page 238. In 1820, in 3 Crawford's history 351, it is said to bring from eight to nine cents in the Indian islands.

[2.] The prices in England are given in pence, as they are so much oftener referred to in that form, but can easily be converted into cents; estimating the pound sterling at $4.80; by doubling the number of pence. They are generally the prices at Liverpool; and from 1793 to 1797, and from 1799 to 1814, are from Tooke on Prices, page 11, appendix; and are of "Georgia bowed cotton," without the duty. The rest, except from 1789 to 1793, and 1834 and 1835, are from Marshall's tables, page 114; and Baines, page 352–3; differing in some cases a little, and in Marshall giving the prices of each kind of cotton separately. See a table in Smithers' history of Liverpool, page 149. Those from 1789 to 1793 are from Baines, page 313, and are of West India cotton; and for 1834 and 1835, the Liverpool reports have been the guide.

As an illustration of the difference in value of different kinds of raw cotton, I annex a statement of their prices at Liverpool, June 16, 1835:

Uplands	from 10*d.* to $12\frac{3}{8}d.$
Orleans	from 10 to 13
Alabama	from $9\frac{3}{4}$ to $12\frac{3}{4}$
Sea-island	from 23 to 34
Brazil	from $13\frac{5}{8}$ to 16
Surats	from 7 to $8\frac{3}{4}$
Bengal	from $7\frac{1}{2}$
Laguyra	from $13\frac{1}{2}$ to 14
West Indies	from $12\frac{1}{2}$ to $14\frac{1}{2}$

See more on prices in Edinburgh Review, 427, (1832.) McCulloch, page 437, 441. The finest kinds of Sea-island often bring four times as much as the inferior qualities. McCulloch, page 437. In 1799 it sold in Liverpool for five shillings per pound. Smithers, page 156. At Smyrna, before 1767, the price of common cotton appears to have been six or seven cents per pound. Postlethwait's Dictionary. At the river Gambia the price per pound is about four cents. Montgomery's colonial history. In Demarara the price (in 1815) is said to average about nine to ten cents per pound. Edinburgh Encyclopedia, article "cotton." In Colombia in 1822 the price per pound was about the same as in the United States, but it fluctuates there and in other Spanish American Governments from eight to fifteen cents a pound, with the quality and the year. See Humboldt and Mollier's Travels.

[3.] Capital. The capital employed in growing cotton, with the income it yields, is a question of much interest and importance. But very little can be found concerning it in books, and the information obtained on it from different correspondents in the United States is defective, and is founded on quite different data in different States and by different persons.

The elements of any computation must be the average cost per acre of cotton lands, wild or cleared, and if the former, the expense of clearing them; the amount of labor necessary per acre to produce a given quantity of raw cotton; the cost of labor, whether in the form of wages or otherwise; the expense of tools, horses, &c. with salaries of overseers, taxes paid, &c.

One mode of making the computation is as follows: The average cost of cotton lands when wild, in the old States, did not probably exceed often half a dollar per acre, including fees for patents, &c. In the new States it has generally ranged from $1.25 to $20 per acre, depending on its quality, location, and the price of cotton. The actual settlers, in purchasing of capitalists, have generally been compelled to give an advance from 50 to 100 per cent.; some times much more.

The expense of clearing wild land averages from ten to fifteen dollars per acre. Land in a condition to be cultivated, will, on an average, in the United States, yield from 250lbs. to 500lbs. of clean cotton. In the old States, 125lbs. clean, or 500lbs. in the seed is an ordinary crop. (Cooper's Political Economy, p. 96.) Cox, in 1810, estimated it at 138lbs. and others at 120lbs. (Rees's Cyclopedia, article "United States.")

It is believed that one field hand or laborer, with the aid hereafter named, can cultivate on an average eight acres. Some say

five to seven, and others ten. He will at the same time assist in raising five to eight acres of corn.

It is usual to employ in this business slave labor, and the next element in the calculation must be the capital invested in slaves for this purpose, and the annual cost of their maintenance.

The price of field hands has nearly or quite doubled in ten years; and they now often cost eight hundred or one thousand dollars, when formerly four and five hundred dollars were the usual rate each.

The maintenance of them is another item very differently computed. Sometimes it is done by the purchase of more land and cultivating it, putting stock on it of cows, sheep, &c. so as, with the aid of other slaves, kept partly for that purpose and partly for the culture of cotton, to raise corn, pork, &c. to feed, and other materials to clothe the whole. In such case the additional land put in cultivation, the additional slaves bought, and the stock on the plantation, &c. must be considered as so much more capital.

The additional slaves in such case, being more youthful, or more aged ones, or infirm females, may be fairly computed at an equal number with the field hands, but costing only about half the price. The additional land should be for cultivation, about twenty acres for each field hand. The capital in oxen, horses, sheep, tools for husbandry, &c., about thirty dollars to each slave on the plantation.

To these must be added the capital which may be deemed temporary, and not as a permanent investment, and hence is to be all yearly returned, such as expense for extra clothing not made on the plantation, for medicine, overseers, tools for labor, taxes, freight, &c., which may be forty-five dollars to each slave.

Differing from these last data, in some respects, in substance, and wholly unlike in form, is another mode of computing all the capital invested except that in the mere cotton lands. Instead of estimating the price of slaves, &c. it may be considered that slave labor could be hired, with food, clothing, medicine, &c. at a cost for each field hand from one hundred to one hundred and twenty dollars per year. That from thirty to forty dollars each would defray the annual expense of overseers, tools, horses for each, and that the additional and equal number of slaves, not prime field hands, could be hired and supported for less than half the annual cost of the others.

On these data the cotton crop, as estimated for 1835, at 480 million pounds, would grow on 1,600,000 acres, at 300lbs. per acre, or 1,920,000 at 250lbs. each. Considering that some lands

wear out quick and are changed, probably the whole quantity cultivated for cotton in the United States, at this time, should be estimated at two millions or more of acres.

From the above elements the whole capital invested in growing the cotton crop in the United States can be readily computed. On one hypothesis, converting the whole capital into that which is permanent, and partly invested in lands, slaves, and tools, as fixed capital, and partly invested in bank or other stocks, or in loans so as to yield an income, and not a capital sufficient to defray those kinds of expenses which are usually deemed temporary, and are yearly remunerated, or require what is called a circulating or floating capital, and the whole will amount to more than 900 millions of dollars. On another hypothesis, considering the capital, as it generally is, divided into fixed and circulating; the capital as fixed, which is invested in lands, slaves, stocks of horses, tools, &c. and only about thirty millions of dollars for other expenses, as circulating or temporary, and to be itself, and not its income or interest, used and repaid yearly, and the whole capital of both kinds will not quite equal 800 million dollars.

This last amount accords nearly with a still different mode of testing the quantity of capital, by supposing that the whole crop of 480 million pounds, at ten cents per pound, being 48 million dollars, would yield six per cent. on all the money invested in any way in raising the crop. If the capital used was all permanently invested, it would, on this hypothesis, amount to near 800 million dollars; but as from 25 to 30 million dollars is temporarily invested, and must itself be repaid yearly, the whole may, in the usual mode of treating capital employed in such business, be considered rather under than over 800 million dollars.

That amount, however, has been assumed as about correct, in the table, and is near enough for the estimate and comparisons at different periods in this country, and at the same period between this and other countries. In others, as in India, Brazil, and Egypt, the cost of labor is less, and perhaps the value of land, though the latter is doubtful; and the crop per acre, and the amount of labor performed by each hand, are believed to be less, independent of the failure there to use much the improved cotton gin.

Here, at 250 pounds per acre as an average crop, and eight acres an average cultivation by one hand, the product would be 2,000 pounds per hand, or at ten cents per pound, would be the average of two hundred dollars per field hand. All the planter

obtains over ten cents per pound would yield him a large rate of interest above 6 per cent. to pay for the greater risk and uncertainty of capital invested in this species of property. (See table B, note 2.) The whole crop of 1834 was probably worth 75 million dollars at the actual market prices, though at 10 cents per pound only 48 millions.

It is difficult to institute any just comparison between the profits of capital invested here in the growing of cotton, and in the manufacture of it; as in the latter so much more in proportion is invested in temporary or circulating capital to pay for wages and stock, and the whole of which is to be annually repaid. Neither have I leisure for the details.

Indeed it might have comported better with the technical language of political economy to have divided the whole expenditures in raising cotton into three heads, viz: labor, capital, and land; to yield in return, wages for the labor, profit or interest on the capital, and rent for the land. (See Senior's Outline of Political Economy, page 165, from the Encyclopedia Metropolitana.) It will be easy, for those who prefer it, to throw the calculation into that form; but the results then, would not be such as accord best with the views proposed in this part of the table C; which are, to present to the community here, in plain terms, and in a form as intelligible as possible to people at large, the amount of capital actually employed at different periods in growing the cotton crop in the United States; whether invested in the original purchase of lands, the clearing, or the culture of them; in the purchase of slaves, or in procuring an income for the payment, or in the actual payment of wages of free labor to raise the crop; for buying seed, tools, food, raiment, horses, &c. and for payment of taxes, overseers, or any other expense, incidental or direct, connected with the production of the crop.

Two brief statements of a very general character are subjoined, in illustration of some of the above remarks.

1st. The capital invested in cotton lands under cultivation, at two million acres, and worth cleared, on an average, $20 per acre, is -	$40,000,000
The capital in field hands, and in other lands, stock, labor, &c., to feed and clothe them, at $100 per year, on 340,000 in number, would require the interest or income of a capital, at six per cent. of	544,000,000
The maintenance of 340,000 more assistants, &c. at $30 each per year, would require the income of a capital at six per cent. of - -	167,000,000

Amount brought over -	$751,000,000
The capital to supply enough interest or income to pay for tools, horses for ploughing cotton, taxes, medicines, overseers, &c. at $30, for the first 340,000, would be - - - -	167,000,000
Making in all a permanent capital, if so used, equal to - - - - -	$918,000,000
2d. The capital in cotton lands, as stated above	$40,000,000
Capital in the purchase of 340,000 field hands, at $800 each, on an average - - -	272,000,000
Capital in the other 340,000 to aid and to raise food, clothing, &c. at half price - -	136,000,000
Capital in horses, cattle, sheep, utensils, &c. for plantation, about $30 to each person, to aid in making food and clothing, &c. - -	20,400,000
Capital in other lands, to support stock, raise corn, &c. at 20 acres to each of the 680,000, worth $20 per acre cleared - - - - -	272,000,000
Capital, temporary or floating, to buy clothing not made on plantation, pay taxes, overseers, freight, tools for cotton, &c. $45 to each - -	30,600,000
	$771,000,000

Making, in all, about $740,000,000 of capital permanently invested or fixed, and about $30,000,000 temporarily or circulating.

The crop in Demarara, per acre, is said to be 400 pounds clean. Edinburgh Encyclopedia, article "Cotton," 1815. But, in another place, the crop in Guiana is computed, on an average, at only 200 pounds, and costs 14 cents (or 7*d.*) per pound to raise it.

The capital, per acre, invested there in land, buildings, slaves, &c. is computed for 1814, at about $730, which is nearly double the amount computed above for the United States. (See same book.) He states also the cost of cotton land, in Louisiana, at about $12½ per acre; slaves at $430 each, and assigns 30 for a plantation of 600 acres and over; horses and sheep for same, costing about $2,250, or $75 for each slave. Those 30 slaves will raise 1,000 pounds of cotton each, (and, it is presumed, maintain themselves from the land not in cotton, and stock on it.) The annual expenses of overseers, physician, tools, clothing and

taxes, with freight of cotton to market, are computed at about $1,350, or $45 each per year; which, deducted from the price of the cotton, valued at 21 cents per pound, or about $6,450, leaves about $5,100 as a return on the original investment of about $22,500, (or at the rate of nearly 25 per cent.) viz:

600 acres, at $12½ per acre - - - -	$7,500
30 slaves, at $430 each - - - -	12,900
Horses, sheep, &c. - - - -	2,250
	$22,650

[4.] The number of persons is computed on similar data and principles to those suggested in the first mode of estimating the capital. Some allowances are made in certain cases, but for comparison there has been preserved similar proportions in all the years for which the computation is carried out in the table.

Thus, two millions of acres, at one field hand to every six acres, would require about 340,000 laborers; but many compute that the number in the United States is over 550,000, who are chiefly, though not entirely, engaged in field labor. Suppose the whole number to be double the field hands, as above computed, or 680,000, who are engaged in field labor, picking and otherwise assisting in the cultivation of cotton and corn, and the estimate of laborers is complete at about 680,000. But allowing that a number more should be added, who are connected with the cultivators, as infirm women, very young children, and too-aged persons, &c. unable to labor in the field, besides overseers, owners and their respective families, dependent on the cotton crop, and it is presumed that then a million of persons would be considered as now engaged in the United States, directly and indirectly, in the growing of cotton; but the actual laborers are only about two-thirds of that number.

The numbers are, for comparative views, in all other countries, stated on the same principle, though they are doubtless more, in most nations, to raise the same quantity of cotton for reasons too obvious for recital, and especially where the saw gin and horse power are less used.

[5.] The whole value is computed from the quantity of the crop in any particular calendar year, and the price it bears here the next calendar and fiscal year, which is the time most of it is sold.

The whole value of what is grown elsewhere is computed

from the number of pounds, as estimated in table A, and rating it, on an average, at only one-half the value per pound, at the different periods which the American cotton, on an average, then bore at home. Considering the qualities of each, their cleanliness, distances from a foreign market, the great proportion of it in Asia, &c. this is supposed to be a high enough value. See prices (note 2 above, and note 1) in India, and in Liverpool, of different kinds of cotton. Our cotton is of a better species, and better cleaned, &c. See 3 Crawford's Hist. of Ind. Arch. 350 to 360. Though in 1791 its quality was considered so inferior that it was supposed foreign cotton must be imported to supply factories. Gales & Seaton's Documents, vol. 1, Finance, page 142.

D.

COTTON—RAW.

Exports from—[10] [11]

Years.	U. States.	Egypt and Turkey.	Brazil.	India.	W. Indies	Spanish America.	Elsewhere.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1770	2,000	[8]					
	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
1789							
1790	$\frac{4}{10}$						
1791	$\frac{1}{5}$	-	20	-	12	-	5
1792	$\frac{1}{7}$						
1793	$\frac{1}{2}$						
1794	$1\frac{2}{3}$	-	-	-	-	1	
1795	$6\frac{1}{4}$	-	-	20			
1796	$6\frac{1}{10}$						
1797	$3\frac{4}{5}$						
1798	$9\frac{1}{3}$						
1799	$9\frac{1}{2}$						
1800	$17\frac{4}{5}$						
1801	$20\frac{9}{10}$	-	24	30	17	-	7
1802	$27\frac{1}{2}$	[2] -	-	-	-	$22\frac{1}{2}$	
1803	$41\frac{1}{10}$						
1804	$38\frac{1}{10}$						
1805	$40\frac{1}{3}$	-	-	$41\frac{1}{2}$			
1806	$37\frac{1}{2}$						
1807	$66\frac{1}{5}$						
1808	12						
1809	$53\frac{1}{5}$						
1810	$93\frac{9}{10}$						
1811	$62\frac{1}{5}$	-	31	-	7	-	13
1812	29						
1813	$19\frac{2}{5}$						
1814	$17\frac{4}{5}$						

D.—COTTON—RAW—Continued.

Years.	Exports from— U. States.	Egypt and Turkey.	Brazil.	India.	West Indies.	Spanish America.	Elsewhere
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
1815	83						
1816	81 4/5						
1817	85 2/3						
1818	92 1/2						
1819	88						
1820	127 4/5						
1821	124 8/10	5 1/2	28	50	9	-	6
1822	144 7/10	4 1/2					
1823	173 7/10	11					
1824	142 2/5	14					
1825	176 1/2	-	-	75			
1826	204 1/2						
1827	294						
1828	210						
1829	264 3/4						
1830	298 1/2	19	39	[5]68	10	-	4
1831	277	20 1/2	37	70	12	-	4
1832	322 1/4						
1833	324 1/2						
1834	384 3/4	23	30	80	8	7	3
1835	386 1/2						
[1]	[2]	[3]	[4]	[6]	[7]	[8]	[9]

[1.] The exports of cotton, or in other words, the foreign trade in raw cotton, in the whole world, is small compared with the whole growth, manufacture, and consumption of that article. It probably does not exceed 535 millions of pounds, and of that the United States export about 384 millions of pounds, or almost three-fourths. Our exports each year have not always corre-

sponded with that part of the crop of the previous year not consumed at home, as in 1808, 1812, &c. commercial restrictions and war caused the stocks on hand to accumulate, and the high prices in some other years have left much less on hand here than usual.

[2.] Before 1802, the exports of cotton did not appear on the custom-house books so as to show what was of foreign and what of domestic growth; and hence, before that year, and occasionally since, to 1825, one or two millions a year of our exports may have been the growth of India or the West Indies. Seybert's Statistics, pages 152 and 257; and see table B, note [4.] See when first begun, table F, note [9.] See amounts for some years, Seybert, 152 and 4.

[3.] From 1821 to 1824, inclusive, from Egypt. See Urquhart on Turkey, page 179. The amount is too high, if the bag or bale was computed as it is now, at 218 pounds instead of 98, as formerly. No exports were from Egypt before 1820; but previously the supplies in England were in a considerable ratio from Smyrna and other parts of Turkey. See table F and London Encyclopedia, article "Cotton," and Edinburgh Encyclopedia, "Cotton." See table A, note [6.] Her exports for 1835, as well as 1834, are said to be diminishing.

[4.] A great part of this is from the northern provinces of Brazil, and includes most of her crop. See Walsh's travels in Brazil. From one-half million to one million is exported from Rio and Bahia. From 1809 to 1813 from 50,000 to 75,000 bags, averaging 180 pounds each, were exported from Maranham alone, and about two-thirds to three-fourths of it to England. (1 Koster's Travels, page 227.) From Pernambuca, the exports of raw cotton were, from 1808 to 1813, on the increase, from 26,877 bags to 65,327. See Koster's Travels, page 146—note. See Smithers' Tables in History of Liv. The exports from Brazil were often formerly described to be from Portugal, as she was a dependency, and as most of it was, under her colonial system, shipped first to Portugal, and then re-exported. Little or none was raised in the mother country. London Encyclopedia, article "Cotton." Coffee and sugar are taking the place of cotton in her exports.

[5.] The exports for 1830, from all places except the United States, are given partly from data in Pitkin's Stat. 484, which

show that from India to all Europe in that year they were about 25 millions of pounds; from Egypt and the Levant, about 18¼ millions of pounds; and from Brazil and West Indies, about 49½ millions of pounds. Due additions have been made to these for exports elsewhere than to Europe.

[6.] Of this, from India, 60 millions of pounds were shipped from Bombay, and most of the rest from Calcutta. Evid. on East India Company, pages 13 and 287, appendix, 1832, A. D. See 1 Milbourn's Orient. Com. It is supposed that the exports of cotton from India will increase rapidly, as her trade is more free since 1833, though less restricted than formerly, since 1823. 1 Smith's Com. Digest, page 15.

Most of the raw cotton of the India islands has been consumed where raised. McCulloch, page 437. The quantities for all the years except 1805 and 1825, are estimates made by knowing the amount of exports to England and the United States, with those in some of the years to China.

