THE

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AND

COMMERCIAL REVIEW.

OCTOBER, 1861.

SEA AND UPLAND COTTON vs. FLAX AND HEMP.

Cotton is found growing naturally in the tropical regions of Asia, Africa and Armenia. It is distinguished in commerce by its color, and the length, strength and fineness of its fiber. White is usually considered characteristic of secondary quality. Yellow, or a yellowish tinge, when it is natural, is usually considered as indicating great fineness. There are many varieties of raw cotton, but they are usually classed under the denominations of long and short stapled. The best of the first is considered the Sea Island, the product of Georgia. A small quantity of very superior cotton has been imported into England from New South Wales.

The manufacture of cotton has been carried on in Hindostan from the remotest antiquity. The manufacture obtained no footing worth mentioning in Europe till the last century. The rapid growth and prodigious magnitude of the manufacture of cotton in Great Britain are, beyond all question, the most extraordinary phenomenon in the history of industry. When the manufacture commenced in England the material was obtained from Hindostan and China, where the inhabitants had arrived at such perfection in spinning and weaving that the lightness and delicacy of their finest cloths imitated the web of the gossamer, and seemed to set competition at defiance. Such has, however, been the stupendous discoveries and inventions as to overcome these difficulties, as well as the cheapness of labor in Hindostan. The precise period when the manufacture was introduced into England is not known, but it is probable that it was the early part of the seventeenth century. Authentic mention of it is made in sixteen hundred and forty-one, (1641.) From the first introduction of cotton into Great Britain, down to 1773, the weft, or transverse threads of the web only, were made of cotton—the warp or longitudinal threads consisting wholly of linen yarn, imported from Germany and Ireland. Prior to seventeen hundred and sixty, (1760,) weavers

were dispersed in cottages throughout the country, and furnished themselves as well as they could with the weft and warp for their webs, and carried them to market when they were finished. The Manchester merchants, at this period, began to send agents into the country, who employed weavers, whom they supplied with foreign Irish linen yarn for warp and with raw cotton, which, being carded and spun by means of a common spindle and distaff, in the weaver's own family, were then used for wefts.

The entire value of cotton goods manufactured in Great Britain in seventeen hundred and sixty, (1760,) is estimated at only two hundred thousand pounds a year, but in sixteen hundred and sixty-seven, (1667,) the spinning jenny was introduced, by means of which eight threads were spun with the same facility as one; and, subsequently, a little girl was enabled to work no fewer than from eighty to one hundred spindles. By the spinners' frames, afterwards introduced, a thread of sufficient fineness was produced to answer for the longitudinal threads for warp. Since seventeen hundred and eighty-five, (1785,) the progress of improvement in every department for the manufacture of cotton has been most rapid. The estimated amount of the cotton crop of the United States, after and including 1832, are—

	Pounds.		*Pounds.*
In 1821,.....	110,940,000	In 1827,.....	285,120,000
" 1822,.....	121,485,000	" 1828,.....	213,840,000
" 1823,.....	136,125,000	" 1829,.....	255,780,000
" 1824,.....	152,880,000	" 1830,.....	292,040,000
" 1825,.....	169,860,000	" 1831,.....	311,655,000
" 1826,.....	211,680,000	" 1832,.....	296,245,000

The lowest average price in England during this period was in 1831, $5\frac{5}{8}$ pence, and the highest in 1825, $11\frac{1}{2}$ pence. Previous to 1790 the United States did not supply the English market with a single pound of cotton; so says Mr. McCULLOUGH, whose authority there is no reason to question in so far as Upland cotton is concerned, but there appears to have been shipments of a superior quality of Sea Island cotton prior to this date. This will account for what appears to be a discrepancy between Mr. McCULLOUGH and the Congressional reports found at the American Institute. According to these last, the first arrival of cotton at Liverpool from the United States was—

January 20th, 1785,..... one bag.
May 4th, 1786,..... two bags.
Total during the year,..... six bags.
Total during the year 1787,..... one hundred and eight bags.
Total import from 1785 to 1790, one thousand four hundred and forty-one bags.

After the termination of the American war the cultivation in Carolina and Georgia succeeded so well, that it now forms the principal staple production of the United States. The cotton gin, according to McCULLOUGH, was invented by WHITNEY in 1793, and has done for the planters what the genius of ARKWRIGHT has done for the manufacturers, and that at present (1835) the export of cotton from the United States exceeds 300,000,000 pounds a year.

The cotton product of the United States in 1764 was 1,200 lbs.

In 1794,.....	lbs.,	1,601,700	....	In 1804,..... lbs.,	38,118,041
" 1814,.....		17,806,479	....	" 1824,.....	142,369,663
" 1834,.....		413,928,240	....	" 1843,.....	792,297,106

In 1842 the product of the United States is given in bales at 1,683,174, and in 1843, 2,378,875. (*U. S. Doc.*) The estimated product of the United States for the year 1859 was 3,400,000, and for 1860, 4,600,000 bales. The average weight of a bale of cotton is assumed to be 470 pounds. The actual result of the year 1860, however, showed the product to have been but 4,000,000 bales.

The MERCHANTS' MAGAZINE for May, 1861, gives the estimated cotton crop in 1820 at 425,000 bales; in 1830, at 870,415; in 1840, 2,177,532; in 1850, 2,796,706; in 1860, 4,600,000 bales.

Congressional reports show the United States exports of cotton to have been in—

1821,..	124,893,405 lbs.	..	average cost per lb.,	16 2-10c. ..	value, $ 20,157,484
1822,..	144,675,096 "	..	" "	16 6-10 ..	" 24,035,058
1823,..	173,723,270 "	..	" "	11 8-10 ..	" 20,445,520
1824,..	142,369,663 "	..	" "	15 4-10 ..	" 21,947,401
1825,..	176,449,907 "	..	" "	20 9-10 ..	" 36,846,649
1826,..	204,535,415 "	..	" "	12 2-10 ..	" 25,025,214
1827,..	294,310,115 "	..	" "	10 ..	" 29,359,545
1828,..	210,590,463 "	..	" "	10 7-10 ..	" 22,487,229
1829,..	264,837,186 "	..	" "	10 ..	" 26,576,311
1830,..	298,459,102 "	..	" "	9 9-10 ..	" 29,674,883
1831,..	276,979,784 "	..	" "	9 1-10 ..	" 25,289,492
1832,..	313,215,122 "	..	" "	9 8-10 ..	" 31,724,682
1833,..	324,698,604 "	..	" "	11 1-10 ..	" 36,191,105
1834,..	384,717,909 "	..	" "	12 8-10 ..	" 49,448,402
1835,..	387,358,992 "	..	" "	16 8-10 ..	" 64,961,302
1836,..	423,631,367 "	..	" "	16 8-10 ..	" 71,284,925
1837,..	444,211,537 "	..	" "	14 2-10 ..	" 63,240,102
1838,..	595,952,297 "	..	" "	10 3-10 ..	" 61,556,811
1839,..	413,624,212 "	..	" "	14 8-10 ..	" 61,238,982
1840,..	743,991,061 "	..	" "	8 5-10 ..	" 63,870,307
1841,..	530,204,100 "	..	" "	10 2-10 ..	" 54,330,341
1842,..	584,717,017 "	..	" "	8 1-10 ..	" 47,593,464
1843,..	792,297,106 "	..	" "	6 2-10 ..	" 49,119,806
1844,..	663,633,455 "	..	" "	8 1-10 ..	" 54,063,501
1845,..	872,905,996 "	..	" "	5 92 ..	" 51,739,643
1846,..	547,558,055 "	..	" "	7 81 ..	" 42,767,341
1847,..	527,219,968 "	..	" "	10 34 ..	" 53,415,848
1848,..	814,274,431 "	..	" "	7 61 ..	" 61,998,294
1849,.	1,026,602,269 "	..	" "	6 4-10 ..	" 66,395,967
1850,..	635,381,604 "	..	" "	11 3-10 ..	" 71,984,616
1851,..	997,237,089 "	..	" "	12 11 ..	" 112,315,317
1852,.	1,093,320,639 "	..	" "	8 05 ..	" 87,965,732

Treasury Department,
Register's Office, Jan. 5, 1853.

N. SARGENT, *Register.*

This much has been said in reference to cotton, as preparatory to the consideration of the articles of flax and hemp, more particularly the former, to which public attention has been more particularly directed by the transpiring events of the day.

"Flax, (Ger. *Flachs;* Du., *Vasch;* Fr., *Lin;* Ita. and Sp., *Lino;* Rus., *Len, Lon;* Pol., *Lin;* Lat., *Linun,*) an important plant, (*Linun usitatissimum,*) was at one time an article of considerable export from the

United States, and may be again profitably raised for its seed without further reference to the use of the stalk.

"In 1790 the quantity of the seed exported amounted to 312,000 bushels. For twenty years previous to 1816 the average annual exports were 250,000 bushels. The smooth, rich prairie land of the West afford an excellent opportunity for raising flax to any extent; and since linseed is an article that bears exportation so well, many thousand acres might be cultivated to advantage, especially as the crop might be pulled by machinery, or, if the seed is the only object, it might be cut with like facility." (*U. S. Doc.*) The estimated hemp crop of the United States in 1844 was 22,800 tons.

Flax is an important plant, and has been cultivated from the earliest ages in Great Britain and many other countries, its fibers being manufactured into thread and its seed crushed for oil. The principal sorts of flax imported into Great Britain are Petersburgh, Narva, Riga, Rivel, Liebau, Memel, Oberland and Dutch flax. It comes in bundles of twelve, nine and six heads. The Riga flax seems to deserve the preference, and is imported from the Baltic. It is the growth of the provinces of Maninberg, Druania, Thusenhausen and Lutherama. Flanders or Dutch flax is well-dressed, and of the finest quality. Flax is extensively cultivated in Egypt of late years; some of the Italian ports, which used to be supplied from Russia, have been supplied on lower terms from Alexandria. New-Zealand flax is said to exceed every other species in strength of fiber and whiteness, qualities which, if it really possesses them in the degree stated, must make it particularly fitted to be made into canvass and cordage. It has been obtained, within these few years, at second hand, from Sidney and Van Dieman's Land, the imports from them amounting, in 1831, to 15,725 cwt. Attempts are now being made, but with what success remains to be seen, to raise it in Great Britain.

When flax is brought to the principal Russian ports where it is shipped, it is classified according to its qualities, and made up by sworn inspectors, appointed by the government for the assortment of that and all other merchandise. These functionaries are said to perform their task with laudable impartiality and exactness. A ticket is attached to every bundle of assorted flax, containing the names of the inspector and owner, the sort of flax and the period when it was selected and inspected.

Good flax should be of a fine, bright color, well separated from tow codilla or coarser part of the plant, and of a long, fine and strong fiber. In purchasing flax it is usual to employ an agent wholly devoted to this particular business.

Of 936,411 cwt. of flax and tow imported into Great Britain in 1831, 623,231 cwt. was from Russia, 128,231 cwt. from the Netherlands, 101,721 cwt. from Prussia, 55,324 cwt. from France, 1,415 cwt. from Italy, 15,276 cwt. from New South Wales, &c. Almost the whole of the quantity was retained for home consumption.

Flax seed contains a great deal of oil, which it yields by expression, and is cultivated either that it may be used in sowing, or sent to crushing mills to be converted into oil. The quantity of the crop depends much on the seed employed; a good deal of care is requisite in selecting the best; generally speaking, it should be chosen of a bright brownish color, oily to the feel, heavy and quite fresh. Dutch seed is in the highest estimation for sowing; it not only ripens sooner than any other that is

imported, but produces larger crops, and of the quality that best suits the principal British manufactories. American seed produces fine flax, but the produce is not as large as from the Dutch seed. British seed is sometimes used instead of Dutch, but the risk of the crop misgiving is so much greater that those only who are ignorant of the consequences, or who are compelled from necessity, are chargeable with this act of ill-judged parsimony. Crushing seed is principally imported from Russia, but considerable quantities are also brought from Italy and Egypt. Of the 758,128 bushels of linseed imported into Great Britain in 1831, 221,702 were brought from Russia, 172,099 from Prussia, 106,244 from the United States, 105,448 from Italy, 98,847 from Egypt, 53,738 from the Netherlands, &c.

Hemp is supposed to be a native of India, but long since naturalized and extensively cultivated in Italy and many countries in Europe, particularly Russia and Poland, where it forms an article of primary importance. It is stronger and coarser in the fiber than flax, but its uses, culture and management are pretty much the same. When grown for seed it is a very exhausting crop, but when pulled green it is considered a clearer of the ground. In England its cultivation is not deemed profitable, so that, notwithstanding the encouragement it has received from government and the excellent quality of English hemp, it is but little grown, except in some few districts of Suffolk and Lincolnshire. The quantity raised in Ireland is also inconsiderable.

From what precedes, the great expansion of the cotton product of the United States appears to have been after the year 1829. Prior to 1820, if not to a still later period, the flax product was deemed of more importance than cotton. Flax was manufactured by the families that produced the plant, in their own houses, and it furnished them with table-cloths, bed-linen, and under garments and outer clothing in summer. Prior to 1810, if not later, the raw cotton furnished the country merchants in the towns on the North River and back, was the East India, by way of England to New-York. It was very imperfectly cleaned of its seed, and packed in large bags without being pressed. The common retail price of this cotton was 2*s.* 6*d.*, or 31¼ cents per pound. It was used for bats for quilts and dresses, and spun into yarn for mops. At that period a coarse muslin was also imported from the East Indies, and sold in the country towns above referred to, at the like price of 31¼ cents per yard. The same article might to-day command some 4 or 5 cents per yard for book covers or like purposes. At that period there was but a single store for the sale of domestic cotton goods in the city of New-York, and, as far as known, but one manufacturer in the United States; this was a Mr. Slater, of Rhode Island, who produced a superior fabric of this description of goods. They were sold by William F. Mott, who is still living, then doing business in Pearl-street, near Peck Slip. Public attention for the last few years has been again directed to the article of flax, and, from present indications, it would seem that it is again to occupy an important place in the productions of the country, and equal, if not exceed in value and importance, the cotton product of the United States. By the simple application of steam, at a pressure of some two hundred pounds to the square inch, the gummy or resinous matter is separated, and afterwards removed from the fiber of the plant, together with the woody substance, and a product as soft and delicate as cotton is the result, better adapted

than it to a vast variety of uses for which cotton is now used. The invention is calculated to work a revolution in flax as great in magnitude, if not greater, than has been effected by the cotton gin in cotton, and eventually to clothe the world in linen, clean and white, for there is evidently no limit to the production of the plant in almost any part of the world. The prairie lands of the great West are more particularly adapted to it, and to these the public attention is particularly directed, where almost the entire labor can be performed by the use of machinery.

JOURNAL OF MERCANTILE LAW.

Commission Merchants—Consignee's Advances on Bills of Lading—Bill of Sale.

Bill of Lading.—The action of Dows & Cary *vs.* Greene & Mather, is one that has been in our New-York State courts for a long time. We first find it reported in 16 Barb., 72, and now it comes up again in a new form and will be found reported in the last volume of Barbour, (32 Barb., 490,) where some important questions are discussed and decided.