In London Encyclopedia, article "Cotton," the exports from India to China alone, in 1818, are stated at 230 millions of pounds, which must be an error, or all the other computations, as to both crops and exports, are much too low in regard to India.

[7.] The exports from the West Indies sometimes exceed their whole crop, as it is imported from the Spanish Main, and re-exported. See table A, note [5.] Colquhoun, page 378, says sometimes double. In 1793 they exported to England considerable cotton grown in the United States. Smithers, page 156. See more on their exports, table A, note [5.]

[8.] The exports of cotton from Spanish America in 1802, were chiefly from Vera Cruz, collected there from other places. 1 Dict'y of Span. Com. and Finance, pages 63 to 69. From 1804 to 1810 about 5⅓ millions were shipped from Venezuela, yearly, (Mollier's Travels in Colombia, 455—note,) and half a million from New Granada. Ditto, 456—note. From Laguyra, in 1823, about one-fourth of a million exported. Hall's Colombia, page 152. In 1822, about one-half of a million exported from Caraccas, and 1½ million of pounds from all the Spanish provinces. 2 Hist. of Colombia, 1822.

The exports for 1834 are an estimate of my own.

Those for 1794 are from 4 Humboldt's Personal Narrative, page 125—note; of which very nearly half was from Laguyra, (3 do. 192, 6 do. 202,) and 2½ millions of pounds before the

revolution, exported from Varagua, Maracaibo, and the Gulf of Cariaco.

See table F, note 9, as to the exports from English territories in America before the revolution, and which were probably grown in the West Indies or Spanish America.

[9.] Among the places not enumerated, which have exported some cotton, it is said in Montgomery's Hist. of Brit. Col. page 604, that 14,900 pounds of raw cotton were exported from the river Gambia, in 1833.

In 1775 there was exported to Holland alone, from Surinam, one-eighth of a million of pounds. 2 Dict'y of Spanish Com. Smithers' Hist. of Liv.

The countries more particularly included under "Elsewhere," though not all, and about which much is known of their exports in cotton, are Demarara and Berbice. See imports into England, table G. The data as to exports from Brazil, West Indies, and "Elsewhere," in last column, are chiefly the ascertained imports from those enumerated places into other countries. From Naples and Spain some cotton was, in 1817, exported to France. 2 Chaptal, page 6. But probably most of the growth of other places. See table A, note [9.]

[10.] The cost of exportation or freight from the United States to Europe, is usually less than two cents per pound. Smithers, page 139. Even this has been reduced by the improvements which mark the spirit of the age, as the cotton is so pressed in the bales that it occupies less space in a vesssel, and the vessels in this trade are so constructed as to carry more when of the same tonnage.

[11.] A small duty is imposed on it in England and France. Baines's His. 317 and 515. Yet, in 1769, it was made free to aid the manufacturer. 3 McPhers. Com. 447. But the duty on raw cotton is remitted or allowed in drawback, on exportation of the manufactured article in England, Pebrer says in his tables, in his work on England, though not if the raw article is re-exported. 3 McPherson on Com. page 659. The duty was 6 per cent. ad valorem in England, for some years before 1831, on foreign cotton, then raised to 5*s.* 10*d.* per cwt. (1 Com. Dig. page 16, by Smith,) and in 1833 reduced to 2*s.* 11*d.* per cwt. On cotton from a British possession, the duty is only 4*d.* per cwt. See McCulloch, page 440. But formerly, as in 1799, it was from 8*s.* 9*d.* per 100 pounds, to 12*s.* 6*d.* from different places;

and from 1803 to 1815, from 16*s.* 10*d.* to 33*s.* 10*d.* See a table in Edinb. Encyclop. article "Cotton."

The duty in the United States on foreign cotton imported here is, and always has remained since 1790, at 3 cents per pound. Though Mr. Hamilton recommended its reduction in 1791, to aid our manufactures. See Rep. Dec. 30, 1791.

The duty in France varies, under various circumstances, from 10 to 16 per cent. See McCulloch, page 639, "Havre," and 2 Com. Dig. 73, by Smith.

There is said to be no duty on raw cotton in Switzerland. In England, in 1833, it is stated to be 3 farthings per pound, or 10 per cent. West. Rev. for April, '33.

E.

COTTON—RAW.

Years.	Exports of Cotton from— Louisiana.	S. Carolina.	Alabama.	Georgia.	New York.	N. Carolina and Virginia.	Rest of the U. States.	Whole value.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	Dollars.
	Millions.	Millions.	Millions.	Mill's.	Millions.	Millions.	Mill'ns.	
1789								
1790	–	$\frac{1}{3}$	–	–	–	–	–	48,285
1791	–	–	–	–	–	–	–	52,000
1792	–	–	–	–	–	–	–	51,470
1793	–	–	–	–	–	–	–	160,000
								Millions.
1794	–	–	–	–	–	–	–	$\frac{1}{2}$
1795	–	–	–	–	–	–	–	$2\frac{4}{1}$
1796	–	–	–	–	–	–	–	$2\frac{2}{10}$
1797	–	–	–	–	–	–	–	$1\frac{1}{4}$
1798	–	–	–	–	–	–	–	$3\frac{1}{2}$
1799	–	–	–	–	–	–	–	$4\frac{1}{10}$
1800	–	10	–	3	–	5	–	5
1801	–	–	–	–	–	–	–	$9\frac{1}{10}$
1802	–	–	–	–	–	–	–	$5\frac{1}{4}$
1803	–	–	–	–	–	–	–	$7\frac{3}{4}$
1804	–	–	–	–	–	–	–	$7\frac{3}{4}$
1805	–	–	–	–	–	–	–	$9\frac{1}{2}$
1806	–	–	–	–	–	–	–	$8\frac{1}{4}$
1807	–	–	–	–	–	–	–	$14\frac{1}{4}$
1808	–	–	–	–	–	–	–	$2\frac{1}{4}$
1809	–	–	–	–	–	–	–	$8\frac{1}{2}$
1810	5	40	–	20	10	15	4	$15\frac{1}{4}$
1811	–	–	–	–	–	–	–	$9\frac{1}{2}$
1812	–	–	–	–	–	–	–	3
1813	–	–	–	–	–	–	–	$2\frac{1}{4}$
1814	–	–	–	–	–	–	–	$2\frac{1}{2}$
1815	–	–	–	–	–	–	–	$17\frac{1}{2}$

E.—COTTON—RAW—Continued.

Years.	Exports of Cotton from— Louisiana. lbs.	S. Carolina. lbs.	Alabama. lbs.	Georgia. lbs.	New York. lbs.	N. Carolina and Virginia. lbs.	Rest of the U. States. lbs.	Whole value. Dollars.
	Millions.	Millions.	Millions.	Mill's.	Millions.	Millions.	Mill'ns.	
1816	–	–	–	–	–	–	–	$24\frac{1}{4}$
1817	–	–	–	–	–	–	–	$22\frac{1}{2}$
1818	–	–	–	–	–	–	–	$31\frac{1}{4}$
1819	–	–	–	–	–	–	–	21
1820	30	37	8	25	28	6	3	$22\frac{1}{4}$
1821	–	–	–	–	–	–	–	$20\frac{1}{4}$
1822	–	–	–	–	–	–	–	24
1823	–	–	–	–	–	–	–	$23\frac{1}{2}$
1824	–	–	–	–	–	–	–	$21\frac{3}{4}$
1825	–	–	–	–	–	–	–	$38\frac{3}{4}$
1826	–	–	–	–	–	–	–	25
1827	–	–	–	–	–	–	–	$29\frac{1}{3}$
1828	–	–	–	–	–	–	–	$22\frac{1}{2}$
1829	–	–	–	–	–	–	–	$26\frac{1}{2}$
1830	$120\frac{1}{3}$	$55\frac{1}{2}$	24	49	$37\frac{3}{10}$	$11\frac{1}{3}$	2	$29\frac{2}{3}$
1831	–	–	–	–	–	–	–	$25\frac{1}{4}$
1832	–	–	–	–	–	–	–	$31\frac{3}{4}$
1833	–	–	–	–	–	–	–	36
1834	164	$67\frac{3}{4}$	$51\frac{1}{2}$	$56\frac{1}{3}$	$30\frac{2}{3}$	$11\frac{1}{2}$	3	$49\frac{1}{2}$
1835	–	–	–	–	–	–	–	$61\frac{1}{2}$
[1]		[2]						[3]

[1.] The exports from each State are the foreign ones, and for 1830 and 1834, from official data; but prior to that they are estimates from the crop, consumption at home, &c.

See table F, note [9], as to some exports before the Revolution.

The first cotton supposed to be of American growth, brought to New York city, for foreign export, it is said, came from Savannah in 1792, and consisted of only two bags. The amount

of exports coastwise has not been ascertained, for reasons stated in the report. Those for foreign countries from any particular State often include more than the crop of that State, as from New York, which raises no cotton, and from Louisiana which raises but a small part of her exports. See table B, note 1.

[2.] The portion exported of Sea-island cotton, was, in 1834, 8,085,935 pounds, and in 1835, was 7,752,736 ; and was chiefly from South Carolina and Georgia. See official returns.

Its cultivation was, as remarked in a former table, introduced into South Carolina as early as 1787, from Bahama, and the export of it during the last 20 years has been on an average not far from 8 millions of pounds. It may be cultivated more extensively, it is supposed, in Florida. See *prices* in table C and notes, and B, and note 3.

It is now exported chiefly to England, say seven-ninths, over one-ninth to France, and the rest elsewhere. See McCulloch, page 440. It has taken the place of the fine cottons formerly from the isle of Bourbon.

See a table of exports of it from 1802 to 1816, inclusive, going in some years to nearly 10 millions of pounds, and to others short of one milllion ; but, as before named, being generally about 8 millions of pounds. Seyb. Stat. page 152 and 4.

[3.] The value has been computed from the quantity and average price through each year, so far as obtainable from official data.

In Seyb. Stat. page 147, is a table of the values from 1803 to 1817, inclusive.

F.

COTTON—RAW.

Exports of, to what places.

Years.	U. States to England.	U. States to France.	U. States to other places than Great Britain & France.	India to England.	India to China.	Brazil to England.	West Indies to England.	Brazil and West Indies to France.	Egypt and Turkey to England.	Egypt and Turkey to France.	All other places to England.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1770	2,000	[9]				Millions.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.
1787	–	–	–	–	–	$21\frac{1}{2}$	62	–	$5\frac{2}{3}$	–	$7\frac{3}{4}$
1789	Ratio of her imports from U. S.	Millions.	Millions.	Millions.	Mill's.	Ratio of her imports from Brazil.	Ratio.				[8]
1790											
1791	$\frac{1}{1000}$	–	–	–	–	$\frac{1}{3}$	$\frac{1}{3}$				
1792	$\frac{1}{1260}$	–	–	–	–	$\frac{1}{3}$	$\frac{1}{3}$				
1793	$\frac{1}{2525}$	–	–	–	–	$\frac{1}{4}$	$\frac{1}{6}$				
1794	$\frac{1}{1110}$	–	–	$\frac{1}{3}$	–	$\frac{2}{5}$	$\frac{1}{5}$				
1795	$\frac{1}{325}$	–	–	$\frac{1}{3}$	–	$\frac{2}{5}$	$\frac{1}{6}$				
1796	$\frac{1}{11}$	–	–	$\frac{4}{3}$	–	$\frac{1}{3}$	$\frac{2}{5}$				
1797	$\frac{1}{11}$	–	–	$1\frac{1}{3}$	–	$\frac{2}{3}$	$\frac{4}{5}$				
1798	$\frac{1}{6}$	–	–	2	–	$\frac{2}{5}$	$\frac{1}{3}$				
1799	$\frac{1}{9}$	–	–	7	–	$\frac{3}{7}$	$\frac{3}{7}$				

F—Continued.

COTTON—RAW.

Exports of, to what places.

Years.	United States to England.	United States to France.	U. States to other places than Great Britain & France.	India to England.	India to China.	Brazil to England.	West Indies to England.	Brazil and West Indies to France.	Egypt and Turkey to England.	Egypt and Turkey to France.	All other places to England.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Millions.	Millions.	Millions.	Millions.	Mill's.	Ratio.	Ratio.	Mill's.	Mill's.	Mill's.	Mill's.
1800	16	–	–	6½	–	1/5	1/5				
1801	19	¾	–	4¼	–	1/4	1/7				
1802	23½	2	–	3	–	1/3	1/9				
1803	27⅜	4	–	1⅜	–	1/3	1/10				
1804	25¾	6	–	2½	–	1/3	1/12				
1805	32½	4½	–	¼	–	1/3	1/10				
1806	24⅕	7	–	2⅔	–	1/3	1/9				
1807	53¼	6	–	3¼	–	1/8	1/11				
1808	8	2	–	5½	–	1/11	1/9				
1809	13⅓	–	–	6½	–	1/5	1/11				
1810	36	–	–	–	–	1/4	1/8				

1811	46¾	–	–	–	–	2/7	½ 6			–	2¼
1812	26	–	–	–	–	2/5	½ 3			–	2¾
1813	–	10¼	–	–	–	3/5	1/1 2			–	2
1814	–	1¾	–	–	–	3/5	1/1 1			–	2
1815	45⅔	20	–	–	–	¼	½ ¼			–	2
1816	57¾	18	–	–	–	1/3	1/3 5			–	7⅓
1817	51	–	–	36	–	1/3	½ 6			–	1
1818	58⅓	–	–	–	–	1/3	1/5 2			–	1½
1819	51¾	–	–	–	–	1/3	1/5 2			–	1¾
1820	90	–	–	23	–	29	6 8/10	–	¼	–	1 1/10
1821	93½	27⅓	9¾	9	–	19½	7	–	¾	–	¾
1822	101	21½	8⅔	4½	–	24¾	10¼	–	4/10	–	2
1823	142½	25	8½	15	–	23½	7	–	1⅓	–	2
1824	92	40½	1½	16½	–	25	6¼	–	7 7/10	–	2
1825	140	30	2¾	20¼	–	33	8	–	19	–	7⅓
1826	131	62⅓	8½	21	–	9⅘	4¾	–	10	–	1
1827	217	70½	11¼	20	–	20¾	7	–	5	–	1½
1828	151¾	53½	10¼	32¼	25	29	6	–	7	–	1¾
1829	157	67½	23	25	(qu.)	29	4½	–	6	–	1 1/10
1830	211	75	13½	12½	–	33	3½	7	3 4/10	6	¾
1831	205½	46 or 50	9	26	66½	31½	2⅓	3½	8	7½	1¼
1832	217½	73 or 77⅓	16	35	58	20	2	3⅔	9	8½	2¾
1833	227½	76¾	9½	32¼	–	28½	2	–	1	–	1¾
1834	266¾	79 9/15	20	32	40	18	4	4	1	7	
1835	252	100⅓	16¾	42½	(qu.)	25	5¼	–	9⅓		
[1]		[2]	[2]	[3]	[4]	[5]	[7]		[6]		

[1.] The exports to England from different places are given chiefly from Marshall's tables, page 110; London Encyclop. article "Cotton." As to those from the United States, since 1820, see our own commercial tables. A slight difference sometimes occurs from a reference by some to the exports to Liverpool alone, or to England alone, not including Scotland or Ireland. The exports from the United States to them all were—

Year.	*Mill's of lbs.*	*Year.*	*Mill's of lbs.*
1831	217¼	1834	284
1832	228	1835	269½
1833	238¼		

See Porter's official tables, page 125. Those for 1817, from India to England, are from Rees's Cyclop. article "United States," in a note. They are believed to be too high. The quantities are given in pounds, where ascertainable with accuracy, and where not so, the proportions are stated from table G, which are founded on the imports into England from the United States and other countries. (See Marshall, page 110, and Smithers, page 146.) The actual quantities exported from the United States to all Great Britain, before 1800, cannot be obtained by me; but the number of bales to Liverpool alone, can be, and, as a matter of some curiosity, are annexed: 1791, 64; 1792, 503; 1793, 111; 1794, 348; 1795, 2,147; 1796, 4,668; 1797, 5,193; 1798, 12,163; 1799, 13,236; 1800, 24,138. See more in books cited.

[2.] The exports from the United States to England and France are sometimes taken from their official reports of imports, and sometimes from ours of exports, occasionally differing a little by losses at sea, imperfect returns, and in the former not always including Scotland and Ireland. The proportions are given in a few cases, where the exact quantity was uncertain, on the principle in table G. For 1813 and '14, see that table. But the quantities given for 1834 and 1835, are from our own returns. In respect to the other places to which our exports go, a statement is annexed, giving the details since 1820, while our returns have been made up accurately and in more detail.

STATEMENT of the quantity of cotton exported from the United States to other places than Great Britain and France, in the year ending September 30, 1821, to 1835, inclusive.

Years.	To Russia.	Holland and Belgium.	Spain.	Spanish West Indies.	Trieste.	Hanse towns.	Italy and Malta.	All other places.
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
1821	304,680	4,186,096	284,832	772,296	34,976	748,110	897,804	2,506,777
1822	713,789	1,970,258	–	445,964	210,138	2,955,581	1,956,253	450,762
1823	309,678	4,650,548	–	–	177,789	2,356,594	217,663	833,332
1824	501,645	432,976	–	3,853	–	292,852	–	227,529
1825	133,934	1,420,225	–	–	–	577,109	980	509,031
1826	15,262	4,592,439	–	–	33,311	2,012,679	–	1,820,116
1827	147,101	5,861,400	7,990	–	183,204	3,389,514	148,170	1,440,547
1828	649,791	3,780,988	–	–	980,354	3,386,108	407,068	1,072,448
1829	227,883	9,595,337	–	–	4,071,247	6,857,796	1,056,387	1,261,925
1830	111,376	8,561,193	32,210	–	2,814,477	4,123,047	235,265	638,877
1831	761,735	972,659	555,098	–	2,778,858	2,416,765	305,695	2,243,741
1832	838,951	3,920,016	2,283,875	–	1,654,775	4,075,122	580,974	2,250,190
1833	1,447,405	2,673,253	758,216	–	1,107,600	1,870,620	–	1,759,615
1834	1,260,494	6,096,462	892,967	–	3,805,312	6,612,895	190,842	1,153,382
1835	974,801	5,694,358	878,219	–	4,943,061	2,788,147	12,952	1,493,760

[3.] The exports to England from other places than the United States for 1834 and '5 are from the last annual report in January, 1836, at Liverpool. It is said in Smithers' History of Liverpool, page 124, that the first imports from India were in 1798, and proved to be very profitable; but they began five or six years earlier to London, if not to Liverpool. See table G, and notes, and same page in Smithers, that Surats were imported in 1783: in page 125, he says that 53½ millions of pounds in one of the late years, being then 1824, were shipped from Calcutta to England, but the official tables are lower.

[4.] Of the exports from India to China in 1828, over 12½ millions of pounds were from Calcutta alone. Evidence on East India Company, page 13, 1832. For 1834, see Baines's history, page 32, which is too low. For other years except 1831 and 1832, see 1 Milbourne's Oriental Comm. page 281. The cotton trade to China began in the last half century, or about 1787, and the reasons for it are stated in table A, note 9. The exports for 1831 and 1832, are from McCulloch, pages 237 and 238. China has raised and manufactured cotton since the 13th century, though less since 1787. See table A, note 9. In London Encyclop. article "Cotton," it is said that, in 1818, about 230 millions of pounds were exported from India to China; but it is probably an error. In supplement to Encyclop. Brit. art. "Cotton," it is supposed to be one-half what had been yearly consumed in England, (1824,) or 50 to 60 millions of pounds, which is higher than Milbourne, but it agrees substantially with McCulloch, whose statement is from official returns; it is the greatest article of trade from India to China, except opium. See McCulloch, page 236; 3 Crawford, his. of Ind. Ar. 350.

[5.] The exports from Brazil to England began in 1781. Smithers' history of Liverpool, 124, and are often included till 1808, under the head of Portugal. Smithers, 146. See table D.

[6.] The exports from Egypt alone to England, it is said, did not commence till 1823, (Smithers' history, page 136,) and consisted of 2,108 bags, or short of one-quarter of a million of pounds, as their bags then weighed. See London Encyclop. article "Cotton," which says that, before 1790, nearly 6 or 7 millions of pounds yearly, were exported to England from Smyrna.

[7.] Under West Indies, the years 1834 and 1835 include Demarara, and elsewhere, not enumerated, as they are not discriminated in the last annual report at Liverpool, which is the authority.

[8.] The exports of 1787, from "all other places" to England, include $1\frac{3}{4}$ million of pounds from Demarara and Berbice.

[9.] The exports in 1770 were from the then provinces of New York, 3 bales; from Virginia, four bags; and from North Carolina, 3 barrels. Smithers' history, page 153. It was probably all of foreign growth, i. e. of the Spanish Main, or of the West Indies, as was, it is presumed, most if not all, of the eight bags from "America," seized in 1784. Smithers' history, 124 and 156. See table B. note. First exports of our own cotton were in small packages from the United States, called "pockets." Smithers' history, 135.

It would seem that, late as 1794, Mr. Jay, when making the treaty with England, was not aware that any cotton was exported from the United States. In Seyb. Stat. page 92, it is said, that the first export of cotton of our own growth took place in 1791. See table B, note 4.

G.

COTTON—RAW.

Years.	Imports of	Where from.						
	Into England.	United States.	Brazil.	Demarara and Berbice.	West Indies.	Egypt and Turkey.	India.	Other places.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Millions.		Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
1701	$1\frac{1}{10}$ or $\frac{9}{10}$							
1710	$\frac{7}{10}$							
1720	2							
1730	$1\frac{1}{2}$							
1741	$1\frac{6}{10}$							
1751	3							
1764	$3\frac{8}{10}$							
1766	3							
1780	5							
1784	11							
1787	22	–	$21\frac{1}{2}$	$1\frac{3}{4}$	$6\frac{2}{3}$	$5\frac{2}{3}$	–	6
1789	$32\frac{1}{2}$							
1790	$31\frac{1}{2}$							
		Ratio.	Ratio.	Ratio.	Ratio	Ratio.	Ratio.	Ratio.
1791	$28\frac{3}{4}$	$\frac{1}{1000}$	$\frac{1}{2}$	–	$\frac{1}{3}$	–	–	$\frac{1}{3}$
1792	35	$\frac{1}{126}$	$\frac{1}{2}$	–	$\frac{1}{3}$	–	–	$\frac{1}{10}$
1793	19	$\frac{1}{225}$	$\frac{1}{4}$	–	$\frac{1}{2}$	–	$\frac{1}{25}$	$\frac{1}{8}$
1794	$24\frac{1}{3}$	$\frac{1}{110}$	$\frac{2}{5}$	–	$\frac{1}{2}$	–	$\frac{1}{100}$	$\frac{1}{13}$
1795	$26\frac{1}{3}$	$\frac{1}{25}$	$\frac{2}{5}$	–	$\frac{1}{2}$	–	$\frac{1}{100}$	$\frac{1}{42}$
1796	32	$\frac{1}{11}$	$\frac{1}{2}$	$\frac{1}{37}$	$\frac{2}{5}$	–	$\frac{1}{44}$	$\frac{1}{50}$
1797	$23\frac{1}{3}$	$\frac{1}{11}$	$\frac{1}{2}$	$\frac{1}{10}$	$\frac{1}{3}$	–	$\frac{1}{17}$	$\frac{1}{28}$
1798	$31\frac{3}{4}$	$\frac{1}{6}$	$\frac{2}{5}$	$\frac{1}{14}$	$\frac{1}{3}$	–	$\frac{1}{15}$	$\frac{1}{285}$
1799	$43\frac{1}{3}$	$\frac{1}{9}$	$\frac{2}{7}$	$\frac{1}{11}$	$\frac{3}{7}$	–	$\frac{1}{6}$	$\frac{1}{50}$
1800	56	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{9}$	$\frac{1}{3}$	–	$\frac{1}{9}$	$\frac{1}{18}$
1801	56	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{12}$	$\frac{2}{7}$	–	$\frac{1}{13}$	$\frac{1}{33}$
1802	$60\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{17}$	$\frac{1}{6}$	–	$\frac{1}{20}$	$\frac{1}{135}$
1803	$53\frac{3}{4}$	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{70}$	$\frac{1}{10}$	–	$\frac{1}{30}$	$\frac{1}{70}$
1804	$61\frac{3}{4}$	$\frac{1}{2}$	$\frac{2}{5}$	$\frac{1}{6}$	$\frac{1}{12}$	–	$\frac{1}{26}$	$\frac{1}{167}$
1805	$59\frac{2}{3}$	$\frac{3}{5}$	$\frac{2}{9}$	$\frac{1}{11}$	$\frac{1}{10}$	–	$\frac{1}{210}$	$\frac{1}{38}$
1806	$58\frac{1}{4}$	$\frac{3}{5}$	$\frac{2}{9}$	$\frac{1}{10}$	$\frac{1}{9}$	–	$\frac{1}{22}$	$\frac{1}{87}$
1807	75	$\frac{3}{4}$	$\frac{1}{18}$	$\frac{1}{9}$	$\frac{1}{11}$	–	$\frac{1}{20}$	$\frac{1}{116}$
1808	$43\frac{1}{2}$	$\frac{2}{5}$	$\frac{1}{11}$	$\frac{1}{14}$	$\frac{2}{9}$	–	$\frac{1}{8}$	$\frac{1}{74}$

G.—COTTON—RAW—Continued.

Years.	Imports of	Where from.						
	Into England.	United States.	Brazil.	Demarara and Berbice.	West Indies.	Egypt and Turkey.	India.	Other places.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Millions.	Ratio.	Ratio.	Ratio.	Ratio.	Ratio.	Ratio.	Ratio.
1809	92 3/4	1/2	1/3	1/18	1/11	—	1/15	1/38
1810	132 1/2	2/3	1/4	1/15	1/18	—	—	1/46
1811	91 1/2	5/9	2/7	1/9	1/20	—	—	1/76
1812	63	4/9	2/5	1/9	1/23	—	—	1/35
1813	51	1/8	3/5	1/10	1/12	—	—	1/20
1814	73 2/3	2/9	5/8	1/12	1/11	—	—	1/30
1815	96 1/4	4/7	1/4	1/15	1/24	—	—	1/24
1816	97 1/3	1/2	1/3	1/14	1/35	—	—	1/24
1817	126 1/4	1/2	1/3	1/24	1/26	—	—	1/14
1818	174	3/7	1/3	1/40	1/52	—	—	1/25
1819	137 1/2	1/2	1/3	1/40	1/52	—	—	1/25
1820	147 1/2	4/7	1/5	1/45	1/76	1/530	1/7	1/65
1821	126 1/2	1/2	1/6	1/46	1/32	1/175	1/14	1/138
1822	141 1/2	4/7	1/5	1/32	1/45	1/350	1/35	1/226
1823	183 1/3	3/5	1/8	1/72	1/52	1/143	1/13	1/72
1824	147 1/2	3/5	1/6	1/24		1/19	1/11	1/12
1825	244 1/3	3/5	1/7	1/29		1/17	1/10	1/9
1826	170 1/2	3/8	1/17	1/40		1/18	1/9	1/9
1827	264 1/3	4/9	1/11	1/38		1/56	1/13	1/22
1828	222 3/4	2/3	1/7	1/48		1/27	1/8	1/17
1829	218 1/3	2/3	1/7	1/39		1/30	1/9	
1830	259 3/4	2/3 to 3/4	1/7 to 1/8	1/60		1/60	1/25	
1831	280	2/3 to 2/4	1/9	—		1/35	1/13	
1832	270 2/3	4/7	1/13	—		1/30	1/8	
1833	288	7/8	1/10	—		1/300	1/9	
1834	320 1/2	6/7	1/17	1/200		1/200	1/9	
	[303]	[9/10]						
1835	361 1/2	3/4	1/12	—		—	1/8	
	[303 1/2]	[14/15 to 15/16]						
	[1] [2] [3]	[5]					[4]	

[1.] For the early imports of cotton into England, see more in Baines, 346; McCulloch, 438; and Seyb. Stat. 92, note. In 1787 the imports set down as from Turkey and Egypt, were entirely from the former, Smyrna, Greece, &c. and none from the last until 1820 and 1823, and since that mostly from Egypt. The "other places" were chiefly French and Spanish colonies in 1787; but include India and Turkey where those columns are blank. See a table in Smithers' History, page 146. The early imports of raw cotton, after the manufacture increased much in England, were from the West Indies, Surinam, and isle of Bourbon. Smithers' History of Liverpool, 123. Those from Brazil, &c. in 1824. See Smithers, page 454.

[2.] The proportions are given from the imports into Liverpool alone; but will not vary much for the whole kingdom. They are stated in the present form to aid in the comparison, at different periods in the same, and different countries. The fractions are very near the true proportion, but occasionally are the next highest or lowest to the exact sum, for convenience in calculation, as is the case in fractions often in all these tables. See Marshall, page 110; Smithers, 147.

[3.] The whole imports into England, Scotland, and Ireland, are included in the above column; as some of the writers discriminate between those into England alone, and some do not. See Porter's official tables, 125; McCulloch, 439. See a table in Smithers, page 146; making the imports into Ireland one to two millions of pounds yearly, after from 1791 to 1817. In Baines, the quantities often differ a few millions, and are higher in most cases. See also Edinburgh Review, page 19, 1827. The usual quantity imported into Ireland and Scotland, as contradistinguished from England, has been, during the last ten years, about 10 to 15 millions of pounds per annum, it is believed. In 1834, it was about 20 millions of pounds; in 1835, it was about 18 millions of pounds. Most of that used in Ireland is believed to be re-exported from England, or included in English imports; and no separate tables have been kept of Irish imports since 1825, when those of cotton exceeded $6\frac{3}{4}$ millions of pounds. Baines's History, page 430. The largest amounts for 1834 and 1835 are taken from the Liverpool reports of January, 1836; and the smaller ones, in the second lines, from other sources of not so recent date.

[4.] Most of the above ratios from India, between 1793 and 1809, correspond with 1 Milbourne's Orient. Com. page 281, and may differ some from the tables as to Liverpool imports alone.

[5.] The imports from the United States in 1792, 1793, &c. were said to be chiefly through the British West Indies. Smithers, 157. Our ratio, it will be seen by the sums in the second line for 1834 and 1835, will vary as the English accounts differ concerning the whole actual or estimated amount of her yearly imports.

H.—COTTON—RAW.

Years.	Imports of. Into France.	Where from. United States.	Egypt & Turkey.	Brazil and the West Indies.	Imports of. Into Saxony, Prussia, Trieste, and Russia.	Into Switzerland.	Into Spain.	Into China.	Into the United States.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	
1789									
1790	–	–	–	–	–	–	–	–	97,357 Mill's.
1791	–	–	–	–	–	–	–	–	¼
1792	–	–	–	–	–	–	–	–	½
1793	–	–	–	–	–	–	–	–	2¾
1794	–	–	–	–	–	–	–	–	2½
1795	–	–	–	–	–	–	–	–	4
1796	–	–	–	–	–	–	–	–	4¼
1797	–	–	–	–	–	–	–	–	3½
1798	–	–	–	–	–	–	–	–	3¾
1799	–	–	–	–	–	–	–	–	3½
1800	–	–	–	–	–	–	–	–	4¼
1801	–	¼	–	–	–	–	–	–	4¼
1802	–	2	–	–	–	–	–	–	3½
1803	–	4	–	–	–	–	2½	–	3
1804	–	6	–	–	–	–	–	–	3¼
1805	–	4½	–	–	–	–	–	–	2¼
1806	21 7-10	7	–	–	–	–	–	25	2¼
1807	–	6	–	–	–	–	–	–	3½
1808	–	2	–	–	–	–	–	–	4½
1809	–	–	–	–	–	–	–	–	½
1810	25	–	–	–	–	–	–	–	¼
1811	–	–	–	–	–	–	–	–	¼
1812	–	–	–	–	–	–	–	–	½
1813	–	10¼	–	–	–	–	–	–	1¾
1814	–	1¾	–	–	–	–	–	–	¼
1815	–	20	–	–	–	–	–	–	¼
1816	–	18	–	–	–	–	–	–	¼
1817	–	–	–	–	–	–	–	–	3
1818	–	–	–	–	–	–	–	–	11½
1819	–	–	–	–	–	–	–	–	15
1820	44½	–	–	–	–	–	–	–	1
1821	47½	27⅛	–	–	–	6	–	–	⅛
1822	61	21½	–	–	–	–	–	–	¼
1823	51	25	–	–	–	–	–	–	⅛

H.—COTTON—RAW—Continued.

Years.	Imports of. Into France.	Where from. United States.	Egypt & Turkey.	Brazil and the West Indies.	Imports of. Into Saxony, Prussia, Trieste, and Russia.	Into Switzerland.	Into Spain.	Into China.	Into the United States.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.
1824	75½	40½	–	–	–	–	–	–	¾
1825	61⅓	30	–	–	–	–	–	–	½
1826	96	62⅓	–	–	–	–	–	30?	¼
1827	87	70½	–	–	–	–	–	–	⅛
1828	61⅔	53½	–	–	–	–	–	–	½
1829	72½	67½	–	–	–	–	–	–	½
1830	84⅔ to 91	75	6	7	38	17½	–	–	½
1831	65½ to 61	46 to 50	7½	3½	39	18 4-5	–	38 to 68	¼
1832	77 to 85	73 to 77⅓	8½	3⅔	48	19½	–	60	½
1833	91	76¾	–	–	36	19	–	–	½
1834	83 to 94½	78 to 81¾	7	4	–	19⅓	2	45 ?	½
1835	94¼	91	–	–	–	–	–	–	1⅜
[1]	[2]			[3]	[4]	[5]	[6]	[7]	[8] [9]

[1.] The value of the imports of raw cotton into each country, it has not been deemed necessary to give in detail, as the quantity, and the prices in the United States and Liverpool, with those in India, and some other places occasionally, are presented, and will enable any person easily to make a computation of the whole value of the imports into any particular country.

[2.] The imports into any country during any particular year, sometimes fall short of the actual consumption in that year, if a large stock, from any particular cause, be on hand at the beginning, or a very small stock at the end of the year. The whole amount imported into any place, and the amount from each country, differ a little occasionally, by mistakes in copying, or misprints probably. For imports of 1820 and 1821, into France, see Quarterly Review, (1824–5.) For those of 1834, see tables of French Com. for '34; and for 1810, Edinburgh Review

page 61, (1829,) which states those for 1828-9, at 80 or 90 millions of pounds; for 1806, see London Encyclop. article "Cotton." Baines, 515. From 1822 to 1832, see a table in McCulloch's Dict., page 448, which is given below in bags. In 1819, in vol. 3, Dict. of Com. and Finance for Spain, page 244, the value of imports of raw cotton is estimated at only $2,000,000, into France, but it must be too low. Those for 1833, and the smallest for 1834 and for 1835, are from manuscript. Annexed are the quantities in bales, and the stocks on hand each year, from 1822 to 1835, inclusive, from another and similar source, as to the three last years; the previous ones are from McCulloch. See table T, note [2,] as to stocks on hand in England.

Statement of the general imports and stocks of cotton in France, in 1835, compared with those of the thirteen preceding years.

Years.		Imports.		Stocks, Dec. 31.
1822	bales	205,861	-	45,545
1823	"	169,845	-	40,078
1824	"	251,074	-	47,194
1825	"	204,572	-	35,306
1826	"	320,174	-	74,479
1827	"	290,617	-	85,403
1828	"	206,132	-	51,812
1829	"	242,230	-	29,292
1830	"	282,752	-	61,260
1831	"	218,393	-	35,810
1832	"	259,159	-	22,506
1833	"	305,633	-	51,753
1834	"	274,307	-	24,407
1835	"	324,425	-	40,096

[3.] See Pitkin's Stat., page 485.

[4.] Those for Saxony, Prussia, and Trieste, are given from Pitkin's Statistics, 485. About one-third comes from the United States, and some of it through France and Holland; from Brazil and the West Indies one-fourth; from Egypt and Turkey one-fifth; and from India one-fourth. See note 8 below, and McCulloch's Dict., 442. In Saxony and Prussia, the manufacture of cotton cloth is considerable, but is chiefly from English yarn. See exports of manufactures from England, and supplement to Encyclop. Britannica, article "Cotton." The spinning is slowly

increasing by machinery. In 1831, Prussia exported one-fourth more of cotton cloths than in 1826, being 17 millions of yards. Blackwood's Magazine for January, 1836.

[5.] Of the imports into Switzerland, quite six millions pass in some years through France. Genoa imported in 1830, two and one-half million; in 1831, four and one-tenth millions; 1832, five and one-tenth. Half of this probably goes to Switzerland, and nearly half the imports into Trieste. (See below.) Switzerland has long imported cotton, but it has chiefly been spun by the distaff. Supplement to Encyclop. Britannica, "Cotton." See more Westminister Review, for April, 1833.

[6.] Those into Spain were chiefly from provinces in America. 1 Dict. of Fin. and Com.

[7.] Except the large sum for 1831, and that for 1832, which are founded on a table in McCulloch, the imports into China are computed from other writers on the exports thither from India, with a small addition from other places, chiefly islands. See tables D and F, and 3 Crawford's History. Most of the exports from India go to China, except what went to the United States formerly, and then and now to England. Table G. It is feared that they are not usually stated high enough. Supplement to Encyclop. Brit. "cotton."

[8.] The imports into the United States are taken from official returns, and have been very fluctuating in amount; they have come chiefly from India. See Seybert, 92, where he says, that before 1825 we consumed two millions of pounds of it yearly. For a table of imports and exports of foreign raw cotton, from 1800 to 1814, see Seyb. Stat. page 257.

[9.] Other countries of Europe than those enumerated, import considerable quantities of raw cotton: e. g. Holland and Belgium, about 10 or 12 millions of pounds, of which a part passes into Germany, and five or six millions of pounds are from the United States. So into Germany direct are imported at Trieste alone, from the United States about four to five millions, and some from Egypt and Turkey; in all, making in 1830, $12\frac{3}{4}$ million of pounds; 1831, $19\frac{3}{4}$ million of pounds; and in 1832, $25\frac{1}{4}$ million of pounds. McCulloch, page 442. Into the Hanse towns are imported from here two to six millions of pounds more yearly,

and about one million of pounds to Russia, &c. See exports, table F, note 2. Russia imported into Petersburg, in all 1830, 2½ million of pounds; 1831, seven-tenths million of pounds; 1822, one and eight-tenths million of pounds. In 1834, Belgium is said, by Mr. Alexander, to have imported 12¾ million of pounds of raw cotton. It is said in Westminster Review, for April, 1833, that Lombardy alone consumes four million pounds of raw cotton yearly.