The *plaintiffs*, Dows & Cary, were, it seems, commission merchants in New-York, and claimed title to a quantity of corn (to recover which this action was brought) as *bona fide* purchasers or lien-holders thereof for value, from a person by the name of J. F. Mack, (an alleged purchaser of the corn from Niles & Wheeler, a forwarding firm at Buffalo,) the said plaintiffs, as consignees of the corn, having in good faith made advances upon the bill of lading given by said Niles & Wheeler to Mack. The *defendants*, Greene & Mather, also claimed this corn through parties who had obtained title from this same firm of Niles & Wheeler *after* they (Niles & Wheeler) had repudiated the sale to Mack, as unauthorized by them, and also as fraudulent. The following were the facts proved:

Facts.—Niles & Wheeler were forwarders, at Buffalo, as is stated above, and agents of the American Transportation Line of canal boats, which line was owned by them and Mr. M. Caleb, of New-York, a partner of theirs in the forwarding business. Niles & Wheeler also purchased and sent corn to market on their own account.

The plaintiffs claimed the corn under certain bills of lading executed at Buffalo, dated August 7, 1848, by Niles & Wheeler per E. H. Walker, their clerk and agent, showing the shipment of the corn to account of J. F. Mack, care of plaintiff, New-York. The form of the several instruments herein called bills of lading is given in the case, and one of them, that on which the plaintiffs rely to recover, is as follows: "No. 143, duplicate. Buffalo, August 7, 1848. Shipped, in good order, by Niles & Wheeler, agents, on board canal boat Neptune, —— master, American Transportation Line, the following named articles, made

and consigned as in the margin, to be delivered as addressed without delay. Account J. F. MACK, care of Dows & CARY, N. Y., 2,385 bushels corn. Ohio freight to New-York, per bushel, 13 cents. NILES & WHEELER, per E. H. WALKER." By a subsequent bill of lading the quantity was corrected and stated at 2,565 bushels of corn.

MACK resided at Rochester, and was a dealer in grain. JAMES L. BLOSS resided at Rochester, and had for several years been purchasing grain in his own name, but in fact as the agent for other persons and by their direction. He had, for five or six months previous to the transaction in question, been making such purchases as the agent of MACK, and had received the money promptly in each instance. In transactions of this kind he had asked for duplicate bills of lading, and the vendors had given the bills before the delivery of the property and before receiving payment. They had trusted to his honor and the integrity of the man at Rochester to send the money, and it had always come.

NILES & WHEELER had purchased a cargo of about 10,000 bushels of corn, which was on board the propeller MONTEZUMA, lying near their warehouse at Buffalo.

On Monday, the 7th of August, 1848, BLOSS called at the office of NILES & WHEELER, and proposed to purchase the corn, intending it for MACK, but did not mention the fact that he was acting as an agent. The negotiation was between BLOSS and NILES; the price asked was forty-four cents per bushel, and BLOSS said he would take the corn if he could have a little time to get money from Rochester, and gave a reference for certainty of payment.

NILES said he wanted no reference, as they would only sell the corn for cash. BLOSS thereupon left the office, but was immediately called back by the order of NILES, when the negotiation proceeded. NILES asked where BLOSS wished to transport the corn, and on being answered to New-York, he said they could, perhaps, make arrangements if he (NILES) could transport the corn. It was finally agreed that half the money should be paid on Friday, and the remaining half on Saturday, and that NILES & WHEELER should transport the corn to New-York in their boats at 13 cents per bushel. NILES said he would not sell on credit to anybody; that he would hold the corn on his boats until it was paid for, and such was the arrangement between them.

BLOSS said NILES would be indemnified by the property itself, as he (BLOSS) would not get possession of it until it was paid for. BLOSS immediately telegraphed to MACK, advising him of the purchase of the corn, mentioning quantity and price, and on the evening of the same day BLOSS received the bill of lading before referred to, executed in the name of NILES & WHEELER, by WALKER, their clerk. He had before made out some bills of lading, and evidence was given tending to show his authority, and also that NILES was present when he made out the bills of lading. The defendants gave evidence tending to show that WALKER had never signed such bill of lading before, but only bills where the goods shipped belonged to other persons and not to NILES & WHEELER. WALKER made a distinction between receipts for property and memoranda of shipment, (such as he claimed these to be,) and regular bills of lading. The corn was shipped in the boats CUBA, NEPTUNE, P. B. LANGFORD and A. BEARDSLEY. The loading was commenced, according to BLOSS, on the

same day, (Monday, 7th August,) and, as Bloss thinks, was completed as to two boats, (Cuba and Neptune,) the same day.

Van Inwegan, the tally clerk, says the loading of the Neptune was commenced on Monday, and completed on Tuesday or Wednesday, and the Cuba started first, on the 9th, (Wednesday,) and the Neptune on the 10th, (Thursday.)

The evidence left the time of lading in some doubt. On Monday, the day of purchase, Bloss got the tally of the cargo of the two boats, (Cuba and Neptune,) and delivered them to the office of Niles & Wheeler, about six or seven o'clock in the evening, and received from Walker, their clerk, bills of lading of the two boats.

Bloss sent the bills of lading to Mack the same day, informing him that the corn was to be paid for on Friday or Saturday. The plaintiffs had been at Rochester on the 5th or 6th of August, and had agreed with Mack to make advances to him on corn, to thirty-eight cents per bushel, on his furnishing shipping bills for the corn.

The business was to be done on the part of the plaintiffs by James Chappell, their general agent at Rochester. Mack was to furnish the shipping bills to Chappell, who was to endorse Mack's drafts on the plaintiffs for the amount of advances, which the plaintiffs were to accept and pay. Advances to Mack in the same way had been made before. On Tuesday, the 8th of August, Mack presented to Chappell the two bills of lading, (Cuba and Neptune,) and drew two bills on the plaintiffs, one for $1,000, for thirty days, and one for $800, at twenty-five days, both payable to the order of Chappell, and both endorsed by him, on receiving the bills of lading, and the drafts were delivered to Mack. Mack passed and negotiated the drafts to the Rochester City Bank, and received the money therefor. On the same day Chappell enclosed the shipping bills to the plaintiffs in New-York. The two drafts were presented for acceptance by the American Exchange Bank, and accepted by the plaintiffs on the 10th of August, (Thursday,) and were paid at maturity. On Friday, the 11th of August, Bloss sought Niles, and told him that he had sent shipping bills of the corn to Rochester to Mack, for whom he had bought the corn; that he had not received the money, and did not know what the matter was; that he had never been disappointed in receiving money, but had previously received it promptly in every instance.

Niles said this was the first he had heard of Mack or of shipping bills, and he should sell the corn. Bloss asked him to wait till he could telegraph Mack and get an answer, and Bloss did telegraph him several times, without getting any answer. He then proposed that Niles or his clerk should go with him to Rochester, saying he would pay the expenses, and get the money or give up the corn. Niles said that Van Inwegan (his clerk) might go, and he went that day with Bloss to Rochester, where Bloss found that Mack had failed and left town on Thursday. On that day, the 10th of August, Mack made a general assignment of all his property to John Brown, preferring him to the amount of about $10,000, and distributing the residue of his property equally among the rest of his creditors, among whom Niles & Wheeler were named as creditors, for corn sold, to the amount of about $4,400. On Saturday Van Inwegan telegraphed Niles that the corn was not paid for, and Mack had run away. Niles then sold the corn to

P. DURFEE & Co. at Buffalo. DURFEE & Co. consigned the corn and delivered the bills of lading to ARTHUR H. ROOT. ROOT transferred them to JOSEPH H. GREEN, JR., the latter to GREEN & MATHER, and they to L. W. BRAINARD; and under these parties the defendants claimed to hold the property, and, on demand made, refused to deliver it to the plaintiffs.

On Saturday afternoon NILES went to Rochester; went up the canal on Sunday, and met three of the four boats, and gave them new bills of lading, on account of P. DURFEE & Co., care of ARTHUR H. ROOT, Albany. The CUBA had passed Rochester before he got there. He sent a bill after her to be signed, which seems to have been done. The boats had all left Buffalo with bills of lading to M. M. CALEB & Co., New-York. On Friday, the 11th of August, when NILES was informed of the bills of lading to the plaintiffs, he telegraphed them as follows:

"Ten thousand and ninety bushels of corn, shipped by us on boats CUBA, NEPTUNE, A. BEARDSLEY, P. B. LANGFORD, acc't J. F. MACK, to Dows & CARY, is not paid for. We notify you to consider and hold the same to our account, till further notice.

"NILES & WHEELER."

There was a mistake in the amount of the corn as stated in the first bills, and this was corrected on Wednesday. When the NEPTUNE arrived at Albany the plaintiffs demanded the corn of the defendants, and offered to pay the freight, the defendants then having possession thereof; but they refused to deliver it, and denied the plaintiffs' right to the corn.

The plaintiffs proved by BLOSS, in addition, that the bills of lading were made out by WALKER, he having been referred to by some apparently responsible man in the office as the proper man for that purpose; and that, as he thinks, NILES was present in the office when he made out the bills of lading; and that subsequently, when the fact was again talked over, NILES made no objection on the ground of want of authority. The bills of lading were in the hands of BLOSS, at Buffalo, on the 9th of August. CARY, one of the plaintiffs, saw them there, and having looked at them, handed them back to BLOSS, who then mailed them to MACK, at Rochester, who delivered them to CHAPPELL's clerk, receiving from him therefor two drafts of MACK on the plaintiffs, payable to the order of and endorsed by CHAPPELL, one for $1,000 and one for $800, which MACK procured to be discounted at the Rochester Bank. The bills of lading were immediately sent by CHAPPELL's clerk to New-York, where they were accepted by the plaintiffs on the 10th of August, and subsequently paid by them at maturity, some twenty-five or thirty days thereafter.

Decision.—The opinion of the court is of considerable length, but we do not deem it necessary to reproduce it here. The following, however, were the points decided:

I. That the plaintiffs' title, if otherwise valid, (being prior to the defendants' in point of time,) must prevail. The question, therefore, is as to the plaintiffs' title.

II. That the bill of lading given BLOSS was good in matter of form.

III. That it was properly executed, and that it went into the possession

of BLOSS lawfully, and the plaintiffs made advances upon it in good faith, relying upon the bill of lading as evidence of ownership, and without notice of any facts justifying the conclusion that BLOSS was not the real owner, or that any fraud was meditated or had been committed in the purchase of the corn.

IV. That the plaintiffs' title to the corn is good, *notwithstanding* MACK *may have intended a fraud in acquiring possession of the goods, and purchased with a preconceived intention not to pay.*

These are the propositions discussed and decided by the court in the published opinion. As to the correctness of at least the last point, (IV.,) there must be, we think, considerable doubt; and we certainly cannot consider it to be a true exposition of the law until it is held to be such by our Court of Appeals. In a similar case, (DOWS *vs.* PERRIN, 16 *N. Y. Reports*, 325,) the Court of Appeals have stated that a bill of lading is *not* such a negotiable commercial instrument as to confer upon a *bona fide* transferee a title not affected by the fraud committed in obtaining it. This was, to be sure, a mere *dictum* in that case, and yet we believe the proposition to be correct, and think the court will reaffirm it whenever the question comes properly before them. A bill of lading has never been held to be negotiable in the sense that a bill of exchange or promissory note is. The extent to which our courts have gone is this: "That the right of stoppage *in transitu* is cut off by the transfer of the bill of lading to a *bona fide* purchaser." For instance, if A. should purchase for cash of B. a boat-load of corn, and A. should fail while the corn was being transferred, B. could retake the corn. But if B. had given a bill of lading, and this bill had been transferred to a *bona fide* purchaser, then A. would have no right to retake the corn, although it had been sold to B. for cash, and B. had failed without making the payment. The right of stoppage *in transitu* would in that case be cut off. This, however, is, we believe, the very extent our courts have or will go towards making a bill of lading negotiable. Where such a bill is void on account of *fraud*, the holder certainly cannot confer a better title than he himself has; it is void in the original holder's hands, and is void also in any one's hands (whether *bona fide* holder or not) to whom it may be transferred. The "*right of property*" must be in the one who obtains the bill of lading, before he can, by any transfer or endorsement of the bill, confer a title to the goods as against the true owner. So where the bill is obtained by fraud, the "right of property" is not, of course, obtained with it, and cannot, therefore, be passed over to any other party by a transfer of the bill. For these reasons we believe the conclusion (IV.) of the court in the above case is incorrect, and will be so held when the question is passed upon by our court of last resort.

BILL OF SALE.

The recent case of SCHENCK AND OTHERS *vs.* SAUNDERS, reported in 13 *Gray* (*Mass.*) *Reports*, 37, was an action to recover the value of sundry cases of boots and shoes. The *plaintiffs* were commission merchants and manufacturers of boots and shoes, under the firm of SCHENCK, WOOD & POND, having their principal place of business in New-York, but were accustomed to put out stock to different persons in the States of New-York, Connecticut and Massachusetts, to be manufactured into

boots and shoes. On the 11th of April, 1856, they made with CHARLES HOWE, of Farmingham, Mass., a written agreement in these words:

"The said SCHENCK, WOOD & POND, of the first part, agree to furnish stock, consisting of upper and sole leather and linings and findings, of sufficient amount to make at least eight and not to exceed twenty cases per week. And the said CHARLES HOWE, of the second part, is to take the stock and make it up, to the best of his abilities, into women's boots; and further agrees, to consign all the goods he makes to the said SCHENCK, WOOD & POND, of the first part, to be sold by them on a commission of five per cent., the goods to be sold for cash, and the returns made to the said CHARLES HOWE as fast as made. And the said CHARLES HOWE, of the second part, agrees to put up and ship to the said SCHENCK, WOOD & POND, at their store in New-York, at least eight cases of boots per week, each case containing sixty pairs, commencing the first week in May, 1856."

It was proved, on behalf of the plaintiffs, that certain leather and stock, suitable to be made into boots and shoes, were delivered by them to HOWE, and by him made up into the boots and shoes now in controversy, and taken to Boston and delivered to the defendant for certain advances made HOWE by the defendant, as stated below; that the defendant refused to deliver them up on demand made by plaintiffs, but sold them and applied the money to his own use.

The *defendant* was an auctioneer and commission merchant at Boston. He contended, on the trial, that the property in the stock delivered by the plaintiffs to HOWE, under the above contract, passed to HOWE, and introduced evidence tending to show that whenever the plaintiffs sent stock to HOWE, they sent him, within a few days afterwards, bills (not signed by the plaintiffs) in this form:

BOOT, SHOE AND LEATHER WAREHOUSE. *New-York, May, 15th,* 1856.

Mr. CHARLES HOWE, bought of SCHENCK, WOOD & POND, Manufacturers and Commission Merchants, No. 25 Beekman-street. Terms, 6 months.

52 sides sole leather, B. A., 644, 26½	$170 66
Inspection and cartage	90
	$171 56

Evidence was also introduced by the defendant, tending to show that when HOWE brought the boots and shoes now in controversy to the defendant in Boston, he showed the defendant said agreement and thirty or forty of the bills sent him by the plaintiffs of the above form, except in omitting in some of them the words, "terms, 6 months," and that the defendant, *after reading the agreement and looking over the bills*, made advances to HOWE on the goods, believing that HOWE owned them.

Decision.—On these facts the court held—

I. That the bills of parcels which were sent from time to time with the merchandise did not change the terms of the written agreement under which the property was sent to HOWE. They were sent only as memoranda of the amount and value of the merchandise transmitted.