I

COTTON—RAW.

Years.	Quantity consumed and manufactured in— England.	France.	United States.	China and India.	S. America and Mexico including Brazil.	Germany.	Turkey and Africa.	Spain.	Prussia.	Elsewhere.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.
1780	13½ in the three countries.									
1784	11¼									
1789										
1790	30½	–	5							
1791	28	10	5½	285	50	15	52	2	2	60
1792	33¼									
1793	17¾									
1794	23									
1795	25									
1796	31									
1797	22¼									
1798	31	18								
1799	42	10¼								
1800	51	6¾	8 [1/10]							
1801	53¾	11	9	280	45	22	50	3	5	50
1802	56½	15 1/10								
1803	51¾	15¾	–	–	–	–	–	3		
1804	66¾	17¼								
1805	58¾	18½	11 [⅛]							
1806	57¼	21¾								
1807	72½									
1808	41½									
1809	87⅓									
1810	126	25	16 [3½]							
1811	89¾	23	17	270	48	25	48	5	6	50
1812	59¾	21								
1813										
1814	52½									
1815	92	–	31½							
1816	86½									
1817	116½	30or26								
1818	172									
1819	132¾									
1820	142	44								
1821	114	47	50	260	42	30	45	8	7	45
1822	120½	61								
1823	177	50½								

I.—COTTON—RAW—Continued.

Quantity consumed and manufactured in—

Years.	England.	France.	United States.	China and India.	S. America and Mexico including Brazil.	Germany.	Turkey and Africa.	Spain.	Prussia.	Elsewhere.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.	Mill's.
1824	131	75	–	–	–	–	–	–	7 7/10	
1825	206	60								
1826	150½	96								
1827	250½	87								
1828	208¼	61	60							
1829	190¾	71½								
1830	255	87½								
1831	257	65½	77½							
1832	260	78								
1833	284⅓	87	80to85	242	35	36	42	10	20	40
1834	297	80								
1835	320¼	–	100							[10] [9]
	[1]	[2]	[3]	[4]	[11]	[8]		[5]	[7]	[6] [12]

[1.] It is important to bear in mind that this table does not show the consumption of *manufactured* cotton, but only the consumption and manufacture of cotton in its *raw* state; hence it includes the quantity of raw cotton raised in any country and not exported, with the additional quantity imported and not re-exported, allowing the quantities on hand at the commencement and termination of each year to be similar. Most of the quantities include what is used in all ways, and made in families as well as in manufactories. It also includes what is consumed in a raw state, which is calculated to be, in England, quite $\frac{1}{14}$th. The whole consumption in Europe, in 1830, was about 387 millions of pounds, (Pitk. Stat., 484;) or less than the present exports of the United States. The consumption in manufactures of raw cotton in all Europe, in 1803, was estimated at only 60 millions of pounds, Dictionary of Spanish Commerce; and in London Encyclopedia, article "Cotton," computed at only 18 millions of pounds in all Europe, except England and France. Till 1773, the warp in the web of what was called cotton cloth

in England, was *linen*. McCulloch, 438. (See table A, note 9.) See below, note [12.]

[2.] The above quantities for England are generally taken from Marshall's tables, which are copied and approved by Pitkin. But Porter, in his tables, makes the quantity from 1820 to 1832, larger by 5 to 10 millions of pounds per annum. Part of the difference may arise from including Ireland, and part by sometimes looking only to the imports, and deducting the quantity re-exported; when, in fact, the quantity on hand at the beginning and end of the year, or the actual quantity entered for home consumption, was essentially different. About 10 to 20 millions of pounds yearly, or often as little as $\frac{1}{60}$ to $\frac{1}{30}$th of what is imported is re-exported from England. See Baines, 347, and, in Marshall and Pitkin's schedules of it. An estimate for 1830, made in France, was only 241 millions of pounds; and in Chamber of Peers for 1834, was 320 millions of pounds; and by 1 Smith's Com. Dig., page 16, for 1832, was 288 millions of pounds; while the Chancellor of the Exchequer in England, in his late speech, states the quantity for home consumption in 1834 was 320 millions of pounds, and in 1835, $320\frac{1}{4}$ millions of pounds. But by the annual Liverpool report in February, 1836, and other sources, the consumption in 1835 is estimated higher than 1834 by $13\frac{1}{2}$ millions of pounds. Others put 1834 at 303 millions of pounds, and 1835 at 330 millions. In the Edinburgh Review, page 433, (1832,) a table is given from Freeman and Cook's Com. of Great Britain, from 1822 to 1831, inclusive, which is as follows: 1822, $144\frac{1}{10}$ millions of pounds; 1823, $147\frac{1}{10}$; 1824, $174\frac{1}{10}$; 1825, $169\frac{1}{10}$; 1826, $164\frac{2}{3}$; 1827, $201\frac{1}{10}$; 1828, $217\frac{3}{4}$; 1829, $221\frac{2}{3}$; 1830, 242; 1831, $257\frac{1}{2}$. The consumption in Scotland separately, and in part from English imports, exceeded, in 1835, 32 millions of pounds. Since 1823, when changes occurred in the duties, Ireland has made considerable cotton cloth: in 1825, quite $6\frac{1}{2}$ millions of yards. But it was chiefly from yarn spun in England, (McCulloch, 444,) or from raw cotton exported there from England; which, from 1821 to 1825, inclusive, was from $1\frac{1}{3}$ to $2\frac{1}{2}$ millions of pounds per annum. See tables on this in Smithers, 150 and 151. London Encyclopedia, article "Cotton." In same article see a table on imports and consumption, and stock on hand, same years: at the close of 1823, in England, it was 92 millions of pounds. See Liverpool annual report, where the stock on hand at the close of 1834 was $59\frac{1}{2}$ millions of pounds, and 1835 was $73\frac{1}{2}$ millions of pounds. In 1833 it was about 60 millions of pounds, and had diminished

gradually since 1826, when it was 100 millions of pounds. (Baines, page 318.) See table H, note 2.

[3.] See on France, Baines, page 525. But the quantity of imports is generally higher than consumption by 5 or 6 millions of pounds, (unless the stock on hand is very large, when the last is sometimes highest;) as, of late years especially, France re-exports to the neighboring countries, by land, 8 or 9 millions of pounds per annum, occasionally. (French Tables of Commerce, page 156, for 1832–'3.) About $\frac{7}{10}$ of these re-exports are to Switzerland, and the rest to Sardinia, Genoa, &c. As far back as 1789 France used but little cotton, except in household manufactures. Quar. Rev., (1824–'5,) page 394. For 1815, see Baines, page 515, and for 1806, see London Encyclopedia, article "Cotton." In the French Chamber of Peers it was testified, that the consumption in 1834 was 80 millions of pounds. In the Edinburgh Review, page 432, (1832,) is a table of raw cotton consumed yearly in France, from 1822 to 1831, in which the quantity is different from 1 to 10 or 12 millions in different years, some less and some more, e. g.

Years.	M. lbs.	Years.	M. lbs.
1822 - - - -	$64\frac{1}{2}$	1827 - - - -	84
1823 - - - -	$51\frac{2}{3}$	1828 - - - -	72
1824 - - - -	$73\frac{1}{10}$	1829 - - - -	$79\frac{1}{2}$
1825 - - - -	65	1830 - - - -	$75\frac{1}{4}$
1826 - - - -	$84\frac{1}{3}$	1831 - - - -	$73\frac{1}{10}$

Those in the table from 1798 to 1806, and 1817, are from Sup. to Ency. Brit. "Cotton." See table K, into what articles the cotton is made, comparative prices, &c.

[4.] The large estimates for 1790, 1800, and 1805, in the United States, were made by myself, and the small ones, with that for 1815, are from a report of a committee of the House of Representatives, February 13, 1816. That for 1810 is from Seybert's Statistics, page 92, and includes what cotton was used in household manufactures, as do my own. Mr. Gallatin made a similar one for 1810. Pitkin, 487. Some estimates of earlier date probably did not include what was used in dwelling-houses. Before 1825 we consumed often 2 millions of pounds a year, of raw cotton grown abroad, (Seyb. 257 and 92;) and one-fourteenth of the imports and crop in the United States and England, is used or consumed in its raw state without being made into

either yarn or cloth. Table H. In Coxe's report on Manufactures for 1810, he gives the manufactures of cotton in families at five millions of dollars value, and number of yards 16½ millions; which, at 50 cents, the worth of coarse cloth to each pound of cotton in it, would make 8 or 10 millions of pounds used. Coxe reports a few large manufactories, but without any data to show their consumption of raw cotton; but see table L, spindles, note. They probably used 6 to 8 millions of pounds more. In the French Chamber of Peers the estimate was only 36 millions of pounds consumed in the United States in 1834, (see below.) The whole manufacture of cotton in the United States must be as large as the estimate, though beyond the usual computation, if we look to the number of spindles, and to the great household manufacture of it in the families of the South and West, for all purposes.

Again, it is to be deduced from the fact, that in the great cheapness and healthfulness of cotton manufactures, our population consume each five or six dollars worth of them yearly, for clothing, bedding, sails, &c. which, at a census of 14 millions, would be from 70 to 84 millions of dollars in value. In England the consumption is computed to be only a fraction less than that, and in France it is $4 dollars per head. In Belgium, Alexander computes it at 20 francs, or a little over $3¾ per head. As we import from England, France, and Germany, about 7 millions of dollars of cotton manufactures more than we export, and those articles are finer than our own, it is a fair estimate, that we manufacture in this country, from 50 to 70 millions of dollars worth of cotton manufactures; which, at two pounds of raw cotton or near it per dollar of manufactured cloth, on an average, would, in all, equal about 100 millions of pounds or more of raw cotton manufactured here. Of this, about 5 to 20 millions of dollars worth are made in domestic form; and 45 to 50 millions of dollars in factories, in A. D. 1835.

In 1831, the convention in New York estimated that only 26 millions of dollars worth of yarn and cloth were made in manufactories; and in 1834, Pitkin, page 484, estimated all manufactures of cotton in the United States at 40 millions of dollars value yearly. This would require in 1831, as in the table, about 77 millions of pounds of raw cotton, as estimated in the convention at New York, for manufactories in 12 States. See McCulloch, 448, who supposes it was a committee of Congress.

As our population is increasing from 1830 to 1840 at the rate of nearly 4 per cent. or quite 400,000 persons per annum, and as 10 to 12 pounds of raw cotton are required per head, and our

imports of cotton manufactures do not increase, we must add yearly to our manufactures about 4 to 5 millions more of raw cotton. This would make an addition from the estimate in 1830, so that the whole consumption would, in 1835, equal 100 millions of pounds of raw cotton. An intelligent merchant and manufacturer of the North thinks the consumption now is 106 millions of pounds. The quantity manufactured here in 1817 is estimated by Reuss, in his tables on American trade, at only 31 millions of pounds, and in 1828 at 36 millions of pounds; but they must be too low, as are the usual estimates for the last three or four years, at only 80 and 85 millions of pounds, or they must include only what was worked up in factories, and the former estimate not all of that. On the great consumption of cotton in household manufactures in the United States, and the opinion entertained in 1791 on the importance and expectations of success in the establishment of manufactures by machinery, and its influence on the growth of cotton in the United States, see more in Hamilton's report, A. D. 1791.

[5.] See Urquhart on Turkey, page 150 and 179, that two pounds per head is manufactured there; and also that 50 millions of dollars worth of muslins alone were yearly consumed there and in Africa. There were not all, however, of domestic manufacture, it is presumed.

In Egypt it has been estimated that from 8 to 9 millions of pounds of the crop of 1835 will be consumed in that country, See table A, note 9.

[6.] This statement for Russia in 1824 is from Porter's tables, 545; see Baines, 406. In the southwestern parts of Russia, bordering on Germany, manufactories and machinery have been considerably introduced, and yarn from England is woven there, as in India and elsewhere, as well as raw cotton, imported chiefly from the United States, either direct or through the ports on the Baltic. See exports of raw cotton, table F, note. A few others have been established southeast of Moscow. See London Encyclop. article "Cotton," and one cotton mill is in operation in St. Petersburg.

[7.] Used up mostly into calicoes, tapes, and galloons. Spain in 1803. 1 Dictionary of Spanish Commerce, 63; 3 do. 148; made 5,640,810 yards of cotton cloth, 51,900 pair of cotton stockings, and 2,686,142 yards of tape.

[8.] In Puebla in Mexico, in 1803, were manufactured 1½ millions of pounds of raw cotton. (4 Dictionary of Spanish Commerce, page 178.) In Campeachy the manufactures are most extensive. 2 History of Colombia.

[9.] Among the other places is Switzerland, which, in 1831, consumed near 19 millions of pounds of raw cotton. Baines, 526; see imports. That country began to use machinery for cotton in 1798, but the progress has been slow, and the establishments are small, though active. London Encyclop. article "cotton." Muslins have been made there, it is said, a century and a half. But beside England and France, the cotton spun in the rest of Europe in 1823 was estimated at only 18 millions of pounds. London Encyclop. article "cotton." See table K, note. In 1834, it was estimated by Mr. Alexander, that Belgium consumed 12¾ millions of pounds of raw cotton. See table, exports of manufactures and notes.

[10.] The statements for 1833, 1821, 1811, 1801, and 1791, are generally computations made from other data as to the crops in the different countries named, which were grown and not exported, and the qauntities of raw cotton imported into each: beyond this, they are rather conjectures than estimates, founded on very satisfactory facts.

[11.] The quantities computed to be manufactured in India and China are very large; but, perhaps, they are below rather than above the truth. See supplement to Ency. Brit. article "Cotton," and tables A and F on growth of cotton and exports. In the Indian islands the most of their raw cotton is made up, though a little is exported to China. 3 Crawford's History, 350.

[12.] A table is annexed of the consumption of raw cotton in all Europe, from 1831 to 1835, inclusive, compiled by Lambert & Co. of Liverpool, and distinguishing the estimated portion of it from this country.

Consumption of cotton in Europe, reduced to bales of 300 pounds.

1831,	- bags	1,272,176,	- of which	928,520	American
1832,	- "	1,372,079,	- "	1,015,280	"
1833,	- "	1,409,786,	- "	1,066,240	"
1834,	- "	1,502,559,	- "	1,205,043	"
1835,	- "	1,581,501,	- "	1,254,586	"

K.

COTTON—MANUFACTURES OF.

Years.	Whole value of, yearly.			Capital employed in manufacturing by machinery. [6]		
	In England.	In France.	In U. States.	In England.	In France.	In U. States.
	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
1789						
1790						
1791						
1792						
1793						
1794						
1795						
1796						
1797						
1798						
1799						
1800						
1801						
1802						
1803						
1804						
1805						
1806						
1807						
1808						
1809						
1810						
1811						
1812						
1813						
1814						
1815	95?	–	24	–	–	40
1816						
1817	–	36				

K.—COTTON—MANUFACTURES OF—Continued.

Years.	Whole value of, yearly.			Capital employed in manufacturing by machinery. [6]		
	In England.	In France.	In U. States.	In England.	In France.	In U. States.
	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
1818						
1819						
1820						
1821						
1822	72					
1823	155					
1824	148 to 190					
1825						
1826						
1827	171	–	–	309?		
1828	–	40				
1829						
1830	–	–	26 (40)	325?	–	$40\frac{3}{4}$ or 62
1831	–	–	–	216		
1832	144	54	–	160	–	$44\frac{3}{4}$
1833	178 (149)	–	–	360 168 ?	115	
1834	$160\frac{1}{2}$	62	–	250		
1835	–	–	45 to 50	185	–	80
[4] [5]	[1]	[2]	[3]	[7]	[10]	[8] [9]

[1.] The values in England, in the tables, are taken, for 1834, from McCulloch and Aiken, Edin. Rev. 472, (1835,) and Baines, 412; for 1833, in 1st line, from Pebrer on Eng. page 314; for 2d line, for 1827, from Edin. Rev. page 22, (1827.) The first edition of McCulloch agreed with Pebrer, but in the second edition he lowered the amount. Baines, 398, and note. That for 1823 was by Mr. Huskisson. Baines, 399. That for 1824 is from Supplement to Encyclop. Brit. "Cotton."

In McCulloch's Dict'y of Com. and Baines, 406, and Pitkin, 486, it is computed that the present value of the cotton manufacture equals about twice the amount of it exported. It is said that only 37 per cent. is consumed of what is made. Aiken's Lectures. See exports. In 1766, England made about three times as much as she exported of cotton goods, though Edin. Rev. page 166, (1830,) says she then made only one million of dollars worth. Do. page 18, (1827.) The estimate for 1815 is in Edinb. Encyclop. art. "Cotton." The items for computing the value of the annual manufacture, are given in Edin. Rev. (1827,) page 22, and in Edin. Rev. page 472, (1835,) and in Baines, 412.

In Scotland alone, it is said the manufacture of cotton, in 1835, equalled in value 11½ millions of dollars; but, in 1832, it was estimated by Kennedy at 12½, though prices higher; and in Ireland at 1⅓ millions of dollars. Baines, 409, thinks the exports are nearly that before named from Scotland, and the manufacture double. Page 410.

[2.] The values in France for 1817 are too high, and that for 1828 too low, it is believed, but were extracted, the first from 2 Chaptal on French Industry, page 150, and Sup. to Encyclop. Brit. "Cotton," and the last from some author not remembered. Estimated at 111 millions of dollars by Mimerel, but too high. Baines, 521.

Those for 1832 and '34, are estimates made on the number of spindles, &c.

[3.] The value for 1830, in the United States, is from N. Y. Conven. and includes but 12 States, and no household goods, otherwise it would equal 40 millions. Pitkin, 483.

The whole value, in 1835, is my estimate from the quantity of cotton worked up, &c. Pitkin, 482.

The value for 1815 is by a Committee of Congress, and is confined to goods made in factories. The whole value of cotton, woollen, and flax manufactures, in 1810, was computed at only 40 millions of dollars, the value of cotton alone in 1830.

[4.] The value of manufactured cottons, when the quantity of raw cotton in them is the same, differs greatly according to different periods of time in the same country, and according to the quality of the raw material, and the machinery used, and the skill employed. See table M, note [2.]

Thus, in England, in 20 years after Arkwright's invention in spinning, manufactured cottons fell nearly eight-ninths of their former price. Every ten years since, some have computed their fall in price as equal to 50 per cent. In the American Encyclopedia, article "Cotton," it is said that, from 1815 to 1829, the coarse cloths fell two-thirds. See in Pebrer's views of England, page 343, a table showing the fall there at different periods. See table M, note [3,] on official and real prices at different periods. In 1810, yarn, on an average, was worth $1 12½ per pound. Report by Gallatin. See prices of other articles in his report. In 1814, it was estimated under $1 per pound by Cox. In 1832 it was said that the cost of making most species of yarn had been reduced, since 1812, about a half, and that of weaving by power looms, &c., still more. See Edin. Rev. 427, (1832,) a list of prices. Some of the differences as to the whole value of manufactured goods, spring from not adverting to all the fall in prices, though the yarn and cloth have increased in quantity. See a table of reduction in prices of spinning. In 1786 it cost 10*s.* per pound of No. 100, in 1824 only 8*d.* or only 16 cents instead of 240 cents. Supplement to Encyclop. Brit. "Cotton."