II. The agreement was not a contract of sale. The true interpretation of it seems to be that it was an agreement by which HOWE was to manufacture the stock of the plaintiffs, and to receive from them as his pay

therefor, the proceeds of the sales of the goods, when manufactured and returned to them for sale, deducting the value of the stock and a commission of five per cent. on the sales.

Such being the construction of the bills and the contract, it follows that the defendant had no valid title to the property as against the plaintiffs, and the plaintiffs are entitled to judgment.

Negotiability of Rail-Road Bonds.

Bonds transferred as security for Pre-existing Debts.—In the same volume of Gray's Mass. Reports, (13 *Gray*, 7,) we find reported the case of Culver and others *vs.* Benedict, which was a bill in equity filed to obtain possession of nine bonds of $1,000 each, issued in Indiana by the Logansport, Peoria and Burlington Railway Company, and payable to bearer.

Facts.—On the trial it was proved that the plaintiffs, being owners of the bonds in question, delivered them to one Edward Soley, (a broker in New-York city,) to procure a loan on them for the plaintiffs and for no other purpose. That Soley thereupon, and without any right or authority, delivered the bonds to the defendant, Benedict, as security for pre-existing debts due from Soley to Benedict, instead of using them as directed by the plaintiffs. The agreement between Benedict and Soley was made in New-York. But eight of the bonds were (pursuant to that agreement) delivered by Soley to Benedict in Massachusetts, and the other one was delivered in Connecticut.

Decision.—On these facts the court held—

I. These securities more closely resemble promissory notes payable to bearer. They are put in circulation and pass from hand to hand by delivery, and are thus bought and sold in the stock market, no formal transfers being required, and interest is paid thereon to whomsoever demands the same, upon presentation thereof, or the coupons attached thereto. Hence the right of the defendant, Benedict, to retain these securities as against the plaintiffs must be decided upon the same principles as if they were negotiable notes made payable to bearer. That such is the character of these bonds is also settled by legislative enactment.

II. None of these bonds were transferred to Benedict in the State of New-York, but eight of them were delivered to him in Massachusetts and one in Connecticut. *The transfer must be dealt with as a Massachusetts contract, under the circumstances disclosed.*

III. By the law of Massachusetts the receiving of a negotiable note in payment of a pre-existing debt, as collateral security for the same, excludes all the equities between the original parties thereto. Of course it must be taken in good faith and without notice of anything to impeach its validity as a just debt. Hence, on the facts disclosed in this case, the defendants' title to these bonds is perfect. Judgment was, therefore, given for the defendants against the plaintiff.

Such were the main propositions decided by the court in this case. Had, however, the court held that this was a New-York contract, (the contract to transfer having been made in New-York,) they must have reached a different final conclusion. For in New-York it is well settled

that a party taking a negotiable security in payment of, or collateral to a *pre-existing debt*, holds the security subject to all the equities between the person from whom he receives it and the original owner. This, it seems to us, is the more equitable doctrine. The party who takes the security on a *pre-existing debt*, actually parts with nothing for the security, and is, therefore, in no way damnified if compelled to re-deliver such security to the true owner. Such, too, is the law, we believe, in Connecticut, and we do not quite understand why the transfer of the one bond in Connecticut was not held to be a Connecticut transfer, and construed accordingly.

Insurance.

Life Insurance.—The action of Taylor *vs.* Ætna Life Insurance Company, (13 *Gray*, 434,) was brought to recover the amount claimed to be due under a life insurance policy. The policy was on the life of Andrew Taylor, for seven years from the 11th of April, 1855, in the sum of $700, payable "within ninety days after due notice and proof of the death of said Andrew Taylor, if within the term of this policy," with a condition that the policy should be void if the said Taylor should, without the consent of the company, endorsed upon the policy, pass beyond the settled limits of the United States, or certain of the British Provinces, or west of the Rocky Mountains.

Annexed to the policy was a license, of the same date, from the company, by which, in consideration of an extra premium, said Taylor was permitted "to pass by sea, in first-class decked vessels, from any port of the United States north of the thirty-ninth degree of north latitude to and from any port bordering on the Pacific Ocean, and to reside in California," and also "to pass to and from California *via* Chagres and Panama, or by the Nicaragua route."

The *defence* made was—*First.* That no affidavit or certificate of the *attending physician*, as to the circumstances and occasion of the death of Andrew Taylor, was ever furnished to the defendants, although the plaintiff was informed, at the time he gave the notice and furnished certain other proofs of such death, that the defendants held such certificates or affidavit to be essential, and that until furnished the proof would not be considered complete nor the loss payable. It is admitted that the ship's physician was present and attending during the sickness, and at the time of the death of said Taylor; and the plaintiff offers no excuse for not furnishing such certificate, except the inconvenience and expense of sending to the Pacific coast to obtain it. *Second.* The other defence was, that the said Andrew Taylor was on board the steamship Sierra Nevada "*as a steerage passenger.*"

Decision.—The court held that neither of the above was a defence to the action. The substance of the opinion is as follows:

I. By the terms of the policy the sum insured was payable in ninety days "after due notice and proof of the death of Andrew Taylor." Such notice and proof were therefore prerequisite to the maintenance of this action. It is, however, admitted in the case that there was no defect in the proof of said Taylor's death, unless, in order to constitute due proof thereof, it was necessary to produce a sworn certificate of the phy-

sician who attended the deceased in his last sickness. The ground taken by the defendants is, that such certificate is a requisite and essential part of the preliminary proof of the death, and made so, not only by the terms and reasonable intendment of the contract contained in the policy, but also by their own usage and understanding, and the usage and understanding of other life insurance companies.

To support this ground of defence, the defendants have introduced (the plaintiff's counsel consenting) a pamphlet issued by them, which they were accustomed to give to claimants on their policies, and which, it is admitted by the plaintiff, was given to him by the defendants at the time when he presented to them his proof of ANDREW TAYLOR'S death. Under the head of "proofs of death required," that pamphlet contained, among other required proofs, the following: 1*st.* A certificate "*from the physician who attended the party* during his last sickness, stating particularly the nature of the disease, its duration and the time of death." It was also a part of said required proof that the certificate "should be sworn to before a magistrate or other officer qualified to administer an oath or affirmation." But in all this we can find no defence to the action. *The policy does not embody nor refer to any by-law, requisition, usage or understanding of the defendants as to the kind of proof which they should require of the death of* ANDREW TAYLOR. Whatever, therefore, might be such by law, requisition, usage or understanding, the plaintiff would not be bound thereby. He is bound only by the policy itself, and that is, to furnish "*due proof*" of the death. If the defendants would have bound the plaintiff by their by-laws, &c., they should have made them a part of the contract contained in the policy. 2*d.* No authority was cited which sustains the position that ANDREW TAYLOR, by taking passage as a *steerage passenger*, failed to conform to the license given to him by the defendants to pass by sea in first-class deck vessels, of which the steamship in which he took passage is admitted to be one. And the court do not know, judicially or otherwise, that life is less safe in the steerage than in any other apartment of a vessel.

Mutual Insurance.—In the last volume of the New-York Court of Appeals Reports, (21 *N. Y.*, 158, LAWRENCE *vs.* NELSON,) we find a case which decides that a member of a *mutual* insurance company, upon its insolvency, cannot, in an action brought against him to recover the amount of his premium note, set off a loss sustained by him on his policy, and adjusted before the company failed. This decision is an interesting one, as showing a characteristic difference between contracts with a *mutual* insurance company and all other contracts. For example: It is of course evident that if A. owes B., and B. owes A., the two accounts would be set off, the one against the other, in an action brought by the assignee of one of them. So, also, should a stock insurance company fail with an unpaid loss, owing A., in an action brought against A. by the receiver of the company to recover any sum due from him, A. would clearly be entitled to set off his loss against the claim of the company. But in a *mutual* company, where the action is brought to recover the amount of the premium note, no such claim would be an offset, for the reason that the *insured* is also an *insurer*—each sufferer is bound to *make* compensation as well as to *receive* it. As the court says, in its opinion, "The members of the association vir-

tually agree to insure each other, and provide a common fund (by giving these premium notes) to indemnify in case of loss. As all have contributed to this fund, they have a community of interest in it; and each member having his proportionate share of the losses, is entitled to his proportionate share of the profits, if any are realized." Thus, the court adds, "when the assets of the company are inadequate to the payment of the losses of all its members, the effect of permitting a sufferer to set off his loss in full against his premium notes, (which are his contribution to the means of the company,) is not only to confer a benefit without making compensation, but to take from the shares of his associate sufferers in the common fund—to which fund he and they are ratably entitled."

Tolls on Rail-Roads.

The People of the State of New-York vs. *The New-York Central Rail-Road.*—It will be remembered that this action was brought a year or more ago by the Attorney-General to recover about five millions of dollars for past tolls, and to establish the liability of the defendants to pay tolls for an indefinite period hereafter. The case was tried at the Orange County Circuit, and resulted in the dismissal of the complaint. An appeal was then taken by the Attorney-General to the general term of the Supreme Court, which was elaborately argued at Poughkeepsie by Attorney-General Myers, for the plaintiff, and Messrs. Paige & Tremain, for the defendants, and now the unanimous decision of the court on this appeal has just been pronounced, affirming the judgment of dismissal rendered at the circuit. This mode, therefore, of replenishing the State Treasury, has thus far proved unsuccessful. The case will, however, be taken to the Court of Appeals, but we cannot believe that any different conclusion can be reached by our court of last resort.

The facts upon which this claim is based are very simple. The defendants are a corporation formed under the act of April, 1853. Previous to their organization under this act, they existed (as is well known) as several separate companies, each under its own charter. Part of these companies, by their charters, were required to pay tolls on all property transported by them, and others were required to pay toll only during canal navigation, and others not at all. The act of 1853, under which they were all consolidated, made the defendants subject to all the liabilities of the several companies, and also subject to the liabilities imposed by the general rail-road act of 1850, one section of which act required all corporations formed under it, and whose roads were parallel to and within thirty miles of any State canal, to pay tolls on freight. On the 10th of July, 1851, however, an act was passed abolishing tolls on rail-roads after December 31st, 1851, and repealing all acts and parts of acts inconsistent with that act. This provision the defendants set up as their defence to this action. The plaintiffs, on the contrary, insist that the act of 1851 was unconstitutional and void, because these tolls formed "part of the revenues of the State canals," and that by the constitution the legislature is prohibited from selling, leasing or otherwise disposing of the canals, or their freight or their revenue. The point, therefore, at issue is, whether or not this act of the legislature abolishing tolls is unconstitutional. Or, in other words, the plaintiff must make out, before

his claim can be considered established, first, that these rail-road tolls are a part of the "revenues of the State canals," and second, that the constitution forbids the impairing of these revenues.

The Supreme Court has held, as we have said above, that this act of 1851 is not unconstitutional, and that the defendants, therefore, are not liable to pay tolls. The question now will have to be passed upon by the Court of Appeals, and hence we shall not produce here the opinion of the Supreme Court. We have had the pleasure of reading a very able argument on this question, by the Hon. CHARLES P. KIRKLAND, of New-York, who was a member of the convention which framed the constitution, and, therefore, particularly able to judge of the intention of that body in inserting those clauses upon which the argument of the plaintiffs' counsel is based. It seems to us that he has demonstrated very clearly that there is no foundation whatever for this claim; that the words of the constitution will not grammatically admit of any such construction; that the language used was well understood by the constitutional convention and the then State officers, (this is clearly shown by the documents called for by and presented to the convention,) as meaning simply the canal tolls and water-rents, and that the sentiment of the convention forming the constitution was absolutely opposed to the policy of tolling rail-roads, and that it could not, therefore, have intended to have fastened such a system forever on the State. We trust there will be no unnecessary delay in presenting this case to the Court of Appeals for its decision.

CHAINS BY MACHINERY.

In New-York a company has been organized with a capital stock of $1,000,000, for the purpose of manufacturing chains of every description, with machinery, the invention of G. G. DENNIS, Esq., who has spent thirteen years in perfecting it, and has now sold his invention to two companies for the sum of $300,000. The New-York company proposes to locate their works, which will be 400 feet in length by 80 in breadth, at Bristol, R. I.

The machinery will be driven by three steam-engines, the largest of 200 horse-power, and will be capable of working up 1,000 tons of bar iron per month into chains of every size and description, from the heaviest cable down to the smallest dog chain.

Mr. DENNIS has three different machines, adapted to the manufacture of small, medium and heavy chains; the largest will weigh about six tons, and will require the aid of only one man to turn out the heaviest cable chain. He has also got up improved machinery for making rings and shackles. It is not probably generally known that the immense amount of chains used in this country are nearly all imported. The persevering efforts of Mr. DENNIS to perfect machinery by which an article so extensively consumed here may be manufactured in this country in successful competition with the cheap hand labor of Europe, entitles him to much credit as a mechanical engineer.

COMMERCIAL PROGRESS IN EASTERN ASIA.

By PERRY MCDONOUGH COLLINS, *Commercial Agent of the United States for the Amoor River.*

I. RUSSIAN SETTLEMENT OF THE AMOOR. II. STATISTICS OF PRESENT COMMERCE AND NAVIGATION OF THE AMOOR. III. MODES OF CONDUCTING COMMERCE BETWEEN THE AMOOR AND THE CENTRAL PROVINCES. IV. CLASSES OF FOREIGN MERCHANDISE REQUIRED FOR CONSUMPTION IN ASIATIC RUSSIA. V. NATIVE PRODUCTIONS ADAPTED FOR EXPORT. VI. IMPORTANCE TO RUSSIA OF COMMERCIAL AND TELEGRAPHIC COMMUNICATION BETWEEN THE AMOOR AND CENTRAL PROVINCES. VII. EXTENT AND NATURE OF THE AMOOR REGION, MONGOLIA, MANCHOORIA AND EASTERN SIBERIA. VIII. COMMERCIAL AND BOUNDARY TREATIES BETWEEN CHINA AND RUSSIA.

AT about the epoch of the accession of the present Manchoo dynasty (1642) over China, the hardy Russian exiles, gold-diggers and fur-hunters, led on, probably, by some daring Cossack, who had emigrated, either with or without his own consent, to the head waters of the Amoor, began to extend their hunting and fishing excursions, mixed, perhaps, with a little freebooting, along the shores of the Amoor to the east. Most probably the whole course of the Amoor to the sea was well known to these hardy pioneers, and that some trade was even had with the Kamchadales.

The boldness and audacity of these Nerchinsk hunters soon brought them into conflict, upon the southern shore of the Amoor, with the constituted authorities of the Manchoos; for their appropriating propensities did not always allow them to distinguish, with the precaution of good neighbors, between the absolutely wild herds of deer and elk and the half-wild herds of cattle, horses and camels of their Manchoo neighbors. Serious conflicts soon took place, and complaints were made to the supreme authority of China against the marauding Russians. The progress of these free hunters of the Nerchinsk was, however, so rapid and so successful, that fortified camps or towns began to be established upon the north shore of the Amoor, several hundred miles in advance of imperial Russian title to the soil.

Escaped convicts, desperate and hardy adventurers, with the riff-raff of a convict, Cossack and mining population, joined heartily in the fortunes of these new and distant settlements, where Russian power and law for the punishment of crime had not yet reached.