[5.] The best cotton goods are supposed to be made in Switzerland, where the skill and machinery are good, and the climate congenial. But the raw material being carried so far by land is expensive, and the manufacturer cannot compete with England, though 20 per cent. cheaper than in France. Baines, 524.

In France many fine goods are made by skill and experience; but the machinery is poorer, and costs more. Edinb. Rev. page 61, (1829.) Hence the prices in those two countries of the cloth made from a pound of raw cotton, exceed on an average, 50 cents, while in England they are about 50 cents, and in the United States are now somewhat less. In 1806 the cotton was made chiefly into velveteens, nankeens, crapes, muslins, &c. See at length London Encyclopedia, article "Cotton."

But in 1810 our cotton cloths made in houses and manufactories, on an average, were estimated at 33 cents per yard in Coxe's tables, page 10. The prices are now lower, notwithstanding the introduction so extensively of finer cloths and of printing calicoes.

We make more coarse and substantial cloths of cotton now than England, and they can be afforded cheaper by two or three cents per yard. They are in greater demand abroad. American Quarterly Review, (1834,) page 256. 3 Parliamentary reports, (1833,) page 332. We put more staple into them, the

raw material being cheaper here. But the English laces, being made chiefly of Sea-island cotton, with a very little silk, enhance the value of each pound to over $5; and the whole manufacture of it equals nine millions of dollars per annum, (McCulloch, page 743,) and 30¾ millions of square yards.

The coarse India cottons are made of the worst materials and less smooth, being chiefly spun by hand, and the raw material poorer. Baines. But the thread so spun is softer and the cloth more durable. Report on affairs of India, (1832,) appendix, page 310. But the power to spin a fine thread there has been carried almost as far as in England. See table L, note [5.]

ON CAPITAL.

[6.] Capital invested is computed on very different principles and data by different persons, and the price of machinery has of late fallen much per spindle. See notes on spindles. In the computation of capital in manufacturing cotton, there is generally included only what is in factories.

[7.] The real capital has doubtless increased in England since 1827, though in the table there is an apparent diminution. That and other differences often arise from the estimates being made by different persons, and on data somewhat unlike, as well as from changes in the value of machinery, and in its increase.

The computation for 1827 is by the Edinburgh Review, page 22, 1827; that for 1830 is by some writer not noted; that for 1831 in 1st edition of McCulloch's dictionary, Pitk. Stat. 486, for 1833, by Pebrer, page 315, in 1st line, and in 2d line by Baines, 415, and Edin. Rev. page 472, (1835,) and 2d edition of McCulloch; and for 1834 by Aiken, who places buildings and machinery, or the fixed capital at only about half the value of that in Edin. Rev. (1827) page 22, or at about 97 millions of dollars instead of 181 millions.

The ratio adopted for 1827 was—		for 1824 was—	
Capital in buying raw material	£9 millions,	£4 millions	
Capital in paying wages -	19 "	10	"
Capital in mills, machinery, looms, shops, &c. -	37 "	20	"
	£65 "	£34	"

So Kennedy in Baines, 413, differs again, making fixed capital only about 15 million pounds, &c. The present value of

capital invested in buildings, water privileges, and machinery, is often less than their original cost, and is another source of difference.

[8.] The capital in 1815, for the United States, is computed by a committee of Congress, and is not any too high. Report, February 13, 1816. That in 1830 is by the New York convention, and is correct according to the number of spindles compared with England and her capital, and is in fact at 40 million dollars for fixtures alone, and about 22 million dollars for the rest. Not too high. That for 1832 is from Reuss on American Trade, page 274. The whole capital here, in proportion to each spindle, is more for mills and machinery together than in England, and more for wages. Here is sometimes higher for additional machinery and workmen for finer kinds of manufacture. The average value of her capital to each spindle, as computed by me for 1835, would be about $20 to each; which would, on the same data, make our capital then equal to $35 per spindle. But in the New York convention, in 1830, are given the details of their estimates, and the buildings and machinery alone cost here, on their computation, near $35 per spindle, and it requires to pay wages, furnish raw cotton and other materials, superintendence, &c. quite $11 more per spindle, making the whole $46 each, or now near 80 million dollars capital. In 1810, it was estimated that $60 per spindle was necessary. See Coxe and Gallatin. It is now $60 in some factories at Lowell. This agrees nearly with the older computations in England; and as goods become finer, and machinery still cheaper in the United States, the approximation will be still closer. See table L, note. But another striking cause of difference arises from the kind of goods made here compared with England, requiring there less capital for machinery, looms, &c. Besides, that the spindles there are cheaper, and less capital is needed for workmen, when the number of spindles is the same, to tend power looms, color and stamp dies, &c. in proportion, than in the United States. Because there, in 1833, only a little over one-half of the cotton spun was made into cloth in the factories, or only 76½ millions of pounds out of 145 millions of pounds. The rest was sold or exported as yarn and thread. See Baines, 607. And in another estimate, over one-half the exports are in yarn. See table M, note [1]. Baines, 409. While, in 1830 in the United States, the computation of yarn sold, compared with cloth made, was not one-tenth of the weight. In 1810 it exceeded one-half. Gallatin. Another cause of the difference is, pehraps, that much

of the fine weaving of ginghams, muslins, and mixed cloths there is done in hand looms not belonging to the factories. See Baines, 418. In the computation before stated, of the capital per spindle for 1830, in the United States, it may be useful to exhibit it in another form. According to Pitk. page 482.

The capital in mills and fixtures was - -	$40 $\frac{6}{10}$	millions.
Do. in other machinery, about -	4 $\frac{4}{10}$	"
Capital in mills and machinery - - -	$45	"

Which, at 1¼ millions of spindles, is about $35 to each.

Capital floating or circulating, in paying wages, was near - - - - - - -	$12	millions.
Capital circulating in buying stock, &c. - -	2	"
	$14	"

About $11 more per spindle, or $46 for every spindle.

The valuation placed on machinery should now be less, though most of that in use cost high. See spindles. The English proportion now is about $12 capital per spindle invested in mills, machinery, and all fixtures connected, or not much over one-third the proportion here. But it is about $8 to each spindle in the floating capital for wages, stock, &c.; or over two-thirds the proportion here. More of their fine spinning is also done on the mule spindle, which costs but little over half what the throstle spindle does, and which last has been equally as much used here as the other, and of late years, it is believed, far more than the other. In 1831, in England, in Lancashire, the number of mule spindles was more than 12 times that of the throstle. Baines, 209—note. Her capital in mills and machinery alone, is said not to exceed $4.16 to each spindle. See Baines, 414 and 368. But that must exclude water privileges and steam engines, probably, and all looms, out-houses, shops, &c. and refer chiefly to the mule spindle.

In 1824 it was considered in England that we employed too many persons and too much capital per spindle. Sup. to Encyclop. Brit. art. "Cotton."

[9.] The advantages of different countries for the cotton manufacture, depend, in a great measure, on their natural condition

—long habits and laws. *England* is superior to most in the abundance and cheapness of iron for machinery; in coal for warming buildings and moving steam power; in suitable climate; ingenuity, experience, and skill of mechanics from great division of labor, &c.; in greater commerce to find best markets; capital at low interest, and wages not high; and property secure. But taxes there and raw material are high, and living is more expensive than in some other places. Edinb. Rev. (1835) page 466. McCulloch, 446. A great increase is supposed to have taken place the past year in erecting cotton factories in England.

The *United States*, by numerous and cheap water falls, have a good substitute for steam, and will soon have coal as low for warming; have equal ingenuity, and probably now superior merit in machinery; but iron and coal are dearer, and raw material and living both lower, and property as secure; wages and capital higher; much less taxation; and a protective tariff. It is sain in Amer. Encyclop. art. "Cotton," that the introduction of the power loom in 1815, has given great permanency and prosperity to our cotton establishments. See table L, notes to spindles, and notes above, in this table, for something more on England and United States.

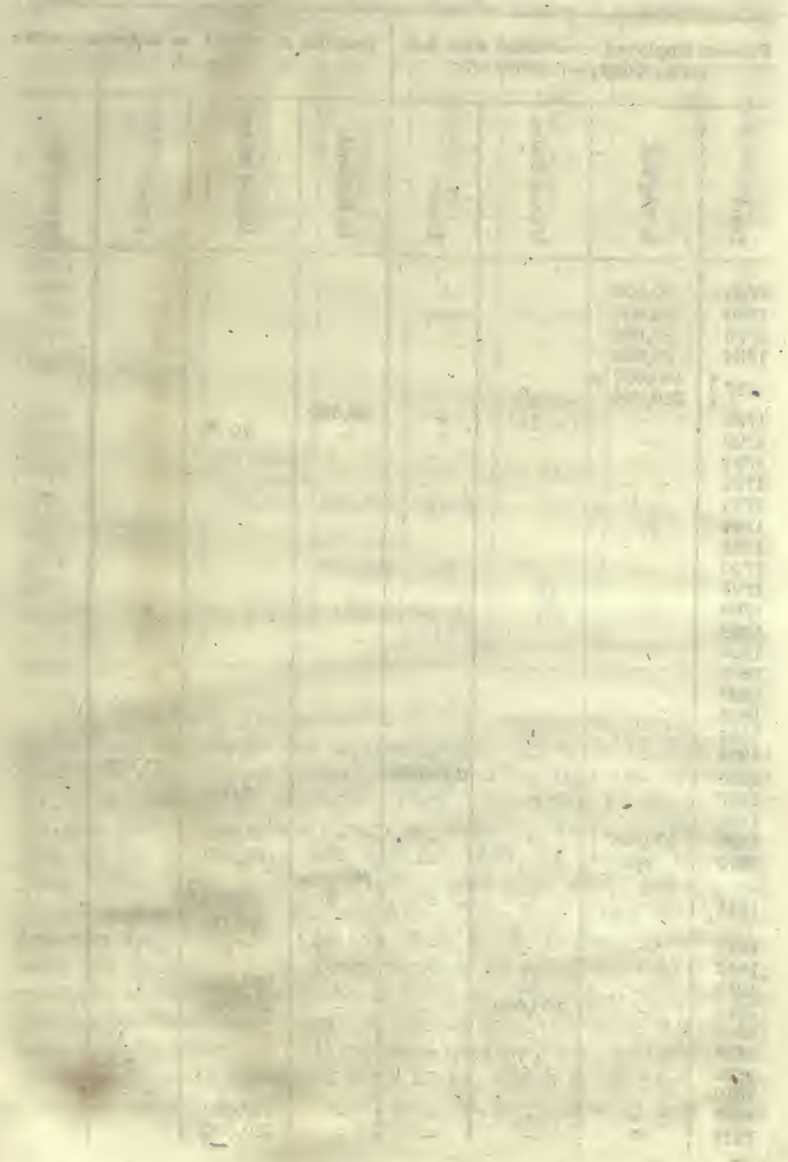
As to France, Switzerland, India, &c. it is not necessary nor convenient here to enter into details beyond what is stated in other parts of these notes. But it may deserve notice, that the increase in the use of raw cotton has been at a much more rapid rate in England than in France. Edin. Rev. (1832) page 433. See Baines, 525 and '6, and 515, on these points. See table I—note. See below, note [11.]

The value of cotton manufactures in England is, comparatively, equal to two-thirds of all her public revenue, and to nearly all her exports of other articles. Table M, note 3. In 1797, the cotton manufacture, it is said in Seybert, page 92, took the lead of any other in England. But in 1816 she consumed no more raw cotton than the United States do now.

[10.] The capital of France invested in cotton manufactures, is given for only one year, and computed at a medium between $20 per spindle, as in England, and $46 per spindle in the United States. As I have no French estimates on this subject beyond the data given in Baines and other authors, as to the number of spindles merely, and their cost at different periods, the computation has not been extended to other years. Baines, 517 and 518, gives estimates showing that France requires 28 per cent. more capital than England to produce the same manu-

factures, according to some persons, and according to others 75 per cent. But Doctor Bowring estimates the difference at about 30 to 40 per cent. Baines, 520.

[11.] The subject of wages in the different kinds of manufacture, and in different countries, has not been discussed in detail. But see on it Wade's Hist. of Mid'g Classes, 570 to 576. It may be interesting to many to know that the average wages in 1832, in the United States, of all employed in a cotton factory, were about 14*s.* 11*d.* sterling per week; in England, about 10*s.*, sometimes 12*s.*; in France, only 5*s.* 6*d.*; in Switzerland, 4*s.* 5*d.*; in Austria, 3*s.* 9*d.*; in Saxony, 3*s.* 6*d.*; and in India from 1*s.* to 2*s.* per week. Ditto, page 576, and Westminster Review for April, 1833. In Niles's Register, November, 1817, page 156, it is said to be only two cents per day in India; but that is probably too low.



L.

COTTON—MANUFACTORIES OF.

Years.	Persons employed, connected with factories chiefly—number of.			Spindles employed in factories—number of.			
	In England.	United States.	France.	In England.	United States.	France.	Switzerland.
1750	20,000						
1760	16,000 ?						
1770	30,000						
1784	80,000						
1787	162,000 to 260,000						
1789	–	–	–	49,500			
1790	–	–	–	–	70		
1791							
1792							
1793							
1794							
1795							
1796							
1797							
1798							
1799							
1800							
1801							
1802							
1803							
1804							
1805	–	–	–	–	4,500		
1806	–	–	120,000	–	–	81,000	
1807	–	–	–	–	8,000		
1808							
1809	800,000 ?	–	–	–	31,000		
1810	qe.	–	–	–	87,000		
1811	–	–	–	Millions. 5	80,000 ? query.	Millions. 1	
1812	–	–	–	4½ ?	–		
1813	–	–	–	query.			
1814	–	–	–	–	122,646		
1815	–	100,000	–	–	130,000		
1816	–	–	–	6¾			
1817	–	–	–	6¾			
1818	–	–	–	–	–	1 2/10	
1819							
1820	–	–	–	–	220,000		
1821	–	–	–	–	230,000		

L.—COTTON—MANUFACTORIES OF—Continued.

Years.	Persons employed, connected with factories chiefly—number of. In England.	United States.	France.	Spindles employed in factories—number of. In England.	United States.	France.	Switzerland.
1822	427,000						
1823							
1824	–	–	–	6 ?	–	–	259,200
1825	–	–	–	query.	800,000		
1826							
1827	705,100 to 1,000,000						
					Millions.		
1828	–	–	–	–	1¼ to 1		
1829	–	–	–	7			
1830	–	179,000 / 175,146	–	–	1½		
1831	–	200,000	200,000	7½ to 8½			
1832	1,200,000	–	–	–	–	3⅓	
1833	1,500,000						
1834	–	–	600,000	9⅓			
1835	–	–	–	–	1¾		
	[1] [2]	[4]	[3]	[5] [6] [11] [12]	[9]	[7]	[8] [10]

[1.] The early computations of the number of persons employed are very loose and contradictory. That for 1750, is from Smithers' History of Liverpool, page 154; that for 1760 and 1770, by Edinburgh Review (1827;) for 1784, by Smith. and Baines, 218. The more recent estimates for 1809, are too high, and are by Seyb. page 92; and for 1827, in second line, are from Edin. Rev. page 13, (1827,) and page 427, (1835;) and McCulloch, 443; and Baines, 431. The last make the actual laborers only 900,000. As the cloth made is finer, more persons are required to a given number of spindles. So if it is stamped or printed (see below.) It is computed that, in ten years after machinery was introduced into the manufacture of cotton, the number of persons employed in it was still augmented tenfold; some have said forty times, which is too high. But if no machinery had been used in 1826, beyond what was used

in 1760, it would have required from 42 to 53 millions of persons to perform what was then done in the cotton manufacture. (Quar. Review, 1826, and Browning's Great Britain, pages 232.) They say one man now equals by machinery 120 in A. D. 1780, or 200 according to Kennedy, cited in Edinburgh Review, page 18, (1827;) Smithers, 127; or, in 1815, one equals from 40 to 60. Edinburgh Encyclop. "Cotton." In 1833, Pebrer, page 314, estimates that 80 millions of persons would be needed in the cotton manufactories without machinery. See on some of above, London Encyclopedia, article "cotton," printed 1829, and in Edinburgh Encyclopedia, article cotton, (1815,) where the number of persons employed is estimated at one million; but too high. See below, note [11.]

[2.] In Spain, in 1803, it was computed that 6,792 persons were employed in the manufacture of cotton goods, 1 Dictionary of Spanish Com. 65; and, in Switzerland, in 1831, about 28,000 persons, West. Rev. for April, 1833.

[3.] The number in France, for 1834, is from Baines, page 521. Many there engage in agriculture a part of the year, as in India. The number for 1806, is from data in London Encyclopedia, article "Cotton," and supplement to Ency. Brit. "Cotton," where, in twenty-two departments, the number of persons engaged in spinning is said to be 28,460, and in weaving 31,107 persons, and the spindles 800,724. These must include most in France; and the other persons incidentally engaged must be almost double, to constitute the recent number of six or seven persons to a spindle in making fine and colored cloths. The number for 1831, is from the West. Rev., April, 1833, page 397.

[4.] In the United States, the estimate for 1815 was made by a committee of the House of Representatives, February 13, 1816. The number includes all engaged in the manufacture, or in making the mills, machinery, &c., and not those alone inside of the mills. These last, in 1832, were computed by Reuss, on Am. Trade, page 274, at only 28,683, but by McCulloch's Dictionary, page 448, at 57,466. In 1830, by New York Convention, at 57,520, and dependants at 117,626 persons, or 175,146 in all, as in second line of the table.

[5.] Spindles. The spindle is the most convenient article in the cotton manufacture, by which to calculate the extent of it. The power of any one establishment, its cost, the number of

persons employed, the quantity of raw cotton consumed, the yarn or cloth made, and most other important results can, by the help of a few general data, be very nearly deduced from the number of spindles.

On the great gain in substituting for the distaff and the spindle used by hand, the present machinery for spinning and other processes to complete the manufacture of cotton, whether moved by horse power, water or steam, some illustrations have already been given in the first note to this table, and in table K.

With a view to furnish a few more details, which may possess some usefulness and interest, it may be remarked, on the power of the spindle, that, by improvements in machinery, it is said that one now sometimes revolves 8,000 times in a minute, instead of only 50 times, as formerly, and that one will now spin on an average from one-sixth to one-third more than it did twenty years ago, (below, note 12.) Indeed, in 1834, it is said that one person can spin more than double the weight of yarn in a given time than he could in 1829. Senior's Outline of Political Econ. page 198. The quantity of raw cotton spun by one spindle depends, of course, on the fineness of the thread and quality of the machinery. In England, where a considerable portion of the yarn is finer, the average is about 8½ ounces weekly, or from 27 to 28lbs. yearly; (McCulloch, 441, note,) while the average in the United States is about 50 pounds yearly, of yarn number 20 and 25 in fineness, and about 26 pounds of number 35 and 40. In 1808 the average was computed at 45 pounds per spindle, of cotton yielding 38 pounds of yarn. (Report to Congress, 1810.) The difference in weight between the cotton and the yarn, by loss from dirt and waste, is usually estimated from one-twelfth to one-eighth. (Baines, 376.) At Lowell 100 pounds of cotton yield 89 pounds of cloth, (Lowell Statistics, 1836,) though the average here used to be estimated at only 85 pounds, (Niles's Register, 1827, page 211,) when cotton was not so well cleaned and machinery less perfect. One spindle at Lowell produces through looms &c. on an average 1 $\frac{1}{10}$ yards of cloth, daily; but this result must differ greatly with the fineness of the thread, excellence of the looms, width of the cloth, &c.

In 1830, it was computed that 37 spindles were necessary to supply one loom; though in 1827, at Lowell, the actual proportion was only 26, at Exeter in 1831, it was 29, and now at Lowell it is 31. The number of looms in England in 1832, was only one to about 40 spindles, so much more yarn is made and not woven there, (McCulloch, 441,) and those were mostly hand looms. But in 1834, the number of them was about 100,000 power looms

and 250,000 hand looms, or in all, about 1 to 30. (Baines, page 237.) One loom formerly wove daily, about 20 yards of cloth of the ordinary seven-eighths width, more of the 26 inches in width used for calicoes, and less of the five-quarters wide. The average now is from 30 to 40 yards of No. 20. At Lowell, in 1835, it was 38 to 49 yards of No. 14, and 25 to 30 yards of No. 30. It requires from four to five yards of cloth of Nos. 20 to 25 yarn, to weigh one pound, and five to six yards of Nos. 35 and 40.

The power of the spindle, as connected with the number of persons actually employed in factories, is, that in making plain cloth of ordinary width and fineness, one person is needed to conduct all the business from the raw cotton to the finishing of the cloth for every 20 spindles. If the cloth be colored and printed or stamped, one person will be wanted for every seven spindles. This would be about 250 persons for all purposes in a factory of 5,000 spindles, making plain brown cloth. One person can manage from two to three power looms.

The proportion of spindles to a factory was formerly very small, both in England and this country. Before 1806, it was only one or two hundred sometimes, and seldom exceeded 1,000. Soon after that some mills were built, containing 4,000 spindles. The average in new mills is now from 5,000 to 6,000. In Lowell, 1836, in 27 mills they have 129,828 spindles, or a little under 5,000 to each, though they print, &c. in some.

A factory with 5,000 spindles must be about 155 feet long and 45 wide, four stories in height, and contain about 140 looms, with other suitable machinery for picking, warping, sizing, &c. Such a one, with a few shops and out-houses appurtenant, and land and water privilege, would cost from $140,000 to $220,000, according to the materials for building, whether wood, brick or stone, and the distance from navigable waters, so as to affect cost of privilege, freight, &c., with other circumstances too numerous for recital. If bleaching or printing cloths be added, more expense will be necessary, and more persons than 250, the average for such an establishment including machinists.

This would be a permanent investment of capital in buildings, water power, machinery, and all appurtenances, equal to $28 or $44 per spindle, independent of the temporary investment of capital to buy raw cotton, pay wages, &c. It would often reach, and even exceed the latter sum, than only the former. (See table K, on capital.) In 1810, it was computed that the capital actually invested in machinery and real estate, averaged $60 per spindle. (Report of 1810.) It is not proposed here to go into

any comparisons of this expense now with former periods, or with other countries, except in regard to the spindle alone, and the machinery as a whole. For the rest see table K.

In 1806, when machinery could not by law be exported from England, and the machinists here were unskilful and few, the spindle and its appurtenances, from the picker to the loom inclusive, it is computed, cost $30 each; or 300 to 400 per cent. higher than it cost at that time in England, and over double its present cost in the United States.

The great fall in its cost and value since, with various improvements in machinery, has been the cause of much loss to many capitalists employed in the manufacture. By A. D. 1820, the machinery cost only about double its then value in England. In 1826, the machinery was made here on an average, for about $14 per spindle, and though now lower, it still costs from 40 to 60 per cent. more than in England. The whole machinery there and the mill cost only $4.16 per spindle. (Baines 368, 414.) But that includes probably no looms, &c., and merely the building, without the water or steam power, and the mule spindle, moved by hand, and costing less than half what the throstle spindle costs, and which is chiefly in use here. In France, in 1832, the spindle alone, which is about half the expense of all the machinery, cost $8. It used to cost there $10. (See Hocklin's Evid.) Now the spindle alone costs here about $4½ if of the throstle kind, and $2½ if of the mule kind. In some places in the United States five per cent. higher. The former alone cost here, late as 1826, it is said, $8 each. The spindle used in the filling frame, quite extensively at this time, costs about $6.

These may constitute useful and sufficient data for further computations. As a matter of some curious interest it may be added that *one pound* of cotton usually makes 8 yards of coarse muslin, and is then increased in value from the raw cotton eightfold. But if spun into the finest yarn, it is worth five guineas, and in 1780, if woven into muslin and tambored was worth £15. (5 Anderson's History of Commerce, 878.) It may now be converted into a piece of lace worth 100 guineas. Senior's Outline of Political Economy, 162, 178. In India, in 1786, they could spin cotton threads over 115 miles to the pound; in England they have since been spun 167 miles long from a single pound. Baines, page 59. Niles's Register, page 181, March 24, 1821. One pound of cotton spun into No. 100 yarn, extends about 84,000 yards in length. Smithers' History of Liverpool, page 127. The yarn spun yearly in England would reach round the globe 203,775 times, or over 600 times each day. Baines, p. 431

They use flour for sizing, &c. in cotton manufactures, 42⅓ pounds to each spindle per annum, or four pounds weekly to each loom. In this country but one pound weekly to each loom. McCulloch, 448, as to report of 1832. But at Lowell, 3,800 barrels to 4,197 looms yearly, or near four pounds each per week. In England three times as many spindles and factories are moved by steam as by water. Edin. Rev. page 472 (1835.) In the United States not one in a hundred factories is moved by steam. The power to move all the cotton mills in England, equals that of 44,000 horses, of which only 11,000 is by the water wheel. Baines, 395. In 1824, the whole power was estimated at only 10,572 horses. Sup. to Encyclop. Brit. "Cotton." Each factory of common size and employment requires from 60 to 80 horse power here, or about 11½ horse power to 1,000 spindles.

[6.] For the number of spindles in England, in 1789, see Smithers' History of Liverpool, page 124. For 1812, Edinburgh Encyclop. article "Cotton;" for 1817, Endinburgh Rev. (1827;) for the rest, 1811 and in 1824, Sup. to Encyclop. Brit. "Cotton;" and the others, Baines's Hist. 368, and McCulloch, 441, &c. The above numbers include Scotland. The first cotton mill built in Ireland was in 1780. London Encyclop. article "Cotton," and Sup. to Cyclop. Britan. "Cotton." In 1824, Ireland had 145,000 spindles. Sup. to Encyclop. Britan. "Cotton."

[7.] For 1812, in France, see Qu. Rev. page 397, (1824–'5) and French Industry, by Chaptal, page 15, who says they then spun only about 30 millions of pounds; this was a large number for the cotton spun, as the spindles were poor and imperfect. For 1832, see Nicho. Koechlin's evidence before the Chamber of Peers; that is from one-half to one million too high, as grounded on an English estimate, which was too large, too many for the quantity of cotton spun; for 1818, from 2 Chaptal, page 145, who makes 220 factories. Very little spinning by machinery, in France, till after 1785. Quarterly Review, 394, (1824–'5.) First in 1787, (Sup. to Cyclop. Brit. "Cotton,") though cotton had been spun on wheels since 1767. See 2 Chaptal's Industry of France, page 4. And the cotton cloths were chiefly made from thread or yarn imported from England, Switzerland, and the Levant. There were large numbers of cotton pocket handkerchiefs made at Rouen, Montpelier, &c. early as 1789. 2 Chaptal's Industry of France, page 4.

France had, in 1818, 70,000 looms for cloth, 10,500 for spinning hosiery. 2 Chaptal on French Industry, page 150. But his estimates on all these subjects are considered high. In 1806, her looms for cloth in twenty-two departments are stated at only 28,634. London Encyclop. art. "Cotton," In 1806, the estimate, as to the number of spindles, is from the London Encyclop. art. "Cotton;" it is increased a little, for the rest of France not included in the above article, and is about one spindle to 25 pounds of raw cotton spun that year, which is a fair proportion, when the goods made are fine, and the machinery is not of the best quality. See note above, and supplement to Encyclop. Brit. art. "Cotton." Power looms are not much used yet in France. West. Rev. Ap. '33.

[8.] Some spindles and looms moved by machinery have been introduced into India; but most of the cotton manufactured there is by women and in households: the men who aid in weaving are also often laborers on the land. Report of the committee on the affairs of the East India Com. App. 310, 1832. Wade on Midd. Classes, page 576. Yarn is often imported from England, it is there spun so much cheaper by machinery. Smithers, 127. So in Saxony, Russia, &c. Supplement to Cycloped. Brit. "Cotton." In China, it is said, cotton mills with spindles, &c. have been forbidden. In Egypt they have been introduced, but do not succeed well from the dryness of the air, its impurities by fine sand, and want of skill; (Hodgden,) but they are still used by the Government. In Spain, in 1802, were 3,705 workshops for cotton or small manufactories, and 1,494 looms. 1 Dict. of Com. 65. 3 do. 198, larger. In Switzerland, the first mill with machinery, was built in 1798; London Encyclop. art. "Cotton," where is some notice of a few spindles in other parts of Europe, viz: Saxony, Russia, Prussia, &c. So in Sup. to Encyclop. Brit. "Cotton." And in West. Rev. for Ap. 1833. The number in the table is from Sup. to Encyclop. Brit. "Cotton."

[9.] The number of spindles in the United States can be computed from the data before given. For those before 1835, see Pitk. Stat. 526, and McCulloch, page 448, and Reuss. Am. Tr. 270. Those for 1809 and 1810, the last too high in his table—see Gallatin's Report for the number in 1807 and 1811. Those at some other dates are from manuscript. Gales and Seaton's Documents, 2 Finance, page 432. Those for 1814, are from Cox's tables. Ditto, page 694, and Seybert Statistics, page 7, and were returned between 1810 and 1814. For 1820 and 1822,

Niles's Register, page 35, March 1823. Those for 1835, are estimated by me on former data. In 1810, Cox in his tables returns 269 mills, but too many, if over one-eighth of them were for cotton. Very few spindles were in each of those built before 1807 and '8. The spindles in 1830, are from the manufacturers' convention, and only 12 States, but included most of the manufactories. Those had 33,506 looms, to about 1¼ million of spindles, or near 1 to 40. At Lowell, 129,828 spindles exist to 4,197 looms, or 1 to 32. This is near one-thirteenth of all the spindles in the United States. Lowell Statistics, 1836. The first mill built there was in 1822, and in 1826 only 2,500 spindles. See Boot's letter to Carey. About 78,000 spindles a year should be added here to make cotton cloth sufficient to meet the demand of the present annual addition to our population. The spindles have increased somewhat faster than that ratio the last five years, and have increased beyond the exports of cotton goods. Of the number of spindles here at different periods in factories, those in 1790 or 1791 were in one mill at Providence, erected by Slater and Brown; those in 1805 were mostly, if not all, in Rhode Island, and two in Massachusetts, and only eight or ten mills. One was begun at New Ipswich in New Hampshire, as early as 1803, it is believed, and one or two in Massachusetts, and one in Connecticut before 1808, one near Philadelphia before 1798, making in all, at that time, 15 mills. Of the spindles in 1815, about 118,000 were in the same State. Gallatin's Rep. 1810; New Hampshire Gazetteer, article "New Ipswich." The Waltham factory in Massachusetts was not erected till 1810 or 1814, and has since devoted much capital to making machinery. There was a great increase in 1806 and '7; again during the war of 1812; again from 1820 to 1825; and in 1831 and '2. If prices continue high as the past year, and the raw material falls, or is stationary, the new markets in Asia, and increased demands in Europe and America, by increased use of cotton, and increased population, will enlarge the number of factories here; but it is very easy, with our extensive water power, and cotton lands, to overstock the market.

It seems that two machines for spinning and carding were, with much difficulty, obtained in this country, at Philadelphia, early as 1788. One carded 40 pounds of cotton a day, and the other had 50 spindles; and the growth of cotton was urged on the Southern States, and the use of these machines in families recommended. In 3 Carey's Museum see the description more at large. In 5 Carey's Museum, (A. D. 1790,) it is said, a model of a cotton mill and machinery, &c., as used in England, had

been obtained at Philadelphia, by the society for promoting manufactures and useful arts. It would seem that T. Cox, Esq., took an active part in urging the cultivation and manufacture of cotton on the country early as 1787. Rees's Encylop., art. "United States," and Gales and Seaton's Doc., page 676, vol. 2, of Finance. The English prohibited the export of the cotton machinery, as well as the emigration of their mechanics, under such penalties as delayed the introduction of it here, and caused the price of machinery for many years to be so high here as to retard, and almost defeat successful competition. See before.

[10.] For a detailed account of the different kinds of machinery used in the cotton manufactories, the inventors of them, improvements in them, &c., see London Encyclop., art. "Cotton," and same article in the New Edinb. Encyclop. and supplement to Encyclop. Brit. "Cotton."

[11.] The change of late years in some places in England, from the hand to the power loom, has caused some distress, and the employment of a larger portion of females and children; now about one-fifth there are men, one-third women, and the rest children. Wade's Hist. of the Middling Classes, pages 570 and 571. The number of hand looms in England, in 1820 and 1830, was about the same, viz., 240,000; but that of power looms had increased from 14,000 to 55,000. Each of the latter performs as much as three of the former. Wade, 261. Parliamentary papers, in 1830. In 1834 the power looms had become 100,000. Baines, 237.

[12.] The American throstle spindle revolved 7,500 times before 1833, though it used to run in England only 4,500, and afterwards only 5,400. West. Rev. for April, 1833, page 403. Machinery and skill, and the raw material, have so improved, that where some years ago the threads broke at the rate of 13 per cent., they break now only 3 per cent. Do. Many modern improvements in machinery in England are from America. West. Rev., Ap. 1833.

M.

COTTON—MANUFACTURES OF.

Values of exports of their own, from—

Years.	England.	France.	Germany.	Spain.	Turkey and Africa.	India.	U. States.	China.
	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
	Millions. Official value.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
1789	6							
1790	8							
1791	9							
1792	$9\frac{3}{4}$							
1793	8^{2}							
1794	11							
1795	$11\frac{2}{3}$							
1796	$15\frac{1}{2}$							
1797	17							
1798	17							
1799	28							
1800	$26\frac{1}{2}$							
1801	33							
1802	37	–	–	–	–	20		
1803	34	–	–	5				

1804	41								
1805	45								
1806	50		–	–	–	–	–	–	4
1807	48								
1808	61								
1809	92								
1810	90								
1811	68								
1812	78								
1813	–		–	–	–	–	18		
		Real or dec. value.							
1814	84	95							
1815	106	98							
1816	86	74							
1817	101	76							
1818	98	89½							
1819	88½	70							
1820	107½	79	–	–	–	–	–	–	3
1821	113	77							
1822	128	82							
1823	137	82½	4½						
1824	143	86	6½						
1825	135	86							
1826	119	71½	–	–	–	–	–	$1\frac{1}{10}$	$1\frac{2}{10}$
1827	157	83½	–	–	–	–	–	$1\frac{1}{10}$	
1828	159½	81	–	–	–	–	–	$1\frac{1}{10}$	

M.—COTTON—MANUFACTURES OF—Continued.

Years.	Values of exports of their own, from—								
	England.		France.	Germany.	Spain.	Turkey and Africa.	India.	U. States.	China.
	Dollars.		Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
	Millions.		Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
	Official value.	Real or dec. value.							
1829	197	83½	4½	–	–	–	–	1¼	
1830	188	81	10	–	–	–	–	1⅓	
1831	208	83	10⅓	–	–	–	–	1 1/10	
1832	209	83⅓	10⅓	–	–	–	–	1 2/10	
1833	222	88¾	11	–	–	–	–	2½	
1834		98½	10	–	–	–	–	2 2/10	
		(88)							
1835		88½							[8] [9]
[1]	[2]	[3]	[4]	[9]	[5]	[10]	[6]	[7]	[11]

[1.] The exports of English manufactures in 1833 and '4, were about one-third in *value* in yarn. See Edinburgh Review, 427, (1835) Baines's and Official Reports. See table K, note on capital. Some years yarn constitutes one-half in *weight*.

From 1814 to 1823 inclusive, the value of yarn exported compared with the value of other cotton goods, increased slowly, from being about one-seventh and one-sixth, to be about one-fifth. London Encyclopedia, article "Cotton." The proportional increase of yarn has been even greater since. See Parker's speech in Parliament, February, 1836. The yarn exported is understood to be generally coarse; between Nos. 18 and 40. From half to three-quarters of the *lace* made is exported chiefly to the continent. It is mostly made of Sea-island cotton, and equals near 9 millions of dollars in value yearly. McCulloch, page 744.

[2.] The difference between the official value on exportation, and the declared value, is given above. But the declared, or what is sometimes called the real value, in the 2d column, is still usually from $2\frac{1}{2}$ to 5 per cent. under the actual market value. (Baines, page 403.) The *official* value is founded on the quantity, computing the price as it was about the close of the 17th century, or A. D. 1689. The market value has changed more from the official in some articles than in others, *e. g.*

In 1829, calicoes, plain, per yard, - -	1*s.*	3*d.*	official.
" " " " " - -	0	6	real.
" calicoes, printed, per yard, - -	1	6	official.
" " " " " - -	0	$8\frac{3}{4}$	real.
" cotton yarn and twist, per cwt.	£10	0	0 official.
" " " " "	7	5	0 real.

(Baines, page 351.) See more on prices of manufactures, table K, note 1.

The sum entered for 1835, is only for the year ending 5th January, 1835, and not any subsequent; and the second sum for 1834, is for the year 1834 only to 5th January, while the first sum for 1834, is probably for the whole fiscal year. Some discrepancies occasionally arise by the statements being made with different terminations for the year, as some end in April, and some in January, &c. See returns.

[3.] The exports of cotton manufactures from England are now, and for some years have been, nearly equal to one-half of her exports of every kind. The above sums for England are from Baines, page 350. The records for 1813 and before that, for

the declared value were burned. Those sums do not include Ireland, amounting from one-tenth to three-tenths of a million yearly. Aikin says 63 per cent. of what is made in England is exported, and Edinburgh Review, page 472, says, in 1833, that the exports from England were about 18½ million pounds sterling, and consumption about twelve and one-tenth million sterling. See for 1831, '2 and '3, McCulloch, 675.

[4.] The exports from France in 1823 and '4, are from 2 Dictionary of Spanish Commerce, page 148. In 1829, from Edinburgh Review, page 62, (1829.) In 1833, from Baines 525, note, and in 1831 and '2, from the French tables of commerce, with a slight addition or variation, it is believed, in some cases, in the value of the franc. In 1830 from Westminster Review, April, 1833, and Wade on working classes, 575, and that 7 millions were printed goods.