The Russian government unquestionably sympathized with these enterprises on the high-road to the Pacific, and was willing enough to let them go on, watching its own opportunity to make them legitimate.

CAM-HI, a Manchoo, coming to the throne of China about this time, saw plainly enough, that if the Russians were not promptly restrained but little of the vast territory of the Amoor would remain to China. He accordingly set on foot an expedition to drive the Russians from their comfortable quarters at Albasin, which was the chief point of Russian strength.

The Albasinians, finding they were to have serious trouble, perhaps a bloody conflict with organized Chinese troops, repaired to the Russian authorities of Nerchinsk, after the example of Yermack to the Emperor, to hand over to the government all the newly-acquired territory and posses-

sions, together with themselves, on condition of receiving aid to repel the expected Chinese troops—the Russian government granting a full and free pardon to all of her subjects found upon the Amoor who had taken a hasty leave of absence on their own authority.

The two governments were thus soon brought into armed conflict, but CAM-HI's soldiers were too numerous on the Amoor; Albasin capitulated, the Russians retired within their stipulated borders, and the Chinese power ruled supreme on the whole line of the Amoor to the sea; and not long afterwards Chinese embassadors, escorted by a numerous and well-appointed army, with a train of artillery, presented themselves before the gates of Nerchinsk, and constrained GOLOVIN, the Russian embassador, to conclude a treaty, by which Russia abandoned all claims to the Amoor country, or navigation upon its waters. Since that day, 27th August, 1689, up to about 1853–4, the commerce and military operations of Russia to the east, towards the shores and coasts of the Ohotsk, Kamschatka and her American possessions, have been conducted by an immense detour to the north, by way of Yakutsk to Ohotsk or Ayan, and thence distributed, the furs returning to Kyachta and St. Petersburg over the same road. Thus for near two centuries has Russia awaited patiently the development of her power and the right opportunity to seize upon the Amoor and hold it.

Up to the close of 1860 we have reliable information of the following steamers and steamships either navigating or preparing to navigate the Amoor and its approaches: AMERICA, MANCHOOR, JAPANESE, sea-going, built in the United States; two river steamers, LENA and AMOOR, constructed in Philadelphia, iron, shipped and set up at the Amoor; one on private account, at Boston, and two at San Francisco. The Russian government built two at Shilka, over two thousand two hundred miles by the course of the Amoor and Shilka rivers from the sea, and steamed them to the Straits of Tartary. The Russian government has also partly organized a force of ten small courier or mail steamers, which are to keep up postal and military communication along the whole course of the Amoor, Shilka and Ingodah rivers, and connect with the Chinese and Siberian system of overland communication at Irkoutsk.

The Amoor Company (Russian) have had constructed in Europe one steamer, sea-going, and five river steamers. The Russian American Company has two sea-going steamers which visit the Amoor where the headquarters of the company for the Pacific is now located.

From the fact that Nicolivsky, the port of the Amoor, is a military post, and not a commercial port, under custom-house regulations, no exact return of merchandise entered can be given. The papers, manifest and bills of lading of vessels are handed over to the captain of the port, and by him retained until they sail. There being no custom-house, or duties, the value of cargoes stated cannot be relied upon, because it is the policy of merchants frequenting the Amoor to conceal as much as possible from rivals the nature and extent of cargoes taken there for sale.

In 1856, first year of foreign intercourse, only two foreign ships entered the Amoor—both American. In 1857 seven merchant ships arrived in the Amoor, with cargoes amounting to 500,000 silver roubles. In 1858 four ships entered with 805 tons freight for government, and merchandise amounting to 174,650 silver roubles, including 72,444 roubles in

value of Russian production. In 1859 thirteen foreign merchant ships arrived at the Amoor. The total traffic from foreign countries and from the upper Amoor, amounted to 1,090,714 silver roubles; at Nicolawsky, from the upper Amoor, 140,114 silver roubles, while the total import and export amounted to 1,230,829 silver roubles.

The port of Nicolivsky has 2,183 male and 369 female inhabitants. There were forty-nine government houses and two hundred private residences, besides twenty-seven government houses uninhabited. There were twelve stores, of which five were American, making in all two hundred and eighty-eight houses.

Among the inhabitants were 1,518 military, of all grades, with their wives and attachés.

In 1859 there were seven foreign merchants, five of whom were Americans.

In 1860 the amount of merchandise received was greater than the previous year, though the sales, owing to temporary causes, had not been so profitable. One American house had withdrawn, but three others had been added. One of the Amoor Company's steamers had ascended the Amoor, but to what point it is not stated.

The number of vessels entered is not stated, but supposed to be ten to fifteen.

Again, in regard to the commerce to the Amoor in American bottoms, we can get no returns of clearances from American ports, because, with but two or three exceptions, vessels intended for the Amoor have cleared for "ports in the Pacific," consequently, the true returns are not to be had.

In the figures given above we have only a partial statement of the actual value of commerce at the Amoor. The great probability is that the transactions of the government in the purchase of machinery, naval stores and provisions, nor the commerce of the Russian-American Company, are included. During 1856 and 1857 fully 700 barges and rafts descended the Amoor from the Trans-Baikal province of Caston Siberia, freighted with munitions, provisions, merchandise and live-stock. The most of them for government account, but the Russian-American Company and private parties had some share in the expedition.

The Amoor is formed by the junction of the Schilka and Argoon, in 121° 40′ E. L., and 53° 30′ N. L., and, after a very tortuous course of two thousand miles, falls into the Straits of Tartary, in about 140° E. L., 53° N. L. The Amoor is navigable for steamers its whole length.

The winter is severe, but not much more so than Moscow, or in equal degrees of latitude on the Volga. The natural floral and cultivated productions of the country indicate a good grain, fruit and grass country, being also well adapted to the rearing of flocks and herds.

The province of Trans-Baikal, (Eastern Siberia,) which lies in part upon the head-waters of the Amoor, viz., the Schilka and Argoon, contains a population of 340,000, and is the chief source in Eastern Siberia from whence the Russian government procures its silver; the mines are rich and extensive. These mines are, however, worked only by the government, but it is reported that they are soon to be opened to the public.

The Amoor is free from ice, and navigable from May to November, which will compare favorably with the navigable season at St. Petersburg.

There is plenty of time and plenty of water, with properly constructed steamers and barges, or keel-boats, to conduct the commerce, during open water, to such points upon its head-waters as convenience and experience may decide upon, where the overland conveyance will be ready to distribute it to the remotest points of the interior. During the winter all the return produce of the country will be concentrated at these dépôts, ready for shipment to meet the sea-going vessels arriving at tide-water in the spring, and thus the commerce will be regularly and conveniently conducted much on the same plan as at St. Petersburg.

To what extent, or how advantageously this new field of Oriental Asiatic commerce is to be occupied by Americans, depends upon the sagacity and nerve of our merchants.

At first the commerce to the Amoor will be most profitably conducted by sailing vessels; barks of two hundred and fifty to three hundred and fifty tons burden being, in my opinion, the best fitted for that trade. Schooners of one hundred to one hundred and fifty tons may also be employed, for special voyages to Japan, China or San Francisco. Vessels should be of good beam, and not more than ten to twelve feet draft.

Upon the Amoor there should be two classes of steamers: 1st. Side-wheel, of three hundred tons, with a draft of six feet. These would navigate to the mouth of the Zea, or about two-thirds of the distance, and may, in the early summer, reach the head of the Amoor. 2d. Stern-wheel steamers, having twenty feet beam, one hundred and thirty to fifty feet long, with four to four and a half feet hold, and ample power. These steamers would reach the head of navigation, and place their cargoes at available points, from whence sledges, wagons and pack-trains would distribute them throughout the interior of Siberia and Tartary.

Steamers on the Amoor are absolutely necessary to its commercial development. We cannot look, at first, to the immediate shores of the river for any large development of commerce; it is to the Siberian and overland trade from whence we are to reap the first great results. This can only be accomplished by a regular, certain and well-organized system of steam navigation throughout the whole length of the Amoor, Schilka and Ingodah rivers. Dépôts of merchandise must be established, at points upon the head-waters of the Amoor, where the Siberian, Chinese and Tartar tradesmen may resort at all times, and where they may, beyond peradventure, find a full supply of such commodities as they desire. There must be no failure in the supplies on hand at these dépôts, because Moscow, Nijne, Navgorod, St. Petersburg, Pekin and Irbit are at great distances, and a failure of supply on the Amoor would be the loss of a year's supply to the trader, and consequently he would loose faith in the Amoor, and seek other marts for his supplies.

The kind of merchandise at first introduced must conform to the choice of experienced Siberian and Northern Chinese merchants. As we progress, we may introduce new articles and more extensive varieties, as well as to manufacture for them goods of such exact pattern, finish and style as they may order, which will become a very important branch of commerce.

By penetrating at once to the head of the Amoor, we tap a regular, well-established and systematic commerce, both Asiatic and European, a commerce that has been conducted with great success and much spirit for a long time. Here we may take our stand and build upon a sure

foundation. The increased development and extent of this commerce depend much upon the class and calibre of merchants who initiate it; they must neither be wanting in mind or in dollars. It is a wide field, and a distant one; its cycle is a year, consequently patient capitalists only can enter it with any hope of success.

The lower Amoor and Manchooria are not to be forgotten; but, as they are on the high-road to Siberia, and always within our grasp as we are passing along with our well-freighted steamers, to supply them is a very easy matter.

The favorable and enlightened policy of the Russian government has already given us free trade for five years, and Count MOURAVIEFF, who is the father of the annexation of the Amoor to Russia, is in favor of a prolongation of this liberal policy; in fact, the progress and importance of Russian interests in Asia, under Count MOURAVIEFF'S administration of the government of Eastern Siberia, has given him great power and influence, and his views are very likely to prevail.

As evidence of the importance that Russia attaches to her new possession upon the Pacific, we have only to mention the fact that the government is now constructing a line of telegraph, which is to connect St. Petersburg with the mouth of the Amoor and other points upon the Pacific coast, and along the whole northern border of Chinese Tartary. The line will be in operation this year as far as Omsk, in Western Siberia, one-third of the distance from St. Petersburg to the Pacific; in another year it will reach Irkautsk, or probably Kyachta, and so on, in the course of the third year, we may expect it to reach the ocean.

The project now on foot, to tap the Russian line at the Amoor, and carry a line of telegraph *via* BEHRING'S Straits, to unite with the California overland line, will give us telegraphic union with Europe; in fact, with the whole world. Nor is this project so difficult, upon investigation, as it at a first glance appears; the climate presents no impediment, and there is but forty miles of ocean to cross.

The extent of country opened to commercial contact through the Amoor is a matter of interest.

The valley of the Amoor covers from west to east about 40° longitude, and north to south about 13° latitude, probably nearly a million square miles of territory, with a population of some five millions.

Mongolia, Songaria, Northern and Central Tartary, cover a vast extent of territory, six hundred miles wide by two thousand long, with a population of probably ten millions.

These people are rich in cattle, sheep, horses and camels; a barter of merchandise for their hides, skins, pelts, wool, hair and tallow would be large and lucrative.

Eastern Siberia, which would be tributary to the commerce of the Amoor, is also a vast country, covering a million of square miles, with a population of two millions to three millions of European blood.

This immense country is dependent, to a great extent, on Europe and China for its fabrics of cotton, silk, flax and wool; to estimate the value of commerce on the specific supply and demand is quite impossible from present data. We know that the Kyachta tea trade has developed a commerce of fifteen to twenty millions of dollars per annum; what amount of European merchandise Siberia consumes we have no precise knowledge, but we may safely put it at ten millions.

The fair supposition is, that every inhabitant will consume six yards of cotton cloth yearly, and we only put this as an illustration of the value of commerce in one single item, which must govern us in making up the future of this commerce. This would give us 102,000,000 yards of cotton cloth, worth, delivered, certainly ten cents a yard, amounting to $10,200,000.

A very reasonable and important question to be answered is: How are we to be paid for what these people want? Where are the millions of hard dollars to come from out of this wild and distant country, to compensate or equalize this commerce?

To begin with Siberia: she is the California of Russia; her mineral wealth is absolutely beyond any reasonable array of figures. She exports to Russia about $15,000,000 of gold yearly; need more be said?

She has copper, plumbago, tin, silver, marbles, iron, salt, bitumen and precious stones.

She has hemp, flax, furs, skins and peltry, wool, tallow, wax, honey and ivory.

She has tar, pitch and turpentine. All these are elements of wealth, and the contact of an extra-territorial commerce, proffering articles of necessity, convenience and luxury, must excite her population to make an exchange.

Mongolia and Tartary have their skins, pelts, wool, camels' hair, hides and tallow. To these must be added Thibet musk, Bucharian rhubarb, pearls and precious stones.

What can be the amount of these articles that these people will have for export? I do not know—but one item I can suggest. Mutton is the chief article of diet, and I suppose, from my own experience and a knowledge of Tartar appetite, that three sheep *per capita* per annum to the whole population would be a very reasonable allowance. Here we have thirty millions of sheep skins, with the wool included, as one item of the production of this country.

Manchooria and the Amoor river country comes next; here foreign commerce has, up to within a very recent period, been absolutely excluded. It is only since Russia has made this eastward step that outside barbarians have been permitted to look into this country. While Mongolia is strictly a pastoral country, Manchooria is both agricultural and pastoral; yielding, besides, all the more northern grains, corn, rice, silk and ginseng.

Heretofore the commerce of this country has been, of necessity, all directed towards Pekin and Corea; but may we not hope that in a contact along the whole northern border of the Manchooria that a very large and lucrative commerce can be introduced? Like the Mongols, the Manchoos have abundance of cattle, horses and sheep, but having bread, their diet is not so strictly carniverous as the Mongols.

The Manchoos have, however, many fine furs, beside the skins and pelts of wild animals.

The wilder portion of the Amoor country, which now belongs to Russia, that is, all north of the Amoor River, and all east of the Ousuree, from its confluence with the Amoor, and following the Ousuree to the south through Lake Hinka, and on to the border of Corea, forms again a distinct subdivision of this part of Asia, in extent covering, probably, not far from 300,000 square miles. This country has an aboriginal popu-

lation of some sixty thousand; what the Russian and Manchoo population may be is difficult to state with any degree of certainty.

The Russian government has already commenced a system of colonization both from Europe and Siberia, and is actively engaged in fortifying its approaches seaward, and in planting military posts and opening post-roads in order to protect the frontier and afford facilities for certain and rapid overland communication at all seasons of the year.

The demand for foreign commerce is of course restricted to mere necessity, and to the actual population of the coasts and borders of the river, because, as yet, steam has not succeeded in presenting to the upper and distant populations stores of merchandise to save them the necessity of the overland, European and Chinese supply.

This country is rich in fur animals, the rivers abound in fish, and gold is found in the mountains to the north of the Amoor. The forests, both upon the Upper and Lower Amoor, are fair and abundant, with ample resources for naval stores and timber for all economic purposes.

The island of Sak-ha-lin, opposite the mouth of the Amoor, abounds in extensive deposits of coal suitable for steam vessels, accessible and already worked by the Russian government.

The steady and onward progress of the present Emperor of Russia, ALEXANDER II., in ameliorating the condition of his people, and in encouraging internal commerce and communication, will open a vast field to American enterprise and commerce.

The Mouravieff-Igoon Convention, ratified by the Ignatieff-Pekin treaty, has annihilated all of those ancient border restrictions against free intercourse between the Chinese and Russians.