[5.] Those from Spain in 1803, were chiefly from her possessions in India and America. Dictionary of Spanish Commerce. Spain of late imports largely of cotton manufactures. See table O, note 1, and table N. The Moors introduced this manufacture into Spain, early as the 9th or 10th centuries. Baines, page 38.

[6.] Those from India are estimates, and might be extended, from the following data. Her islands and she have long had a domestic trade in cotton goods. 3 Crawford's Hist. of Ind. Archip. 350. It then spread to other parts of Asia, to the eastern coast of Africa, and next to Europe.

India in 1813, exported to England alone 10 millions of dollars worth of her cotton goods, and now imports as much from England. Montgomery's Anglo. East. Emp. But she still exports certain kinds to England valued in 1831, at about 2 millions of dollars; in 1832, at 1½ millions; and in 1833, at 1 million. Some of these are re-exported. McCulloch, page 672 and 676; Evid. on East Ind. Comp., page 310, App. In 1802, '3, and '4, the United States imported cotton goods of India origin, worth nearly 3 million dollars per year. Seyb. page 218. Hence the exports of cotton manufactures from India formerly were large. But they have fallen off greatly, and especially since 1816, to the United States. Pitk. Stat. 188 and '9. She often exports raw cotton of late years, instead of cotton manufactures. Supplement to Encyclop. Brit. "Cotton." See Seyb. Stat. page 289,

on our whole imports thence in 1814, and chiefly cottons. See above.

[7.] Those exports from the United States are from official tables. They doubtless would have increased much more rapidly, had the demand for them at home not been so great, by means of their good quality, cheapness, and our increasing population.

[8.] The whole exports of cotton goods from China to England and her dependencies in 1832, were valued at about $\frac{1}{4}$ million of dollars. McCulloch, 237, article "Cotton," and page 240, where is given the pieces of nankeens so exported from 1793 to 1831, which alone at 50 cents each, would range from $\frac{1}{2}\frac{1}{0}$th to $\frac{1}{2}$ million of dollars yearly. In page 813, he thinks the exports of nankeens have been on the increase to different quarters.

From China the exports of cotton goods consist chiefly of chintses and nankeen, and the amount in the table are estimates. The former have greatly diminished of late years. Supplement to Encyclop. Brit. "Cotton." She imports now both English and American cotton goods. (See exports of them, tables N and O.)

In 1802, '3, and '4, the United States alone, it is estimated, imported Chinese cotton goods valued from 1 million of dollars to $1\frac{1}{2}$ million yearly. See official returns of all articles imported from China, Gales & Seaton's Doc., page 599 in 1 vol. on Com. and Nav. Formerly the United States imported largely of nankeens, so as some years to export $\frac{1}{1}\frac{1}{0}\frac{1}{0}$ million of dollars of them as in A. D. 1792, Gales & Seaton's Doc., page 144, vol. 1, Com. and Nav. But our official returns since, as well as before 1821, do not discriminate the cotton goods imported. From 1818 to 1827, they fell off from about 1 million to $\frac{1}{4}$ million. Pitk. Stat. 305, McCulloch, page 242.

[9.] The exports of cotton goods from Germany are chiefly by land and not extensive. This trade could not have existed at at all formerly, and the estimates are too uncertain for much reliance.

In and near Vienna are established considerable cotton manufactures by machinery. Supplement to Ency. Brit. "Cotton." According to McCulloch Dict., page 448, the cotton exports from Austria are chiefly in yarn. They are on the increase. See Wade on Working Classes, page 576.

[10.] From Turkey, including the products of Smyrna and the neighborhood, as well as Barbary and Morocco, there have been frequently exported in former years, various articles of cotton manufacture ; but not of great value as a whole. This manufacture was introduced into Turkey in Europe, in the 14th century, by the Turks. Some cotton cloth was imported from the coast of Africa to England about the close of the 16th century. The growth and manufacture of cotton were diffused much by the Mahometan conquests. 2 McPherson's Com. 193 ; Baines 32.

[11.] The barrenness of this table is another illustration of the small extent in the foreign trade of cotton goods except by England, France, and the United States. It presents also a singular illustration of the recent date of their progress in it, and of the difficulty in knowing much of the ancient or later business of India and China in this branch of their trade, with such accuracy as to deserve reliance ; though more leisure might probably have enabled me to present some more statistical facts on that subject, than I have yet met with. See the diffusion of this manufacture by the Mahometans from Arabia, &c. note (10) in this table, and (5.)

In 1825 the Dutch exports and imports at Japan are given (McCulloch, page 812,) and the former as well as the latter contained a few cotton goods, from 5,000 to 8,000 in value.

N.

COTTON—MANUFACTURES OF.

Exports of their own—to what places—values of.

Years.	England to United States.	England to France	England to Germany.	England to Netherlands.	England to India and China.	England to South America and Mexico, except Brazil.	Various places to Spain.	Various places to Russia.	England to Brazil.
	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
	Millions.	Millions.	Mitlions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
1789	-								
1790	-								
1791	-								
1792									
1793									
1794									
1795									
1796									
1797									
1798									

N.—COTTON—MANUFACTURES OF—Continued.

Exports of their own—to what places—values of.

Years.	England to United States.	England to France.	England to Germany.	England to Netherlands.	England to India and China.	England to S. America & Mexico except Brazil.	Various places to Spain.	Various places to Russia.	England to Brazil.
	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.	Millions.
1799									
1800									
1801									
1802									
1803	-	-	-	-	-	-	20		
1804									
1805	Offi. Real or dec.								
1806	17 21								
1807	17 21								
1908	11 14								
1809									
1810									
1811									
1812	-	$\frac{1}{4}$ to $\frac{1}{3}$							
1813									

1814	-	-	-	-	$\frac{1}{2}$				
1815	-	-	-	-	$\frac{2}{3}$				
1816	-	-	-	-	$\frac{3}{4}$				
1817	-	-	-	-	2				
1818	-	-	-	-	$3\frac{1}{2}$				
1819	-	-	-	-	$2\frac{1}{4}$				
		Whole sum.							
1820	-	8,700	20	5	4	-	-	$4\frac{8}{10}$	
	Real. or dec.								
1821	$6\frac{6}{10}$	8,500	18	5	$5\frac{1}{4}$				
1822	$8\frac{2}{10}$	18,000	19	$5\frac{1}{2}$	$5\frac{1}{2}$				
1823	7	22,000	$14\frac{1}{2}$	7	6				
1824	$7\frac{6}{10}$	55,000	$13\frac{1}{2}$	$6\frac{1}{2}$	$5\frac{3}{4}$	-	-	$2\frac{7}{10}$	
1825	11	57,000	$15\frac{1}{2}$	7	$5\frac{1}{2}$				
1826	$6\frac{1}{2}$	119,000	14	6	$5\frac{3}{4}$				
1827	8	122,000	$14\frac{3}{4}$	$6\frac{3}{4}$	$9\frac{1}{2}$	$5\frac{1}{2}$			
1828	$8\frac{3}{4}$	110,000	$13\frac{3}{4}$	$6\frac{3}{4}$	-	$5\frac{3}{4}$			
1829	$6\frac{1}{2}$	122,000	$14\frac{1}{2}$	$6\frac{3}{4}$	-	$7\frac{1}{4}$			
1830	$6\frac{2}{10}$	50,000	14	6	-	$8\frac{1}{4}$			
1831	13	240,000	$11\frac{1}{4}$	$6\frac{1}{2}$	$9\frac{1}{4}$	$7\frac{1}{4}$ [$7\frac{3}{4}$]	-	-	$3\frac{1}{3}$
1832	$8\frac{1}{10}$	318,000	$15\frac{3}{4}$	$8\frac{1}{3}$	$8\frac{2}{3}$	$6\frac{1}{3}$	-	6	$6\frac{1}{3}$
1833	$6\frac{3}{10}$ [or $8\frac{3}{10}$]	450,000	$14\frac{1}{2}$	$9\frac{1}{10}$	8	$6\frac{1}{2}$	-	$6\frac{1}{2}$	8
1834	$8\frac{2}{10}$	730,000	$15\frac{3}{4}$	10	$7\frac{1}{3}$	8	5	6	$7\frac{1}{4}$
1835									
[1] [3]	[10]	[4]	[9]	[2]	[5]		[6]	[7]	[8] [9]

[1.] This table shows chiefly the exports of cotton goods from England to different places, and from 1820 to 1833 the values are mostly taken from official documents. Porter's tables, 161–7, page 300. The statements in different books sometimes differ from referring to different terminations of the year.

[2.] Since 1832 Belgium has taken, in that year and 1833, about $1\frac{1}{2}$ millions of the amount of what is placed to the whole Netherlands from England. In 1834, it is said by Alexander, she imported of cotton goods, from all places, about $2\frac{1}{4}$ millions of dollars, and smuggled twice as much more, that did not appear on the official returns.

[3.] The exact consumption of manufactured cotton goods in each country is seldom attainable. But an approximation to the quantity, or value, can be easily made from the data given in the tables. Thus the quantity of cotton manufactured in each, and not exported, will, with the imports of cotton manufactures not afterwards re-exported, constitute nearly the true amount.

Another general mode of computation might be, that in such countries as Turkey, it has been estimated that only two pounds of raw cotton per head, made into manufactures, is consumed. (Urquhart's Views, page 150.) In warmer, and still poorer countries, it would be less. In France, each person is estimated to consume $4 worth of cotton goods per year; in England, $5; and here, probably $6.

The exports to Germany and Netherlands are from one-third to one-half in twist and yarn, and are woven there. Porter's tables, page 300, and Baines 416. So in a great proportion to Russia. Sup. to Enclyp. Brit. "Cotton;" and some even to India. See table O. So chiefly to Prussia. Blackwood's Magazine, for January, 1836.

[4.] The exports to France from 1789 to 1793, are computed at 5 millions of dollars yearly, in Quar. Review, 394-9, (1824-5.) See official returns for the table, and McCulloch, page 644. But it must include all smuggled, and is then not too high. It equals the whole amount of all the regular imports of cotton goods into France at that time from all quarters. 2 Chaptal's Industry of France, page 9. The sums in the table for 1789, &c. are from Bowring's Report, page 52, who says that 10 millions of dollars worth of English manufactures, and chiefly cotton, are of late years smuggled from England to France. See

also Baines, 517, note. The whole imports of such goods into France, in 1823, were 9 millions of dollars; in 1824, 12 millions of dollars. In 1806, about 14½ millions of dollars worth were smuggled. Sup. to Encyclop. Brit. "Cotton." See 2 Dictionary of Spanish Commerce, page 214. In 1812, all the legal imports of cotton goods into France were less than a third of a million of dollars. 2 Chaptal, page 9. Of those smuggled, in late years, quite 2 millions of dollars worth were in bobinet laces. McCulloch, 1054.

[5.] The exports to India include the islands, and for 1831 and 1832 are from McCulloch, page 446, and the others mostly from official tables. See more in McCulloch, 235, as to that part by the East India Company. The trade in cotton manufactures has increased greatly since the first opening of it, in 1814. Do. 533-4, and 539, another table.

[6.] These exports to Spain were chiefly from England, France, and Italy, and some from Spanish America. (Dictionary of Spanish Commerce.) Those direct to Spain from England, in 1833 and 1834, were only about $\frac{1}{10}$ million of dollars. But England exported to Gibraltar, in those years, from 1 to 1½ millions of dollars in cotton goods, (see official tables,) and which found their way in part into Spain. McCulloch, Dic. page 600. The sum for 1834 is a computation only on the above data, and the fact that France exports therefrom 2 to 2½ millions of dollars yearly. See table O, note [1.]

[7.] The imports into Russia, in 1832, were almost wholly from England. Porter's tables, 545; Baines, 416. In 1833, from England, 6 millions of dollars; and in 1834, only 5½ millions of dollars. Some of them go to places in the Black sea, &c. McCulloch, 859. Russia excludes certain cotton cloths, but not yarn. Blackwood's Magazine, for February, 1836, page 62. On others, her tariff is high. 2 Smith's Com. Dig.

[8.] Exports to Brazil, &c. See McCulloch, 446; Baines, 416; and Official Reports for 1834 and 1835.

[9.] England exports largely cotton goods also to Italy and Italian islands: in 1833, 7 millions of dollars; and in 1834, 10 millions. See more in McCulloch, page 814, and page 1212, some to Venice, now $\frac{1}{10}$ of a million.

The ratio of this kind of exports from England, in 1834, was as follows: 1. Germany; 2. Italy; 3 United States; 4. India and China; 5. Holland; 6. Brazil; 7. Russia; 8. Turkey and Greece, in 1833 and 1834, over 4 millions of dollars each year; 9. Portugal and islands, in some years 3 to $4\frac{1}{2}$ millions of dollars; 10. British West Indies, ditto, 3 to $3\frac{3}{4}$ millions of dollars; 11. Chili alone $1\frac{1}{2}$ to 3 millions of dollars; 12. States of Rio de la Plata alone $1\frac{1}{2}$ to $2\frac{1}{4}$ millions of dollars. See official returns, and Baines, 416. Those for Germany go largely to Trieste. McCulloch, 1186.

The whole exports to Germany in 1833, were estimated to be so divided that from 10 to 11 millions of dollars were in cloths and laces, and the remainder in yarn, being 35 millions of pounds. Beside Trieste, part of these exports pass through the Hanse towns, and others through Rotterdam and Antwerp. Blackwood's Magazine, for January, 1836.

[10.] Those exports to the United States are obtained chiefly from our own official returns of imports, though some, and especially the earliest, are from English tables.

O.

COTTON—MANUFACTURES OF.

Years.	Exports of their own—to what places—values of.							
	France to the United States.	France to England.	France to her colonies.	Germany to the United States.	United States to South America and Mexico.	United States to India and Africa.	United States to China.	United States to the West Indies.
	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
	Millions.	Millions.	Millions.	Millions.	Millions.			
1787	$\frac{1}{10}$							
1789								
1790								
1791								
1792								
1793								
1794								
1795								
1796								
1797								
1798								
1799								

O.—COTTON—MANUFACTURES OF—Continued.

Years.	Exports of their own—to what places—values of.							
	France to the United States.	France to England.	France to her colonies.	Germany to the United States.	United States to South America and Mexico.	United States to India and Africa.	United States to China.	United States to the West Indies.
	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
	Millions.	Millions.	Millions.	Millions.	Millions.			
1800								
1801								
1802								
1803								
1804								
1805								
1806								
1807								
1808								
1809								
1810								
1811								
1812								

1813								
1814								
1815								
1816								
1817								
1818								
1819								
1820								
1821	$\frac{1}{25}$	–	–	$\frac{1}{30}$				
1822	$\frac{1}{17}$	–	–	$\frac{1}{20}$				
1823	$\frac{1}{17}$	–	–	$\frac{1}{20}$				
1824	$\frac{1}{13}$	–	–	$\frac{1}{18}$				
1825	$\frac{1}{16}$	–	–	$\frac{4}{10}$		Whole sum.	Whole sum.	Whole sum.
1826	$\frac{1}{2}$	–	–	$\frac{1}{3}$	$\frac{9}{10}$	10,000	14,000	99,000
1827	$\frac{1}{3}$	–	–	$\frac{3}{10}$	$\frac{9}{10}$	13,000	9,000	66,000
1828	$\frac{1}{2}$	–	–	$\frac{1}{2}$	$\frac{8}{10}$	22,000	14,900	46,000
1829	$\frac{1}{2}$	–	–	$\frac{4}{10}$	$1\frac{8}{10}$	37,000	26,000	49,000
1830	$\frac{2}{3}$	–	–	$\frac{1}{3}$	1	75,000	56,000	47,000
1831	$1\frac{1}{2}$	$\frac{1}{20}$	–	$\frac{9}{10}$	$\frac{9}{10}$	66,000	49,000	41,000
1832	$1\frac{1}{4}$	$\frac{2}{10}$	–	$\frac{1}{2}$	$\frac{9}{10}$	83,000	88,000	53,000
1833	$\frac{3}{4}$	–	$1\frac{1}{4}$	$\frac{1}{6}$	$1\frac{9}{10}$	120,000	215,000	86,000
1834	$1\frac{1}{10}$	–	1 to 3	$\frac{3}{10}$	$1\frac{5}{10}$	186,000	152,000	127,000
1835								
[4]			[1]		[2]			[3]

[1.] Over half of the exports of France, in her cotton manufactures, are to her own colonies, according to Baines, 525, note; but this is too much for 1831 and '2. France exports, also, about $1,000,000 of them per year to Holland and Belgium, one-half million to Germany, two and a half million to Spain, and one million to Sardinia. See Tables of French Commerce, for 1832. In 1831, the export was short of a million to Holland and Belgium, Sardinia and Germany, each, about two millions to Spain, over 1 1/6 to Mexico, and only about one million to her own colonies, with one-fourth of a million to Hayti. Her exports to England given in the table, are from her official tables for 1831 and 1832. Besides that some is smuggled.

[2.] Those exports from the United States are compiled from official tables, as far as they go back, discriminating to what country. Those to the United States, from France and Germany, are from our own official returns.

[3.] *Tariff or duty on cotton manufactures.*—The exports of cotton manufactures to any particular country, are often influenced by the rate of duty imposed on their importation. A detail of the several tariffs of all those countries, in respect to cotton goods, would be tedious, and might be supposed to bear on the question of protection, &c., in the United States, and which question, it is not proposed in these tables or notes, to agitate.

It may be added, that the average duty imposed in France, at this time, on the imports of most cotton goods, is very high, amounting almost to a prohibition, except for re-export. So in Russia. Blackwood's Magazine, for January, 1836. In England, it is considered to be about 20 per cent., though low as 10 on some articles. Before 1826, it was much higher—50 and 67 per cent. See 1 Com. Digest, by Smith, page 98, and Huskisson's speeches, in 1825, in Parliamentary Debates. McCulloch, page 1117. In the United States, the duty, in 1790, was about 7½ per cent. on the value of most cotton goods: in 1794, raised to 12½ per cent.; in 1816, to 25 per cent. and a minimum; in 1824, the same, with a certain *minimum* valuation, making the duty larger; in 1828, increased still more by raising the minimum; in 1332, reduced again. See the different acts of Congress on the tariff, and Pitk. Stat., page 188.

This makes the average duty in 1833, on most cotton cloths, and as computed by some, about 42 per cent., and thus exposes it to a biennial reduction till 1842, when, by the existing laws, it will become only 20 per cent. Campbell on Tariff, page 120.

The duty on British cotton manufactures has lately been increased in Java, by the Dutch, from 6 per cent. to 25 per cent. Blackwood's Magazine, January, 1836, page 51.

[4.] More could be given on the exports of cotton manufactures from a few of the above countries at other periods, but the amount and value of them were so small as to deserve very little notice, and the increases of late years, compared with their meager and blank condition, in this respect, a quarter and a third of a century ago, are striking indications of the revolution going on in Europe and the United States in the manufacture of cotton.

P.

COTTON.

Dates of the most important changes in the cultivation, manufacture, and trade of cotton, chiefly within the period to which these tables generally extend.

[1]	
1730	First cotton yarn spun in England by machinery, by Mr. Wyatt. Smithers, 153.
1735	Cotton first grown in Surinam by the Dutch, or perhaps first exported thence.
[2]	
1738	A patent first taken out by Lewis Paul for an improved method in carding,
[6]	and the fly shuttle invented by John Kay. Stock cards were first used for cotton by J. Hargrave in 1760, and cylinder cards were not invented till 1762, and were first used by Robert Peel. Carding not brought to perfection till 1775. Baines, 170.
1742	First mill for spinning cotton built at Birmingham; moved by mules or horses; but not successful.
1750	The fly shuttle was brought into general use in England in weaving, though some postpone the date to 1760. Baines, 116.
1756	Cotton velvets and quiltings first made in England.
[3]	
[4]	Arkwright obtained his first patent for the spinning frame, though he made
1761	further improvements in 1768. Became free 1784. Baines says his first patent was in 1769. So does Wade, and that his second patent was in 1771.
1763	Two years after, Thomas Highs claims to have invented the spinning jenny,
1767	which J. Hargrave claims also in 1767. Smithers and McCulloch, 436. Edinb. Encyclop. art. "Cotton;" or, according to Baines, in 1764.
1768	The stocking frame applied to make lace by Hammond.
1772	The feeder invented by Lees, and the crank and combs by Hargrave.
1774	A bill passed to prevent the export of machinery used in cotton factories.
[7]	Smithers, 155. And still in force, though not strictly executed. Blackwood's Magazine for January, 1836.
1779	Mule spinning invented by Hargrave, or rather perfected by Crompton. Baines, page 199.
1781	First imports of raw cotton into England from Brazil; poorly prepared; and
[5]	in three to nine years after, first from United States of their own growth; and from India and Bourbon about 1785. See table F—note, and Smithers, 156.
1782	Watt took out his patent for the steam engine, though some say in 1769 the first one; and got into general use to move machinery in 1790. He began his improvements in 1764, according to Wade's history of the middling classes, page 82.
1783	A bounty granted in England on the export of certain cotton goods. 4 McPherson, 42 and 56.
1785	Power looms invented by Doctor Cartwright; though previous to that some
[9]	similar models had existed which had not been patented or used. Baines, 228. Supplement to Encyclopedia Brit., article "Cotton." Steam engines used in cotton factories. Baines, 226. Cylinder printing invented by Bell. Baines, 267. Arkwright's patent expired, and a great impulse to manufactures of cotton. 4 McPherson, 79 and 81.
1786	Bleaching first performed by oxymuriatic acid by Bertholett. Baines, 184.
1787	First machinery to spin cotton put in operation in France, though some cotton was used in spinning, &c. since 1767. Encyclopedia Brit. 407.
1789	Sea-island cotton first planted in the United States; and upland cotton first cultivated for use and export about this time, or three or four years previous. Some say in 1786. See tables, and Baines, 297; and others in 1790.

P.—*Dates of most important changes, &c.*—Continued.

1790	First cotton factory built in the United States in Rhode Island. [8.] Water
[8]	power first applied to the mule spinner by Kelly. Baines, 205.
1791	
1792	
1793	The cotton gin invented by E. Whitney, in the United States. This is often stated to be in A. D. 1795; but the patent is dated in 1794, March 14.
1794	
1795	
1796	Sea-island cotton chiefly substituted for Bourbon cotton in England.
1797	
1798	First mill and machinery erected in Switzerland for cotton.
1799	Spinning by machinery introduced into Saxony. Encyclopedia Brit. 411.
1800	
1801	Power looms moved by water or steam succeed in Scotland.
1802	Dressing and warping machine for power looms invented by Radcliff and Jackson, and contributed, much to their success. Blackwood's Magazine for January, 1836. An act passed in England, requiring in cotton mills, as well as some others, certain clothes for apprentices—not to work them more than 12 hours each day—and certain instructions in letters to be given to them, &c. Wade's history, page 98.
1803	First cotton factory built in New Hampshire. See table L, note [9]. Power loom, as now used, perfected in England, and patented by Harrock.
1804	
1805	Power looms successfully and widely introduced into England after many failures.
1806	
1807	The revolution in Spanish America begins to furnish new markets for cotton manufactures.
1808	Stamping the cylinders for printing cloth by means of dies introduced at Manchester.
1809	Lace machinery much improved by Heathcott.
1810	Digest of cotton manufactures in the United States by Mr. Gallatin, and another by T. Cox, Esq. and public attention drawn to their growing importance.
1811	A patent for making bobbin lace by machinery, by John Burn; though invented by Mr. Heathcott in 1809. McCulloch, 743.
1812	
1813	The India trade made more free, and more British manufactures sent there; took effect April 4, 1814. McCulloch, page 538.
1814	
1815	The power loom introduced into the United States first, at Waltham, in
1816	1815, it is said, in American Encyclopedia, article "Cotton."
1817	India cotton goods less imported on account of the minimum in the tariff of 1816. Pitk. Stat. 188. Same year the fly frame was introduced into England.
1818	New method of preparing sewing cotton invented by Mr. Holt. Cotton averaged about 34 cents per pound; the highest of any year in the United States since 1801.
1819	New cotton lands sold very high in the United States.
1820	Steam power first applied with success extensively to lace machinery.
1821	
1822	First cotton factory erected at Lowell.
1823	First export of raw cotton from Egypt to England.
1824	Higher duty imposed in the United States on foreign cotton manufactures by the minimum principle. See table O, note [3].

P.—*Dates of most important changes, &c.*—Continued.

1825	Self-acting mule spinner patented in England by Roberts. Baines, 207. Same year the tube frame introduced there from America. Cotton rose to 21 cents per pound, and great speculations in it in the United States.
1826	First exports of American cotton manufactures to any considerable value.
1827	
1828	Highest duty in the United States on foreign cotton manufactures. Table O, note [3.]
1829	
1830	About this time Mr. Dyer introduces a machine from the United States into England to make cards.
1831	
1832	Duty on cotton manufactures imported into the United States reduced. Table O, note [3.] By 1 and 2 William 4, it was provided in England, that, in cotton mills, work should not be done in night by *minors*, and but 9 hours' work on Saturdays. Wade's history, page 113.
1833	Further opening of India trade increases the market there for English and American cotton goods.
1834	Cotton rose to 16¼ cents per pound—higher than any other year since 1825.
1835	Extensive purchases of new cotton lands in the United States.
[10]	

[1.] In the 16th century, *cotton* manufactures came to Europe from India, through the trade of Venice. Smithers, 118. He says they were introduced into China from India about 200 years earlier, (Smithers, page 152,) having existed in the latter country from the first knowledge of it. From Venice the trade in them, and then the manufacture, went to Flanders about 1560. They existed in Arabia in the 7th century. Found in America when discovered, at the close of the 15th century.

[2.] In the 17th century, A. D. 1641, *raw cotton* came to England from Cyprus and Smyrna, and was taken from London to Manchester to be worked up. Smithers, 119. Edin. Rev. (1827) page 2. Though cotton manufactures had been imported early as A. D. 1500; and the first act of Parliament relating to them, nominally, passed in A. D. 1565, though probably woollens were intended. Table A, note [12.] Calicoes were imported before 1631. Smithers, page 152. Made in London, A. D. 1681; and those from India prohibited, 1721. Smithers, page 153. Baines, 79.

Raw cotton, in 18th century, came chiefly from the French West Indies, Surinam, Brazil, and Isle of Bourbon, till near its close, when the imports began from the United States, India, &c. Smithers, 123. In 1660, England prohibited her colonies from sending it to other than British ports or dependencies. 1 Mc Pherson's Com. 486.

[3.] Muslins first made at Paisley, in Scotland, A. D. 1700; but they did not succeed well, nor cambrics, till 1725, in Glasgow.

In 1759, French cambrics and lawns were prohibited by law. Smithers, 154.

[4.] In 1769, Arkwright built cotton mills at Nottingham, and in 1780, at Cromford, &c. the first moved by horse, and the next by water power. He made new improvements, and took out new patents, and, in 1780, commenced actions for violating his patents, in which he failed, (Smithers, 155,) though in some former trials on his first patent he succeeded. Supplement to Encyclop. Brit. "Cotton."

Populace began to destroy cotton machinery in Lancashire in 1779.

The first spinning machines had only a few spindles, say 8; but afterwards increased to 80, (Do.) and sometimes to 120. McCulloch's Dict. page 438.

On machinery of other kinds, see in table, A. D. 1738.

[5.] The raw cotton of India, the Surats, and Bourbons, was first imported into England in 1783. Before, that from Cayenne, Surinam, Demarara, St. Domingo, and Essequibo, was chiefly used. Smithers, 155.

[6.] But Wyatt's invention does not appear to have been well matured or much brought into use, though he and Paul took out a patent in 1738. Baines's Hist. McCulloch's Dict. 439; note.

[7.] It is a remarkable fact, that the cotton manufacture was so little known and appreciated in England when Adam Smith published his Wealth of Nations, (in A. D. 1776,) that the subject is believed not to be alluded to by him in the slightest manner. So, in 1794, it is believed Mr. Jay was not aware that cotton was or would be exported from the United States. Pitk. Stat. page 198. See table F, note 9, page 33. In Postlethwaite's Dict. "Cotton," 1766, he urged its cultivation in English plantations suited to it, and seemed to anticipate the increasing importance of its manufacture.

[8.] Mr. Gallatin states this to be, 1791, in his report on domestic manufactures, April 17, 1810. See Gales and Seaton's Docs. v. 2, on Finance, p. 425.

[9.] Cloths were sent abroad to be bleached till 1750, and required 8 months, then reduced to 4 months, and in 1784, Watt introduced the practice of bleaching with chlorine in a few hours into England. Baines's Hist. 246 and '7.

[10.] Many of the above dates and facts appear in the other tables and notes; but they are collected here in chronological order, with some other material events, for the purpose of presenting, in one view or statement, the different periods in which the chief progress, from fifty to a hundred years past, has been made in the growth, cultivation, and trade of cotton.

Q.

Extracts as to the subject of Cotton, from the Annual Treasury Report in December, 1835.

1. "From this it appears that our whole exports, of every kind, in the last five years, including the estimates for 1835, have not exceeded those, during a similar term, from 1803 to 1807, inclusive, but about forty millions, and being an excess no larger than at most intervening periods, while an extraordinary increase has taken place in our exports of domestic products, exceeding in value those during that term more than one hundred and fifty millions, and being quite doubled the excess at most intervening periods. Indeed, it will be seen that they have been almost a hundred per cent. larger than they were in any similar term of years, previous to 1816, and have exceeded those during such a term, only ten years ago, by the sum of about one hundred and fifteen millions; a difference greater than the whole amount of all our exports of domestic products during the first five years under our present form of Government. The recent average rate of increase in these exports, however, has not been large, independent of the article of cotton; nor is it likely to augment during the few ensuing years. Adopting a comparison between every term of ten years, from 1792, '93, and '94, to 1832, '33, and '34, and including all articles, it appears that the whole exports of domestic produce exhibit an increase in the last thirty years of less than three per cent. annually, or a rate considerably lower than that of our population, though, in the previous term of ten years, by the great prosperity from our new form of Government, and the rapid progress in the cultivation of cotton, that increase was near eight per cent.; and in the high price and large exports of this article in the last term of ten years, it has been about five per cent. annually. But as that price has of late been unusually high, and is now lower, and as the demand for cotton abroad in the ensuing year is not likely to exceed, if it equal, the late customary ratio, and on which some interesting facts may be seen in the statement annexed, (E,) the value of our whole domestic exports (over one-half of which now consists of cotton) will probably be less in 1836 than in 1835.

2. "It may be instructive, in respect to the estimates of our future proceeds from lands, to recollect that, after the present system commenced, the sales never amounted, in fact, to one million of acres a year till 1815, nor to two millions a year till the temptations of the credit system, and the great rise in the

price of cotton to 26 and 34 cents per pound, induced larger purchases, extending to over two millions of acres in 1817, and about five and a half millions in 1819; and thus, even fifteen years ago, exceeding in quantity, by nearly a million of acres, the large sales of 1834, and exceeding them in the sum promised to be paid, by the almost incredible amount of more than twelve millions of dollars. But the fall of cotton in 1820, to only about half its former price, combined with other causes, left the purchasers in debt to the Government over twenty-two millions of dollars, and with the change from the credit to the cash system, reduced the sales again to much less than a million of acres a year, caused nearly six millions of the former sales to revert, and kept them down to less than a million in every year after, till the rise of cotton in 1825 gave a new impulse, which being aided by other powerful causes, the sales gradually enlarged till they reached a million again, in 1829. Since that, increasing still more rapidly, they have exceeded, during 1834, four millions of acres, and during 1835, probably nine millions. Among those other causes, the more extensive introduction of steam power on the western rivers and northern lakes, with the public improvements in their navigation, and the increased facilities of intercourse by railroads and canals, have of late added much to the sales of the public lands beyond previous years, and beyond the proportional increase of population. To the force of these causes have been joined, during the last three years, as formerly suggested, the effect of the pre-emption law, the increase in the price of cotton, and the unusual abundance of surplus capital in 1835, seeking new investments."

3. "Besides what has already been remarked on the influence which the increased cultivation of cotton in this country has in various ways exercised, and is likely to exercise hereafter, on our revenue from customs and lands, it might be made a subject of further and very interesting inquiry, in connexion with the uncertainty of the estimates on those subjects, affecting, as that cultivation does, more remotely, not only our revenue from lands and customs, but the balance of trade and the export of specie, as well as the continuance, by means of mutual dependence among great interests, of many of our peaceful and prosperous relations, both at home and abroad. But without entering, on this occasion, into further details concerning any of these points, it may be mentioned as a very striking result connected with the last one, and as furnishing a strong presumption in favor of greater exemption hereafter from fluctuations by war and commercial restrictions, that while the quantity of cotton exported from this

country has increased from half a million of pounds in 1790, to over three hundred and eighty millions in 1835, and has exceeded in value, during six of the last ten years, all our other exports of domestic products of every description, the manufacture of it at home, and chiefly in the Northern States, has increased, from consuming only a few bales, to more than ninety millions of pounds yearly, and to that extent creates a new and strong bond of reciprocal advantage and harmony; and that while we now furnish, instead of the small quantity in the first years of our Government, quite fifteen-sixteenths of the whole consumption of raw cotton by England, and seven-tenths of that by France, all the present exports of it to Europe from all the rest of the world do not probably equal, if those two nations could obtain the whole, one-third of what they now consume, or one-fourth of what they now import from the United States alone; and thus, while neither of them produces any of the raw article, except a little in some remote dependencies, that they have an annual manufacture now relying on it, and chiefly on the United States, equal in France to eighty millions of dollars, and in England to one hundred and eighty millions of dollars, and constituting in the latter, after it supplies her own large necessities at home, over one-half in value of her great annual exports to all quarters of the globe."

4.

"EXPORTS OF COTTON.

Year.	Quantity.	Value.	
	Pounds.	Dollars.	
1792	138,328	32,000	
1793	487,600	107,272	
1894	1,601,760	320,352	
	3)2,227,688	459,624	
	742,562	153,208	Average.
1802	27½ millions.	5¼ millions.	
1803	41 1/10 do.	7¾ do.	
1804	38 1/10 do.	7¾ do.	
	3)106 7/10 do.	20¾	
	35.6	6.9	Average.
1822	144 6/10	24	
1823	173 7/10	20½	
1824	142 3/10	21¾	
	3)460 6/10	66¼	
	153.5	22.1	Average.
1832	322¼	31¾	
1833	324¼	36	
1834	384¾	49½	
	3)1,031¼	117¼	
	344	39.1	Average.

"NOTE.—Looking further to the future, in connexion with the past, a brief comparison of the quantity and value of our exports in cotton at a few equi-distant periods, as exhibited in the above table, will serve to illustrate, in a condensed form, the great influence which the cultivation and exports of cotton alone seem to have exercised, and are likely to exercise hereafter, on the amount of our whole exports of domestic products, and thus indirectly to affect our importations, and consequent revenue from customs. Doubtless some other cultivation and exports would have taken the place of cotton in the South, had it not been so successfully grown there; but they probably would have been less valuable, and will be so hereafter, if ever substituted for that; because the average increase of all our domestic exports, including cotton, has been only from 3 to 5 per cent., while that alone of cotton has, during the last 30 years, been, on an average, near 25 per cent. annually. But of late, the ratio of increase in cotton, though still much greater than that of other exports, has become diminished and more settled, having fallen from quite 500 per cent., during the first ten years of our present Government, to only about 10 per cent. during the last ten, though the whole annual quantity now exported exceeds the enormous amount of 380 millions of pounds. This 10 per cent. increase yearly, considering the vast quantity now grown in the United States, and how fully the cotton raised in the other quarters of the world has already been excluded from the European markets, with other circumstances named in the body of the report, may be justly estimated both as a more regular ratio than any which has prevailed heretofore, and as something larger than its probable increase in the ensuing ten years."

While the preceding tables and notes were in the press, Mr. ADAMS submitted the following resolution; which was considered and agreed to:

"*Resolved*, That the Secretary of the Treasury, under whose direction the printing of certain tables and notes on the subject of cotton has been placed by this House, be authorized to add any further explanatory notes on that subject which may occur to him in the progress of the printing."

ADDENDA.

Table A, note 3, page 14. Other statements made in some of the Atlantic States, and at other periods, show a smaller difference between the exports of 1835 and 1836, to the last dates. In some accounts of the exports kept in the Southwest for the current year, the quantity is represented there to be less at the most recent dates than during the same period of last year by about 70,000 bales, and the stock on hand to be about 100,000 bales less.

Table B, page 20. Cotton has been raised in Illinois, and even in Pennsylvania. Niles's Register, February and March, 1822, pages 371 and 67. But it is believed not to be raised of late to any considerable extent north of Tennessee and Virginia. This table shows another striking fact: that considerably over half the whole crop of cotton in the United States is now raised in the new Southwestern States, whose outlets are on the Gulf of Mexico, and where little was grown and scarcely any exportation made previous to 1803.

Table C, note 2, page 28. In the ninth line from the top, the price named means the price of common cotton.

Table L, note 9, page 87. Since these tables were transmitted to the House of Representatives, the original letter which was written in consequence of a circular from Mr. Hamilton, Secretary of the Treasury, on the subject of manufactures, dated June 22, 1791, from Moses Brown to J. S. Dexter, dated July 22, 1791, has been sent to me.

It confirms the statement in the notes, that the first cotton mill in Rhode Island was built in 1790. Attempts had been made, Mr. B. says, by himself, in 1789, to get the machinery into operation by water, by means of models for carding and spinning, which the State of Massachusetts had procured from abroad. But no mill was actually begun until the autumn of 1789, when one was commenced by the assistance of Mr. Slater, who had then recently come from England, notwithstanding the obstacles which were opposed to the emigration of artists, and the exporta-

tion of machinery. About this time a cotton mill was erected at Beverly, Massachusetts, by an incorporated company. See more in that letter, and in Gales and Seaton's Docs. vol. 1, Finance, page 142; Hamilton's Report on Manufactures, and Pennsylvania Mercury, for 1789. It is said that the model of the machine for weaving by water was procured from England, by some persons in Delaware, early as April, 1788. See Penn. Mercury.

[Other small additions to the notes of the later tables were introduced into the body of them in the proper places while they were printing, after the passage of the resolution, inserted immediately before these addenda.]

U.S. Treasury