Under this treaty, merchants and traders may freely cross the frontier and establish themselves in such towns and cities as they choose, the police authorities being specially directed to protect them.

This liberal policy will give great stimulus to the Siberian and Amoor merchants, and must lead to the introduction of European and American merchandise and manufactures into the interior of the whole length and breadth of Tartary.

We have also a recent ukase of the Emperor, granting to foreigners equal privileges with the native Russian merchants in all parts of the empire. This ukase will explain itself, is one of great liberality, and must lead to most important results, opening, as it does, this vast empire to the merchants and bankers of the world.

On the 7th–19th July, 1860, the Emperor addressed to the Senate the following ukase:

"The Imperial manifest of the 1st January, 1807, has set certain restrictions to the commercial rights of foreigners established either permanently or temporarily in Russia. Now with the improvements introduced in the means of communication, and the rapid development of the international commercial relations, said restrictions do not agree any longer with the necessities of the present times. On the other hand, the principal European powers allow our subjects, as in general to all foreigners, to carry on commerce in their countries on the same terms as their own subjects.

"Taking into consideration the useful influence that would result to all branches of public wealth by an extension granted to the facility of profiting by use of foreign capital in all kinds of enterprises, and desirous

to give, at the same time, a new proof of our particular solicitude for the general prosperity of trade, agriculture and of industry in the Empire, and show, at the same time, a just reciprocity towards foreign powers, we have thought proper to grant, in this respect, to foreigners residing in Russia the same rights as our subjects enjoy amongst the principal European nations.

"Consequently, and in accordance with the opinion of the Council of the Empire, we decree:

"1*st.* It is allowed to foreigners to inscribe themselves in all the guilds of merchants in like manner as the subjects of the Empire, and to enjoy all the commercial rights that those guilds give to Russian merchants. (*Art.* 77, *à* 107 *du reglement sur le commerce, tome xi., du corps des Lois, de* 1857.)

"*First Observation.*—The foreign Israelite subjects, known by their social position and by the great extent of their commerce, who arrive from abroad, can, according to the order established—that is to say, on a special authorization each time by the Ministers of Finance, of the Interior and of Foreign Affairs—trade in the Empire and establish banking-houses on procuring a license of merchant of first guild. It is also allowed them to establish factories, buy and take on lease real estate, according to the resolution of the present ukase.

"*Second Observation.*—The commercial rights granted to Asiatics are resolved by the articles 227 to 233 of the commercial regulations. (*Tome xi., corps des Lois, edition de* 1857.)

"2*d.* The safety of the domicil and of the magazines of foreigners, as well as of the lands that appertain to them, are placed under the protection of the common law; no search can be made in their dwellings, nor in their commercial books, but in accordance to the regulations prescribed in such cases to Russian subjects of the same condition.

"3*d.* Foreigners can acquire—be it by purchase, be it by inheritance, legacy, donation, concession of the Crown, etc.—all kinds of movable and immovable property, with the exception, however, of that which the hereditary Russian nobility and foreigners who have obtained the right can alone possess in virtue of laws in force.

"4*th.* Foreigners, with the exception of Israelites, can direct, under title of clerk, inhabited lands, if they have the procuration of the proprietors to that effect. It is also allowed them farms, according to agreements allowed by the laws, real estate occupied, and of any other kind, inhabited or not, by conforming only to the condition and restriction imposed upon the subjects of the Empire. (*Code Civil, livre iv., cest. iii., ch.* 2.)

"The Senate will take the necessary measures for the execution of the present.

"ALEXANDRE."

In order to make this subject more readily comprehended by our readers, we annex in full the report to the House of Representatives in February last. It is one of the most important commercial subjects of the day.

SURVEY OF THE NORTHERN WATERS,

Coasts and Islands of the Pacific Ocean, &c.

Mr. John Cochrane, from the Committee on Commerce, made the following report, February 18, 1861:

The Committee on Commerce, to whom was referred the memorial of Perry McD. Collins, asking the aid of Congress, in order to make a thorough exploration and survey of the coasts, islands and seas of the Russian possessions, both in Asia and America, from the mouth of the Amoor River, in Asiatic Russia, to the confines of the Russian possessions in America, adjoining the possessions of Great Britain, in view of the construction of a line of telegraph, which shall unite the city of New-York, in the United States of America, and consequently the whole of the United States, Canada and the British possessions in America, with not only London, but with all the great capitals of Europe and Asia, respectfully report: That the committee have had under consideration the said memorial, and, after mature reflection and a study of the importance of the proposition, have been deeply impressed with its great value to commerce.

In the first place, what is it that Mr. Collins proposes?

"The telegraphic union of Europe with America, overland, *via* Asiatic Russia and Behring's Straits."

Can this be accomplished? Let us see.

It is already known to practical working telegraphists, that high latitudes add to rather than retard the electric current. During snow-storms the escape of electricity over the common wire and pole telegraph is essentially diminished; thus, while rain and moisture are good conductors, snow, ice and a dry, cold atmosphere are good non-conductors or insulators; consequently, high latitudes are favorable to the free and rapid passage of the electric current.

But in this connection we do not have to depend upon theory alone to substantiate the truth of the foregoing proposition; we have existing lines of telegraph stretching from Berlin to Vienna, from Vienna to St. Petersburg, from St. Petersburg to Moscow, and from Moscow eastward to Perm—all to the north of 47°, and as high as 60° north latitude. Here, then, we have positive and irrefragable proof of the practicability of telegraphic communication in very high latitudes.

Being satisfied that telegraphic communication can be successfully maintained in high latitudes, we will, in the next place, inquire as to the country over which it is proposed to construct this line, in view of its practical maintenance.

It is well known, that from Moscow to Kamschatka the Russian government hold absolute sway, and have a continual system of overland communication, absolutely free from interruption, so far as the inhabitants of the whole intervening country is concerned. There is not on the whole line a single hostile tribe or nation. The absolute, the peaceful, the patriarchal sway maintained by the imperial government over this vast extent

of country might be a profitable, a humane and a practical study of our own government in the control and government of the red tribes inhabiting the great interior of our own country, from the borders of Missouri to the Sierra Nevada Mountains and the Pacific Ocean.

The accompanying papers indicate more precisely the different routes by which it is proposed to reach the American shore. Therefore, we do not propose to examine them in detail. We will not refrain, however, from expressing our conviction, in view of all the difficulties, physical, mechanical and experimental, that the route which involves the least amount of submerged cable should take preference. Up to the present time experience has proved that submerged cables of any great length are, practically, of no value for telegraphic purposes. Without going into lengthened or tedious detail, we have sufficient evidence of the truth of this proposition, not in isolated or unimportant cases, but in gigantic and costly efforts to unite continents.

First in time and place were the efforts to unite Europe and Africa, next Europe and America, and lastly Africa and India. All these great schemes have failed, apparently from physical difficulties; for if science, ingenuity, hardihood and indomitableness ever gained a victory by their united efforts in a great cause, we certainly should have had, ere this, telegraphic communication nearly around the earth. We all know the history of the Atlantic cable, and of other long, deep-sea cables, but perhaps the facts in regard to the Suez and Kurachee cable, or, as it is more familiarly known, "the Red Sea cable," because quite recent, may be instructive.

The British government, being very anxious to establish telegraphic communication between her own insular shores and her far-off Indian possessions, determined either to construct or to encourage to be constructed submerged lines from England to Gibraltar, from Gibraltar to Malta, thence to Egypt and overland to Suez, from whence a cable was to stretch along the bottom of the Red Sea to Aden, along the Arabian coast to Muscat, and thence under the Arabian Sea to the mouths of the Indus.

This gigantic work was to place Bombay, Calcutta and Singapore in the immediate and visible presence of the Foreign Office, where, in peace or in war, by night or by day, secured from friend or enemy, from accident or design, the premier and viceroy could hold council over the destinies of India, six thousand miles distant.

Under tenders to the British government a company was formed, with a capital of £1,000,000, for the construction of the line from Suez to Kurachee, in India. Five per cent. interest per annum was guaranteed by the government for fifty years upon the capital; provided, only, that the company expended the money in good faith, whether the cable proved permanently a working telegraph or not. These were the best terms the government could get; the contract was made, and the cable has been submerged; it worked for a short time, and then, like its great predecessor, the Atlantic cable, ceased to speak.

Very recent accounts tell us, that after every effort upon the part of the most able and efficient practical telegraphists, like the Atlantic cable, it has been abandoned to the fishes, and remains only as another gigantic monument to the perseverance and liberality of the English government and nation in works of public utility and national import-

ance. Thus we perceive that, up to the present time, some ten thousand miles of deep-sea submerged cable has been lost or abandoned, costing, in the aggregate, not far from ten millions of dollars. We therefore consider, that without some new plan by which a telegraph can be constructed, or the application of some new principle in electricity by which the known difficulties can be overcome, Europe and America must remain as far asunder as if electricity had never been discovered, or MORSE, WHEATSTONE, AMPHERE and SIERNENS never had lived.

But must mankind, by the intervention of the Atlantic Ocean, be forever barred from the advantages of this agent? We hope not.

Mr. COLLINS has, we think, demonstrated the practicability of the construction of a telegraph line from Moscow to the shores of the Pacific Ocean. Here he was compelled to pause in the personal inspection and exploration of the proposed route, for want of adequate means to cross to the American coast. We perceive, in tracing the route over which it is proposed to construct this line of telegraph, that there are many elements of success in it, besides the fact that no very large bodies of water obstruct its pathway.

The Russian government is now engaged in pushing forward a line to the East, which has already reached Perm, one thousand miles east of Moscow, and is to be continued to the mouth of the Amoor. This line, with its system of lateral branches, unites the whole of Europe, taps the Caspian provinces of Russia, Circassia, Georgia, Persia and British India, and, consequently, whatever telegraphic connection may exist between Europe and Africa.

Penetrating eastward through the extensive mining districts of the Ural, it leaps from town to town and city to city, until Omsk is reached, from whence a branch will penetrate to the frontier of Chinese Tartary and Kokhan, on the route of the great central caravan trade, vibrating through that immense country between Persia on the west and Manchooria on the east.

Pausing for a few moments at this point, we should take at least a hasty glance of a country which may in a few years figure as one of interest. Russia has been steadily pushing at this point to the south, until she has touched, as it were, British India; not that she has as yet joined territory, but that she has tapped Indian commerce. Turkistan to the west, Thibet to the south, Bucharia, Koko-Nor and inner Mongolia to the east, all combine to make this *southern central wedge*, driven by Russia into the very heart of *Central Asia*, a point that must eventually gather around it an extended and lucrative commerce.

This *central gate* of *inner Asia*, through which the whole commerce of a vast and populous country must flow, is renowned in history as the pathway of nations—the only practicable pass between Eastern and Western Asia as a central route. Through this *gate* the Great Mogul, GENGHIS, led his victorious hosts, under the banners of a thousand chiefs; where OCTAI and TIMOUR followed, and where MARCO POLO saw an Asiatic Italy, rich in fruits and vines, wines and silks, and all the marks of wealth and luxury.

The approach of Russia to the centre of *Northern India* is really a matter of interest to the civilized world, because it will evidently open that hitherto sealed country to the knowledge of the world and to commerce. It is only a little to the south of the point gained by the late

Russian-Chinese treaty that the great pioneer in Asiatic exploration, MARCO POLO, passed, on his way to the court of KUBLAI KHAN.

Yarkand is but five degrees south of the Russian post of Varnoë. MARCO POLO describes the countries through which he passed on the line of Casgar, Yarkand, Hoton and Pein. He says: "That these countries contain many castles and cities; that the people, besides much merchandise and manufactures, have fine gardens, vineyards and orchards, with a good supply of silk, and all necessaries in great abundance; cotton is also grown, and the artisans are most skilful; they have also many precious stones."

In fact, MARCO POLO's description of the countries passed through in these *central* regions make them quite a second Italy in climate and productions.

The province of Hoton alone is estimated to have (now) a population of two millions and a half. It is through this country, which is, as it were, a gate, in consequence of the approach of the Altai chain of mountains from the north and the Himalaya from the south, without uniting, that an easy passage is found from Eastern to Western Asia, and may be compared, physically, in some respects, as a means of communication with the Gila route, in traversing our continent.

At the Gila the Rocky Mountains have been broken down, while the Sierra Madre have not yet raised their formidable barriers. Now, suppose the Atlantic side had a population of some three hundred millions, and the Pacific side two hundred millions, even without rail-roads or steamboats, one could very readily conceive that there would be a very large commerce between the two sections through this pass, even if it had to be carried on the backs of animals, or even of men. But with the hardy Bactrian camel, a train of which is nearly equal to one of our great freight trains on a rail-road, the commerce would of necessity and naturally be very considerable. Such is the gate of *Central Asia* now.

The most southern outpost of Russia in this section is in about 43° north latitude, and 78° east longitude; Yarkand is 5° southwest; Samerkand, Kokan and Bucharia west by south; on the high caravan route to Persia *via* Yarkand, Saddak and Cashmere, you reach Cabul; while through Hoton and Murgen the Koko-Nor is reached on the navigable waters of the Ho-ang-ho.

Saddak, it must be remembered, is on the waters of the Indus, and consequently on the high road to British India, and only 8° southwest of the Russian frontier. A glance at the map of Asia will at once show the importance of this gate; and if Russia should will to set up a great national fair there, an Asiatic Nijne-Novgorod would soon spring into existence.

It is not necessary to follow very closely the route proposed to be traversed by the main trunk line of telegraph; we see that it follows along the great post and caravan route, reaching from Moscow to the heart and centre of Russo-Chinese commerce at Kyachta, about four thousand miles to the east.

After leaving Omsk, we have found many towns and cities besides Irkoutsk, the capital of Eastern Siberia, at which point concentrates the commerce of a vast country. Irkoutsk holds the keys and unlocks all that is to the east for the west, and all that is to the west for the east—a beautiful city, half barbaric, half Asiatic, where refinement and the

civilization and the energy of Europe have met, subdued and utilized the fierce hordes of the Steppes.

From Irkoutsk to Kyachta, and from Kyachta to Pekin, Nankeen, Shanghai, Amoy and Hong Kong, seems to be the natural route, all by land, which shall place China, from the great wall to the sea, all under magnetic influence.

From this, *via* the Amoor River, to the shores of the Pacific Ocean, though a new field, is one of much interest; and though but recently brought to the knowledge of the country through the report of Mr. COLLINS' explorations, recent events have brought it prominently before the commercial world. By the treaty between China and Russia, concluded at Pekin on the 14th November, 1860, it is provided:

"ART. 1. Henceforth the eastern frontier between the two empires shall commence from the junction of the rivers Schilkah and Argoen, will follow the course of the river Amoor to the junction of the Ousuree with the latter. The land on the left (north) bank of the river Amoor belongs to the empire of Russia, and the territory on the right bank, (to the south,) to the junction of the river Ousuree, to the empire of China. Further on, the frontier line between the two empires, from the point of the issue of the river Sou-gat-chu, divides the Lake Hinka, and takes the direction of the river Be-lin-ho; (Tour;) from the mouth of the river it follows the mountain range to the mouth of the river Houp-i-tou, (Houp-tou,) and from thence (that point) the mountains situated between the river Koun-choun and the sea, as far as the river Thou-men-Kiang. Along this line equally the territory on the sea-side belongs to the empire of Russia, and that to the west to the empire of China. The frontier line rests on the river Thou-men-Kiang, at twenty Chinese versts (li) above its mouth into the sea."

"On the whole of the frontier line established by this treaty trade free of all duties or restrictions is established between the subjects of the two empires. The local authorities are bound to give special protection to such trade, and to those who exercise it."

Free intercourse is also extended to the citizens of both nations. Thus, at one stroke, the barrier of Chinese exclusiveness has been broken down along the whole northern boundary, and the Amoor River has been opened to free trade from its sources to the sea. This new liberal commercial and boundary treaty must soon work a wonderful change in the interior commerce of that vast country, and must make the Amoor River a great commercial highway.

Tributary to this river there are many millions of people, whose trade and commerce must be vastly augmented by steam, rail-roads and telegraphs. This commerce must naturally find outlet to the Pacific through the Amoor, where our merchants may congregate, and with their ships distribute it to the markets of the world.

From the mouth of the Amoor another lateral line of telegraph is proposed, to extend to Yeddo, the capital of Japan; this is accomplished by crossing to the island of Suk-hah-lin, to Jesso, to Niphon, upon which Yeddo is situated, with about only twenty miles of submerged cable. Thus we have progressed from Moscow to the shores of the Pacific Ocean without meeting with more than the ordinary physical difficulties on great lines of telegraph, and have, in a very hasty manner and to a very inconsiderable extent, touched upon the trade, commerce,

population and resources of this vast country, yet in the main locked up from the approach of exterior contact and commerce.

We have shown how, by its own local and intrinsic merit, *this route attracts* and *attaches* to itself the whole European system of telegraphs, and also how naturally the Caucasian, Persian and Indian nations are made tributary to it; and, as we progress to the east, other nations, including China and Japan, are all, as it were, embraced in its ample folds. Having, therefore, as we conceive, annexed Europe, Asia and Africa, we have yet America to reach, in order to encompass the whole earth.

From the mouth of the Amoor, in order to reach America, there are several routes proposed. Whichever may be the most practicable should be most unquestionably selected. We do not propose to enter into any lengthened argument for or against any of the particular routes; but we have come to the conclusion that until the route *via* BEHRING'S Straits shall be, upon full and fair investigation, pronounced impracticable, to be the route to which we should give our attention. By this route submarine cables are dispensed with, except at one point—the crossing of the straits—and then only to the extent of forty to sixty miles, which may be divided into shorter sections by using islands lying in the straits.

The advantage of this route over all others is so patent, in view of the necessity upon any other line of long submerged cables, that it has only to be stated to be at once fully appreciated. We do not, from all the light before us, believe that the physical difficulties in the way are of such a nature as to be insuperable, though they may be very great. Our greatest apprehension arises from the presence of savage tribes along a portion of the route as you approach BEHRING'S Straits, over which, as yet, the Russian government has not exercised absolute control. This objection may, however, be very materially modified when we come to know, by actual contact, how far these tribes are to be controlled, even without force.

It is not apprehended that any unusual stubbornness or difficulty will be encountered, not incident to most of the red tribes, both in America and Asia However, the cause is worthy of the trial; and until it is known that they cannot be controlled sufficiently to permit the passage of a telegraph through their country, we shall be in favor of the attempt.

It is not considered that on the American side much difficulty will be encountered, except in a portion of British Columbia; but it is to be hoped that the importance of the object in view will bring sufficient power to bear upon the difficulties to be overcome as to dissipate them all.

What are the probabilities and the prospects of the ultimate success of an overland telegraph to unite Europe with America? Let us see: In the first place, we have come to the conclusion that it can be done; and, in the next place, it is infinitely more practicable and likely to succeed than by any other route or mode yet suggested. In fact, we have come to the conclusion of its entire practicability, and that it only is a mere question of how much will it cost, and can it be made to pay as an investment? In an international, in a commercial, in a political, in a utilitarian point of view, it soars above all mere questions of cost, of profit and loss, of dollars and cents. It is one of those great works which very properly commends itself to the attention of all governments, because its value or importance cannot be measured by a mere money standard.

If it were possible, we think that the commercial nations of the world should unite in its construction, and donate it to progress and civilization. But as such a plan would be impracticable, the next thing to be done is to encourage the construction of it by private parties by all the means at our command.

Already, while we are writing, the work of progression is busy at both extremities; Russia is constructing her line eastward across the Urals, while the United States is engaged in pushing to the west over the Rocky Mountains and to the shores of the Pacific. Thus these two opposite forces are constantly diminishing the intervening space, and solving most effectually all doubts and difficulties as to the possibility of telegraphic communication overland between America and Europe.

Telegraphs, tending ultimately to unite America with Europe by the overland route, *via* BEHRING'S Straits and Asiatic Russia, are in progress of construction on both sides; Russia is determined to build her line to the Amoor, while the contract made by Colonel HIRAM SIBLEY with the United States government, to construct a line to California, insures a line from the Mississippi to San Francisco. Nor is this all; a line is in course of construction from California to Oregon. Consequently it will be perceived that there remains only the intervening space on the American side from Oregon to BEHRING'S Straits, some seventeen hundred miles, and on the Asiatic side from the Straits to the mouth of the Amoor, some two thousand two hundred miles, in all, say about four thousand miles, to complete the circuit of the earth. It would seem a small matter to fill up this intervening gap, when we take into consideration the immense interests involved.

We have already seen many millions of dollars expended in experimenting with long deep-sea cables, upon theory alone, in order to unite distant continents. It certainly looks to be but a small affair, to carry out this plan of connecting the Old with the New World, when we see that success is certain with our present knowledge of working telegraphs, and at a less cost than was incurred in laying the Atlantic cable.

Four thousand miles of land telegraph is no very great distance, when we see what has already been constructed and in progress of construction in America and Europe. The California overland line will be two thousand miles long, and will be constructed for about three hundred and sixty thousand dollars. In fact, the proposed line from Oregon to the mouth of the Amoor can undoubtedly be built for less than the Atlantic cable cost.

There are now in Europe some one hundred and fifty thousand miles of telegraph, and in America fifty or sixty thousand miles, producing a revenue of probably ten millions of dollars annually. Unite all these lines, and make them subsidiary to the great world-encircling telegraph, and it must become one of the most lucrative investments possible.

If this line should be finally constructed, it leaves nothing more for human enterprise to achieve in telegraphic communication, except to fill up gaps and construct lateral lines. It will encompass the earth over a route formed by nature, and to which there can be no rival. It accomplishes every thing, satisfies every interest, penetrates into every nation and country, pervades the whole earth.

Aside from telegraphic communication, there are other interests which would be materially benefited by this exploration and survey.

The Amoor is now open to free trade. A number of American ships and merchants have been attracted there already by its rising commerce. A number of steamers and steamships have been built in the United States, either for commercial purposes or connected with its rising fortunes as a Russian colony.

Again, in view of establishing steam communication between San Francisco and China by way of Japan, Hakodadi might become an intermediate station, which would rapidly augment American commerce in the North Pacific and adjacent coasts and seas; consequently a more thorough survey and knowledge of those remote coasts and islands would be highly advantageous to commerce. And, in this connection, a thorough search for the most favorable points from whence a supply of coal for steam navigation could be obtained would not be neglected. Coal is found on the Fox islands, on Jesso and Suk-hah-lin.

Our Pacific whaling fleet, of which more than a hundred sail frequent the more remote coast and waters of the North Pacific, would be vastly benefited by such survey as the one proposed. Shipwreck and loss of life would be lessened by a better knowledge of those waters, which consideration should, if uecessary, argue in favor of the proposed survey.

As to Russian America, so little known to our commerce (because of the exclusive grant to the Russian-American Company of its trade and commerce, internal and external) heretofore, we are likely, on the expiration of their grant, in 1862, to have a commerce also in that direction, when it will also be highly advantageous to have a better knowledge of its coasts and waters.

Under all the circumstances of the case, and in view of other benefits to be derived from the exploration and surveys as proposed by Mr. Collins, the committee recommend an adequate appropriation by Congress, in order to carry out successfully the views of the petitioner, and for that purpose report a bill.

Society of the Amoor.—The Society of the Amoor (*Amourskaïa Kompania*) is established in order to promote and develope commercial and industrial activity in the basin of the Amoor. To this effect, the society propose to establish commercial relations with the native inhabitants in the basin of the Amoor, in order to furnish them with all the objects they may desire, in exchange for skins and other products of the chase, or of their fisheries, and to provide the Russian colonies with all necessaries and other useful commodities; to carry on commerce, interior and exterior, through the ports of the Pacific Ocean, except upon the northwest coasts of America, the Allutian and Curile islands, which are reserved by an exclusive grant to the Russian-American Company until 1862; to found establishments and manufactures to develope the indigenous products of the country; to undertake to furnish various objects to the local authorities throughout the whole of Eastern Siberia; and to keep and maintain on the Amoor and its affluent, the Schilkah, steamboats and sailing vessels. * * * * The capital of the society is fixed, at first, at four millions of francs, divided into four thousand shares, of one thousand francs each.

COMMERCE WITH AFRICA.

TRADE IN IVORY AND BARWOOD—CAPE LOPEZ—TOBACCO PLANTATIONS—SUGAR CANE—COTTON.

Explorations and Adventures in Equatorial Africa; with Accounts of the Manners and Customs of the People, and of the Chase of the Gorilla, the Crocodile, Leopard, Elephant, Hippopotamus and other Animals. By PAUL B. DU CHAILLU, *Corresponding Member of the American Ethnological Society, of the Geographical and Statistical Society of New-York, and of the Boston Society of Natural History. With Eighty Engravings. Octavo, pp.* 531. HARPER & BROTHERS, *New-York,* 1861.

THE work of M. CHAILLU has created considerable excitement among the *savans* and *litterateurs* of London and Paris. He is somewhat known in New-York, having been long enough here to be sufficiently known and appreciated as to become a member of two leading societies in this city and of one in Boston. In London the writings of M. CHAILLU have been violently and repeatedly attacked by the *Athenæum* and other critics, while he is defended warmly by others; and this war has not yet ceased, nor his integrity as a man fully established. But giving a fair degree of credence to his work, we find much in it to claim the attention of the merchant and trader, and no slight materials for the earnest consideration of the philanthropist and statesman.

M. CHAILLU professes to have travelled extensively over the region of Africa included in the delta bounded on the north by the river Nazareth, which enters the sea in latitude 0° 41′ S. and longitude 9° 3′ E., and on the south by the Fernand Vaz, which falls into the sea in latitude 1° 17′ S. and longitude 5° 58′ E.

The internal trade with the natives is not direct between the foreign trader or the coast native merchant, but is carried on through various tribes having a limited territory on the rivers. Thus, a number of "middle-men" enforce a tax upon the export of native products, in the shape of commissions or profits upon each article. Thus, a piece of ebony or ivory, belonging originally to a native in the far interior, is intrusted to a dealer in the next tribe below; he, in turn, to the next chief or friend: and so ebony, ivory or rare woods pass through a dozen or more hands before it reaches the factory of the trader on the coast. Each of the tribes assumes to itself the privilege of acting as a go-between or *middle-man* to those next to it, and charges a heavy per centage or profit; and no infraction of this rule is permitted, under penalty of war. (Page 34.)

The far interior tribes are kept in ignorance of the high prices obtained for their products on their receipt at the coast trading points, and are compelled to submit to a loss of 75 or 90 per cent. in the net proceeds, and then take their pay in foreign coarse manufactures. All direct intercourse between the coast and the interior tribes is discouraged, and all possible obstacles thrown in the way of communication between the trader and the first source of supply. Upon the arrival of a ship, the captain is informed, that "never was there such a dearth of ivory," or whatever the captain may want; "never were the interior tribes so obstinate in

demanding a high price, never was the whole coast so bare, never were difficulties so great." "There have been fights, captain," "and fever, captain," "and floods, captain," "and no trade at all, captain;" finally, not a tooth to be had. (Page 37.) The author says (page 40:)

"The chief product of the Gaboon country is its ivory. This is said to be the finest on the Western Coast. It produces, also, barwood, a red dye-wood, from which is obtained a dark red dye, and ebony, the last taken from the great forests of this wood, which abound near the head-waters of the Gaboon River. I have seen very large sticks brought thence, but the supply is not yet large. The barwood tree is found in great plenty along the shores of the river and its numerous tributary creeks. It is also found on the Moondah and Danger Rivers. Copal is another product of this country, but it is of inferior quality, and is not sought.

"Ivory comes down the river from the interior, by inland journeys, in great quantities. Upwards of 80,000 pounds are taken from the Gaboon River yearly, when home prices are good; for the ruling prices here are so high that traders cannot buy to advantage unless the home demand is very brisk. I suppose that the country from Banoko to Loango furnishes, in brisk years, at least 150,000 pounds of ivory.

"But, however important may be these commercial resources of the Gaboon country, I am convinced that the people will never prosper till they turn their attention more to agricultural operations, for elephants must finally disappear. This, indeed, is the great evil of all the nations of Western Africa. The men despise labor, and force their women and slaves to till the fields; and this tillage never assumes the important proportions it deserves, so that the supply of food is never abundant, and, as will be seen further on, the tribes, almost without exception, live from hand to mouth, and, with a fertile soil, are half the time in a state of semi-starvation."

One of the leading articles of export from the Gaboon country, a few miles north and south of the equator, is barwood, a red dye-wood. The continual demand for foreign fancy woods, in the American market, will require a regular supply of those that can be obtained from the interior of the Western Coast of Africa and other accessible portions of that part of the world. In fact the trade offers large inducements for the investment of capital from this country. Of the production of barwood, M. CHAILLU says:

"Barwood, as I have before explained, is a red dye-wood. It is the trunk of what the natives call the ego-tree, a large, tall, very graceful tree, with abundant branches high up, small bright green leaves, and a beautiful smooth reddish-colored bark. It is very abundant in the forests of this part of Africa. In fact, the supply may be considered as inexhaustible, the labor of bringing it to market being the most costly part of its production.

"Though great traders, these natives have no ideas about laying up a store of their products before it is wanted. This is what detains trading-vessels so long on the coast. When a vessel comes for barwood the news immediately spreads all about the neighborhood, and the men bestir themselves to get a supply down. There is great excitement among the villages; and this, particularly, if it happens that the chief of the village has friends among those to whom the captain has 'given his trust'—that

is to say, those with whom he is going to deal, and for whom he has brought goods.

"Every man immediately goes out to the forest and selects a tree for himself, which he begins to cut down. The barwood of commerce is the heart or main part of the trunk, and is red. This useful wood is surrounded by a covering of white sap-wood about two inches thick, which is useless, and is carefully cut off. Then the wood is cut into lengths of three feet, each piece weighing from fifteen to twenty pounds. The father and his children cut and split the wood and the wives carry it into the villages, and the latter thereupon claim a distinct part of the returns, which they get, though often unwillingly. Barwood is so low-priced in Europe that the natives here get but very small prices, and five dollars for a hundred billets is already a high rate. As they have to carry everything down to the sea on their backs, unless they are lucky enough to live near rivers or creeks, they have to work hard enough for the little they get."

One of the best harbors on the coast is Cape Lopez, latitude 0° 36′ 10″ S. and longitude 8° 40′ E. from Greenwich, which takes its name from the Portuguese, who formerly called it Cape Lope Gonsalvez. The bay is about fourteen miles in extent, having several small rivers which empty their waters into it at or near its base. The water is very deep near the Cape itself, and vessels of large size may sail in close to the land. The productions of this region deserve the attention of enterprising merchants. The author says:

"The region known generally as the Cape Lopez country includes all the shores of the bay, and the interior for thirty or forty miles. It has much fine land, and King Pango, if he were not a drunken vagabond, might be a prosperous king. Back from the seashore the land becomes higher and hilly, the mangroves give place to forests of palm and more useful woods, and fine prairies dot the country quite thickly. The whole of this district is given to the slave trade. It produces small quantities of ivory, ebony, wax, &c.; but the slave factory is the chief commercial establishment, and the buying, selling and transporting of slaves for the barracoons at the Cape is the most profitable business."

At Cape Lopez are found two slave factories or dépôts, one of which is kept by the Portuguese. The author narrates that upon one occasion when he was present, two young women and a boy of fourteen years were brought in for sale, and were bought by the Portuguese. The price paid for the boy was a twenty gallon cask of rum, a few fathoms of cloth and a quantity of beads. The women sold at a higher rate. Each was valued at the following goods, which were promptly paid over: one gun, one Neptune, (a flat disk of copper,) thirty fathoms of cloth, two iron bars, two cutlasses, two looking-glasses, two files, two plates, two bolts, a keg of powder, a few beads and a small lot of tobacco.

Soon after a slave schooner of 170 tons hove in sight and approached the landing, when six hundred slaves were taken off to her. (P. 180.)

The author concludes that a more general intercourse between foreigners and the coast tribes would be beneficial.

"A greater development of regular civilized trade would be a great boon to these people. Many articles, such as guns, powder, tobacco, brass and iron in various shapes, &c., have become necessities to the tribes who are within reach of white trade; but they are never obtainable in

nearly sufficient quantities, and consequently are held very precious. Now the high prices are a great temptation to the cupidity of the African, who having, by custom, rights of property in his children, often does not hesitate to sell these when other produce is lacking. He finds that one of his children is not bright, that it has no sense, or that it wants to bewitch the father. Then a consultation ensues with the relatives of the mother; they are promised a share in the produce of the sale—for they have rights also in the child—and, when they are brought to consent, the unhappy child is sold off.

"With the increase of legitimate trade such temptations will be done away with. At the same time, I am convinced that the introduction of agricultural industry, the planting of cotton and sugar for export, when these ends are accomplished, will only serve to rivet the bonds of the slave by so much as they will increase his value to the master. Now, the slave only adds to his master's ease and consequence; then, he will appeal to his cupidity. Show him that he can make a profit on his labor, and he will never consent to set him free."

Near each village, particularly near the boundaries of the forest, are large plantations carried on with industrial labor, where tobacco, peanuts, plantains, yams and sugar cane are grown in large quantities. Cotton is found growing, but not in abundance. (P. 461.)

Narcotic plants are used to excess, as is the case in Asia, Europe and other portions of Africa, as well as in America. Of the lamentable results of this poison upon the human system M. Chaillu makes the following remarks; sufficient, we think, to deter our own people from indulging in the noxious weed:

"One day during my journey I found a village in great excitement. One of the men had been smoking liamba leaves, and had run out to the forest in an insane state, and it was feared that he would be eaten by wild beasts. Such cases are not uncommon in the Ashira country. Under my own observation, afterwards, one liamba-smoker became furiously and permanently insane, and I saw many who were miserably debilitated by the habit.

"Hasheesh and the Cannabis Indica are so well known that it is not necessary to say any thing about them here. The plant is a native of Abyssinia, and Persia, and Hindostan, and is not, in my opinion, indigenous to this part of Africa. This I think, because I nowhere heard of its growing wild, and because the Ashira and Assingi, the only people I met who used it, cultivate it with considerable care. How it came hither, or how they first came by a knowledge of its qualities, I could not learn. There are among the Ashira many confirmed liamba-smokers, and the habit seems very quickly to fix itself with a fatal tenacity. Beginners I have seen fall down in convulsions from the first few puffs. Practiced smokers are seen laughing, talking, quarrelling, and acting in all respects like a drunken person. Insanity is its ultimate effect on those who persist in its use. I have several times seen men run into the forest under the influence of a few whiffs of liamba, perfectly unconscious and raving. The negroes acknowledge its pernicious effects, but yet its votaries increase, and though the plant is yet unknown to the seashore tribes, they will soon fall under its subjugation, for it is making gradual but sure advances. I never saw the leaf on the seashore, but once saw a few of the seeds in the possession of a slave in a slave factory. He was care-

fully preserving them, intending to plant them in the country to which he should be sold."

There are no doubt thousands of enterprising American merchants who are prepared to enlarge their sphere of trade in African products. The work of M. CHAILLU will furnish them much information on this subject.

TAPESTRY—ITS ORIGIN AND HISTORY.

By CHARLES TOMLINSON, Esq., *Lecturer on Natural Science, King's College School, London. Author of the "Cyclopædia of the Useful Arts."*

TAPESTRY, derived from the French, *tapis*, a carpet or table-cover, (which comes from the Latin, *tapetum*, a carpet or covering for a bed or couch,) is a name given to woven or embroidered fabrics, employed chiefly as lining or hangings on the walls of rooms or churches, and occasionally as ornamental coverings for articles of furniture, such as tables, couches, desks, &c.

Tapestry appears to be of oriental origin. Its materials were silk and wool, dyed in brilliant colors; also flax, byssus, gold and precious stones. Figures, landscapes and various ornamental devices were embroidered in the ancient tapestries, many of them apparently by hand. The embroidered curtains of the tabernacle, described in the book of Exodus, are supposed to have been worked with the needle in thread of silk, gold or wool. Embroidery and other ornamental works were extensively practiced among the Egyptians, and their figured cloths were made both by the needle and the loom. Respecting the latter, we are told that many patterns worked in colors by the loom were so richly composed that they vied with cloths embroidered by the needle. The Babylonians and other nations of antiquity were acquainted with this art, and made use of it to represent the mysteries of their religion, and also celebrate historical events. The Greeks attributed the invention to MINERVA. Shawls or hangings for the temples formed an important part of the gifts offered by devotees to heathen divinities. On these hangings the utmost care and skill were bestowed, and they were even celebrated by the poets. Thus, EURIPIDES describes a shawl on which the sun, moon and stars were represented, and which, with others containing hunting-pieces, &c., belonging to the temple of APOLLO, at Delphi, were used to form a magnificent tent. In what way the precious metals, jewels, &c., were introduced into ancient tapestry, we are not clearly informed. In the 39th chapter of Exodus there are directions for beating gold into thin plates, and then cutting it into wires for the cunning work of the ephod; and it is thought probable that the gold thread used in Egyptian embroidery was made in the same manner, and rounded by the hammer, for no trace of wire-drawing has been discovered in the ancient accounts of working in metal.

The working of tapestry with the needle can be traced, in France, to the earliest times of the monarchy. When CLOVIS and his people em-

braced Christianity, not only were the churches adorned with rich tapestries, but the very streets were curtained with them. At that time, and down to the ninth century, they appear to have been fabricated entirely by hand; but at about the latter date the loom was introduced, and shared in the manufacture, which, however, was still largely carried on by the needle, and formed the employment of females in convents and elsewhere. In the two following centuries other parts of Europe produced fine embroideries; and those of England gradually became highly prized on the Continent.

A great extension of the employment of tapestry took place in the twelfth and thirteenth centuries, when it began to be applied to private use in the residences of the nobility, instead of being reserved, as heretofore, for the curtains, palls, altar-cloths and vestments of churches and monasteries. The lofty walls of stone were no longer allowed to remain cold and naked, but were covered, often by the industry of the ladies of the family, with rich hangings, on which the heroic deeds of their ancestors were embroidered with more or less dexterity, according to the skill of the draughtsmen in design and of the needlewomen in execution. The taste for these household luxuries is said to have been introduced from the East, in consequence of the increased intercourse occasioned by the Crusades. The oriental practice of covering walls with prepared and ornamented skins, united so as to form solid leather hangings, which not only resisted damp, but were capable of high ornamentation by means of gilding, seems to have suggested the use of tapestry for similar purposes, and thus to have led to a vast improvement in the domestic comfort of many a baronial dwelling. These solid and richly embroidered curtains must have saved the inmates from many cold currents of air, while their legends imparted an unwonted appearance of life and activity to the bare walls. The eastern origin of these wall-coverings may be traced in the name Sarayins or Sarayinois, formerly applied in France to the workmen engaged in their manufacture. In the fourteenth and fifteenth centuries the Flemings, who had long been celebrated for their tapestries, carried the art to great perfection, and produced some of the finest specimens which had yet appeared. Guiceiardini ascribed the invention of tapestry to Flanders; but this could only apply, if at all, to such as is produced by the loom, and embroidery by the loom appears only to have followed when the fingers became inadequate to meet the demand for a well-known and necessary article. Among the early manufactories of tapestry were those of Brussels, Arras, Antwerp, Lisle, Oudenarde, Tournay, Bruges and Valenciennes. Those of Arras became highly celebrated; they were executed, as were most of the French tapestries, chiefly in wool, with a little hemp and cotton, but without silk or gold or silver thread. The richer and more costly kinds of tapestry were fabricated chiefly at Florence and Venice. In the sixteenth century Francis I. established the celebrated manufacture of Fontainebleau, in which threads of gold and silver were introduced into the work. This manufacture was also patronized by his successor, Henry II., who brought Italian workers to further French art. In the following century new edifices were erected for the tapestry weavers of Paris, and Flemish workmen were hired to assist them. But the work languished after the death of Henry IV. It was revived by Louis XIV., who founded a manufacture in premises which had been erected by celebrated

dyers, named Gobelin. The establishment was named Hotel Royal des Gobelins, and has attained a world-wide celebrity on account of the fine tapestries executed there, often from designs of Raphael, Guilio Romano and other Italian painters. Le Brun was at one time chief director of the establishment, and many fine productions are from his designs. This manufacture continued to flourish until the time of the Revolution, when it greatly declined. It was subsequently revived under the government of Napoleon, but never regained its ancient fame. The works executed in it were thenceforth chiefly for the use of the royal palaces, and very few were presented for general sale. Our great exhibition of 1851 presented two fine specimens from this celebrated manufactory. Both were copies of well-known pictures, the one, of Raphael's fresco in the Farnesian, in which Psyche is represented carried through the air by genii, and bearing the vessel which, at the behest of Venus, she has brought from the nether world; the other, of Horace Vernet's picture of Ali Pasha looking on at the massacre of the Mamelukes, who, at his command, were shot by his soldiers. In both these copies the general effect, as well as much of the feeling of the artists, were preserved to an extraordinary degree, considering that the process of copying was so purely mechanical.

Of the use of tapestry in England we have many brief indications in Anglo-Saxon times. Silken curtains, embroidered in gold, were fabricated for some of the dwellings of the nobility; and, in the wonderful specimen of industry known as the Bayeux tapestry, we have an evidence of the use of linen tapestry, worked with wool, in the days of William the Conqueror. This piece of needle-work is said to have been executed by his queen and her maidens, in commemoration of the conquest of England, and to have been bestowed by Matilda herself on the cathedral of Bayeux, of which Odo, the Conqueror's brother, was bishop. At one time this piece of tapestry was annually hung up in the church, where it entirely surrounded the naves, and was so kept for eight days, when it was again carefully locked up. By order of Napoleon I. the Bayeux tapestry was exhibited in Paris in 1803, and in other large towns of France; it was then consigned, not to the cathedral, but to the municipality of Bayeux. It is twenty inches wide and two hundred and fourteen feet long, and is divided into seventy-two compartments, each bearing a superscription in Latin.

Tapestry hangings were introduced more generally in the time of Eleanor of Castile, and began to be employed, also, as a covering for floors. The rich tapestry of Elizabeth's time is noticed by poets and writers of the day, and indicates an abundance which could not have been supplied by the needle. And it appears that tapestry weaving had been introduced into England in the reign of Henry VIII., and was practiced from that time with more or less success. A celebrated manufactory at Mortlake, in Surrey, produced superb hangings for the royal palaces, &c. These were hung up on frames by means of hooks, and often at some little distance from the walls, so that concealment behind the tapestry was quite possible. This arrangement facilitated the removal of one suit of tapestry and the substitution of another to suit particular occasions, such as a royal progress, when the tapestry was sometimes sent on and affixed to the walls for that special occasion. At a later period, tapestry shared in the improvements of weaving and dyeing, but became

less characteristic and interesting as its peculiar use in recording family or historical events passed away.

Tapestry work is distinguished by the workmen into two kinds, that of high and that of low warp; (*haute-lisse* and *basse-lisse;*) though the difference is rather in the manner of working than in the work itself, which is in effect the same in both; only the looms, and consequently the warps, are differently situated; those of the low warp being placed flat and parallel to the horizon, with the weaver in a sitting position, and those of the high warp erected perpendicularly, so that the weaver is in a standing position. The loom on which the high warp is wrought consists of four principal pieces, two long planks or cheeks of wood, and two thick rollers or beams. The planks are set upright, and the beams across them, one at the top and the other at the bottom, or about a foot distance from the ground. They have each their trunnions, by which they are suspended on the planks, and are turned with bars. In each roller is a groove from one end to the other, capable of containing a long round piece of wood fastened in it with hooks. The use of it is to fix the ends of the warp. The warp, which is a kind of worsted or twisted woollen thread, is wound on the upper roller, and the work, as fast as woven, is wound on the lower. In the inside the planks, which are 7 or 8 feet high, 14 or 15 inches broad and 3 or 4 thick, are holes pierced from top to bottom, in which are put thick pieces of iron, with hooks at one end serving to sustain the coat-stave. These pieces of iron have also holes pierced, by putting a pin in which the stave can be drawn nearer or set further off; and thus the coats or threads are stretched or loosened at pleasure. The coat-stave is about three inches in diameter, and runs all the length of the loom. On this are fixed the coats or threads, which make the threads of the warp cross each other. It has much the same effect here as the spring-stave and treadles have in the common looms. The coats are little threads fastened to each thread of the warp with a kind of sliding knot, which forms a sort of mesh or ring. They serve to keep the warp open for the passage of broaches wound with silk, woollens or other matters used in the piece of tapestry. In the last place, there is a number of small sticks of different lengths, but all about an inch in diameter, which the workman keeps by him in baskets, to serve to make the threads of the warp cross each other by passing them across; and, that the threads thus crossed may retain their proper situation, a packthread is run among the threads above the stick. The loom being thus formed, and mounted with its warp, the first thing the workman does is to draw on the threads of this warp the principal lines and strokes of the design to be represented on the piece of tapestry, which is done by applying the cartoon or design to be copied to the back or wrong side of the warp, and drawing the pattern on the front of the warp, the threads of which are sufficiently open to allow the artist to see the design between them. The original design by which the work is to be finished is hung up behind the workmen, and wound on a long staff, from which a piece is unrolled, from time to time, as the work proceeds.

Besides the loom, &c., here described, there are three other principal instruments required for working the silk or the wool of the woof within the threads of the warp; these are a broach, a reed and an iron needle. The broach is made of a hard wood, seven or eight inches long and two-

thirds of an inch thick, ending in a point with a small handle. This serves as a shuttle—the silks, woollens, gold or silver to be used in the work being wound on it. The reed or comb is also of wood, eight or nine inches long, and an inch thick on the back, thinning off to the extremity of the teeth, which are more or less apart, according to the greater or less degree of fineness of the intended work. Lastly, the needle is made in the form of the common needle, only larger and longer. Its use is to press close the wool and silks when there is any line or color that does not fit well.

All things being prepared for the work, and the workman ready to begin, he places himself on the wrong side of the piece, with his back towards the design, so that he works, as it were, blindfold; seeing nothing of what he does, and being obliged to quit his post and go to the other side of the loom whenever he would view and examine the piece, to correct it with his pressing-needle. To put silk, &c., in the warp, he first turns and looks at the design, then taking a broach full of the proper color he places it among the threads of the warp, which he brings across each other with his fingers by means of the coats or threads fastened to the staff; this he repeats every time he has to change his color. Having placed the silk or wool, he beats it with his reed or comb, and when he has thus wrought in several rows over each other, he passes around to see what effect they have, in order to reform the contours with his needle if there be occasion. As the work advances, it is rolled upon the lower beam, and as much warp is unrolled from the upper beam as suffices. When the pieces are wide several workmen may be employed at once.

The loom or frame on which the low warp is wrought is much like that of the weavers. The principal parts are two strong pieces of wood, forming the sides of the loom, and bearing a beam or roller at each end. They are sustained at bottom with other strong pieces of wood in the manner of trestles; and, to keep them the firmer, they are likewise fastened to the floor with a kind of buttresses, which prevent any shaking, though there are sometimes four or five workmen leaning on the forebeam at once. The rollers have each their trunnions, by which they are sustained; they are turned by large iron pins, three feet long. Along each beam runs a groove, in which is placed the *wich*, a piece of wood of about two inches diameter, and almost of the length of the roller; this piece fills the groove entirely, and is fastened from space to space by wooden pins. To the two *wiches* are fastened the two extremities of the warp, which is wound on the further roller, and the work, as it advances, on the nearer. Across the two sides, almost in the middle of the loom, passes a wooden bar, which sustains small pieces of wood, not unlike the beam of a balance. To these pieces are fastened strings, which bear certain spring-staves, with which the workman, by means of two treadles under the loom, on which he sets his feet, gives a motion to the coats, and makes the threads of the warp rise and fall alternately. Each loom has more or fewer of these spring-staves, and each staff more or fewer coats, as the tapestry consists of more or fewer threads.

The design or painting which the workman is to follow is placed underneath the warp, where it is sustained from space to space with strings, by means of which the design is brought nearer the warp. The loom being mounted, there are two instruments used in working it, the reed

and the flute. The flute does the office of the weaver's shuttle; it is made of a hard polished wood, three or four lines thick at the ends, and somewhat more in the middle, and three or four inches long. On it are wound the silks or other materials to be used as the woof of the tapestry. The comb or reed is of wood or ivory; it has usually teeth on both sides; it is about an inch thick in the middle, but diminishes each way to the extremity of the teeth; it serves to beat the threads of the woof close to each other, as fast as the workman has passed and placed them with his flute among the threads of the warp. The workman is seated on a bench before the loom, with his breast against the beam, only a cushion or pillow between them; and in this posture, separating with his fingers the threads of the warp, that he may see the design underneath, and taking a flute, mounted with a proper color, he passes it among the threads, after having raised or lowered them, by means of the treadles moving the spring-staves and coats. Lastly, to press and close the threads of the silk or yarn, &c., thus placed, he strikes each course (*i. e.*, what the flute leaves in its passing and coming back again) with the reed.

The usual widths of tapestry were formerly from two ells to three ells Paris measure; and it was the business of the ventrayeurs, or fine-drawers, to unite the tapestry into one picture, without any appearance of seam. Of late years, however, the pieces are woven of such a width that joining is seldom required, even for the largest pieces.

THE COTTON QUESTION.

I. Cotton in Georgia. II. Report of the Cotton Supply Association. III. Cotton Growing in Jamaica. IV. Supply of Cotton and Paper Material. V. Cotton in Queensland. VI. Cotton in England.

Cotton in Georgia.

Most of the Southern papers advise the planters to store their crops on the plantations and not send them to market. The *Augusta Chronicle* says:

"Why send cotton to either the interior towns or the ports? It is said that it should be ready to take its earliest chance for a market. But this is the advice of speculators and others interested in the carriage, storage and sale of cotton, and not to benefit the producer. Suppose only 150,000 bales stored in Augusta, and the blockade raised next January; it would require eight millions of dollars to move it, and as the means at hand would not be sufficient, of course the buyers would be the veriest bears, and the price go down, down, with such a supply urgently seeking market, and all to the planter's loss.

"The farmer and planter can store his cotton at a much less cost than any one can store it for him; and in fact without paying out money at all for it, and it is certainly best for him to do so, when the time of sale is so uncertain and indefinite. And as to insurance, it comes out of the producer any way, and he can have it insured at home just as well as if it were in a warehouse in town, and perhaps at less cost. He may want

advances on his crop, perhaps, but if he can get them at all, he can get them just as well while his cotton is in his gin-house and sheds. We know that in lower Georgia and the west—not so much in this region—advances are made on cotton even before it is planted."

The Cotton Supply Association.

The annual meeting of this association was held on the 11th June, in the Manchester town hall. The attendance was numerous and influential.

Mr. J. Cheetham, the president, said the present state of circumstances affecting the supply of cotton to this country, alarming as it was, did not make the arguments of this association any stronger than they were at its foundation, four years ago, though its principles might be more fully recognised now than they were at that time, by the many who then stood aloof. The leading principle of the association had been, from the outset, that this vast national interest of cotton manufacture ought not to remain in almost total dependence on one source of supply for its raw material, especially when the permanence of that source was so closely bound up with a social system liable suddenly to break down and leave us in the direst emergency. He regretted very much the indifference with which the question had been regarded among the manufacturing interest itself, as compared with the anxious attention paid to it in all circles in the metropolis. Everywhere in London the question was being asked of them, "What are you doing in Lancashire, and what is to be the result there of this crisis in the United States?" Now that the crisis seemed imminent, it was a matter for congratulation that this association had already been in existence four years, storing up information and experience that might serve to guard us from ill-considered and disastrous experiments. It was easy to report of this or that part of the world, that it was capable of supplying abundance of excellent cotton; but the point too often lost sight of was the enormous advantages possessed by the American planter. In the first place he had the pre-eminent advantage of being an Anglo-Saxon, endowed with all the skill, enterprise and ingenuity of that race. Then he had a country, the soil and climate of which were peculiarly adapted for the culture of the article, from the lowest qualities up to the very finest. He had an adequate and intelligent acquaintance with the real wants of the consumers; his own country was covered with roads, railways and navigation, so as to give him the greatest possible economy in conveying his produce to the port, and there also he met the capitalists, who gave him the means of speedy communication with all the markets of the world. What, then, were the places on the globe where we were able to contend with a competitor so highly favored?

On a review of those parts of the world whence cotton might be expected to come, it was found that, apart from the southern portion of the United States, there were only two regions possessing the very first requisite, which was labor, to employ; and those two were the West of Africa and the East Indies. Every other country possessing soil and climate fit for the growth of cotton of a quality equal and in many cases superior to that which America produced, was yet placed out of the question at present by the want of labor. And in the West of Africa, though there was labor, the people were savage, the country was desolated by the warfare of hostile tribes, and the climate, also, was fatal to

Europeans. Thus we were at present restricted to that great continent of India, which was now actually growing more cotton than any other portion of the globe. It was calculated that the annual produce of cotton in India was not less than 6,000,000 bales. We also possessed the advantage of having that country under our own government. There, also, we had abundance of free labor; there was no question of slavery to grapple with. And yet there were formidable obstacles, as compared with the position of the Americans. In the cotton districts of India there was no such man known as the Anglo-Saxon. The cultivation was in the hands of the ryot, a small farmer holding a few acres of ground, and so poor himself as to depend on bankers for his capital. When his crop reached maturity the produce was taken by the money-lender, who, of course, had great control over the price, and it very little exceeded 1¼d. or 1½d. per lb. The cotton was imperfectly cleaned, and underwent various adulterations for the advantage of the succession of dealers through whose hands it passed before it reached the English merchant at the place of export. It was worthy of remembrance, that scarcely any article exported from India had ever been brought to a satisfactory state of production, unless under European superintendence. But in India we were also without roads to the seaboard, without water communication, also, and railways were only now on the point of becoming available. Another difficulty was the understood principle of the Indian government that no land should ever be sold in fee simple to Europeans; and then there was the jealousy of the civil service against enterprising Englishmen in the interior of India, who were to this day regarded as interlopers, though an altered tone was beginning to be manifest on the part of the government. Under these circumstances, it was not surprising that Indian cotton was the worst grown in the whole world, and fetched the lowest price, so that consumers were accustomed to smile at all proposals for relying on India as a main source of supply. The movers of this association believed, nevertheless, that there was a prospect not only of increasing the Indian supply to this country, but also of elevating the quality to a level with that grown in America. The quantity received from India in the last six years was 2,974,000 bales, of which we had ourselves consumed only 266,000 bales per annum on the average, the annual excess of 230,000 being taken away to various countries on the continent. India was capable of giving us a much larger quantity than 900,000 bales, which was the amount last year. Probably we could reckon on 1,200,000 bales a year from Bombay. This association had lately been enabled to hand over the development of the cultivation of a superior quality of cotton in India to the efforts of a joint-stock company, whose chairman was his friend, JOHN PLATT, of Oldham. As soon as the season permitted, the company proposed to send out to India, as its commissioner, Mr. G. R. HAYWOOD, who had hitherto been the secretary of this association; and Sir CHARLES WOOD had placed at that gentleman's disposal the services of Dr. FORBES, who would accompany him. Mr. CHEETHAM referred again to the danger of relying exclusively on America, and pointed to the fact, that while the annual supply from the whole world, in the last ten years, had averaged only 3,984,000 bales, the annual consumption of Great Britain, Europe and America had been 3,960,000. The present price of cotton arose not so much from the actual crisis in America as from the practical knowledge that a million bales had been lost to us by the failure of the harvest.

Mr. H. Ashworth moved the adoption of the annual report of the association, which was agreed to; and the meeting was addressed also by Dr. Beke, a traveller in Abyssinia, as to the capabilities of that country; by Mr. H. Jordan, the government commissioner from Queensland; by the Rev. Mr. Arthur, who claimed pre-eminence for India as the source chiefly to be relied on for a speedy supply of cotton; by the Rev. Mr. Townsend, from the West Coast of Africa; by the Rev. Mr. Stuart, who is about to join the expedition of Dr. Livingstone; and by Mr. Heppel, the engineer of the Madras Railway.

Cotton Growing in Jamaica.

A commercial letter from Kingston, Jamaica, dated 6th June, shows that the course of events in the United States has affected trade in that island, which is greatly dependent on the northern States for its supplies of food. On another topic, viz., the cultivation of cotton, considerable interest has been developed. The writer says:

"The good to result to Jamaica lies chiefly in the question of cotton cultivation. The British, really trembling for the stoppage of supplies in the raw material, are roaming the world round to discover some new sources of supply. Now, as this island possesses as great facilities for the cultivation of cotton as perhaps any country on the face of the globe, it is not surprising that there should be a share of British capital at this critical moment—critical to the Manchester men, for it looks as if cotton no longer is king—invested in our soil. A company has been formed in England for the purpose of immediately cultivating 60,000 acres in cotton in this island. A lively interest is also being awakened to the subject in the minds of colonists, a great many of whom are thinking seriously of turning their attention to the cultivation of the great staple. I have no doubt, myself, that Jamaica is destined to be one of the future sources of supply of the raw material to the manufacturers of Great Britain."

Supply of Cotton and Paper Material.

A correspondent of the London *Daily News* says: As cotton is the all-engrossing topic of the day, and, as events are likely to prove, the all-important one, will you allow me to call your attention to another place in the British possessions where cotton and paper material are obtainable? South Africa, which is now known to be a fibrous region, produces an indigenous plant, belonging to the armyllidea family, which possesses a mass of the finest fiber, and which, when dressed, could be used for spinning and weaving purposes, and the residue worked into halfstuff and shipped to this country as a substitute for rags, (duty free,) and used as material for paper-making. There is a large quantity of this now obtainable, but it is so prolific and capable of propagation that, by cultivation and due attention, millions of tons could be produced, as I find by calculation that if the yield was only one ton per acre, a piece of land, say 500 miles square, would produce the almost incredible quantity of one hundred and sixty million tons, at the same time capable of producing five times the quantity per annum. Royal letters patent, under the great seal, were

granted in 1847 for the application of this production for textile and paper purposes, but owing to the then abundant supply of cotton from America, and the demise of Mr. CROMPTON, the eminent paper-maker, little has been done practically in the matter, though samples of the cotton have been exhibited in the Exchange of Manchester, and live samples of the plant introduced to most of our national institutions. Sir WILLIAM HOOKER, Professors QUEKETT and BENTLEY, and other eminent scientific judges, eulogize highly the qualities of the fiber, Professor QUEKETT using the following striking language: "I would particularly call your attention to the cotton bulb, the silky filaments of which are no doubt capable of being converted into the most delicate fabrics." With the aid of Kaffir and other native labor, and the improved agricultural implements science has given to the world, there is little doubt but that South Africa could supply as much of this cotton and paper material as Great Britain could consume.

COTTON GROWING IN QUEENSLAND.

Mr. M'MILLAN, having completed his purchase of a cotton farm on the Calliope River, had departed to take possession and commence active operations. He has taken with him a number of cocoanuts, to plant on the shores of Port Curtis. Mr. M'MILLAN arrived from Victoria to commence cotton-growing in this colony. He intends to begin operations at once, employing, if possible, native aboriginal labor. In this kind of labor, however, he says he has not much confidence, and hopes soon to have a draught of coolies on his land. He has to direct his attention chiefly to Sea Island cotton, and "trusts before twelve months are passed to become a public creditor to the amount of several sums of £10 each, for bales of good marketable cotton fit for the English manufacturers." Mr. M'MILLAN has evidently the most abundant confidence in them, and with good reason no doubt. He rates the population of Brisbane soundly for their sloth and apathy, but for which he says they might have developed a large cotton-growing interest years ago. Mr. M'MILLAN goes in strongly for coolie immigration, without which he seems to think there will be little cotton or any other cultivation in Queensland.—*Australian and New-Zealand Gazette.*

COTTON IN ENGLAND.

From the investigations of the Cotton Supply Association of the Manchester Chamber of Commerce, and of individual persons well competent to form an opinion upon the subject, it appears that in the British colonies there are larger spaces of territory, more eligible climates, a greater amount of cheap labor for the production of the raw material of the chief manufacture of the mother country, than there are in any other portions of the earth. India or Australia, it is said, could, under conditions, alone supply our markets; large quantities of cotton could be obtained from our stations in Southern Africa, and the western coast of that continent could quickly rival the United States in the cotton export trade. * * * * * * *.

The political complications of the United States may, however, produce

the most disastrous results in 1862. We have already enumerated the vast resources for cotton supply which are even now at our command.

There is yet time to render them more productive, and we have had fair warning. We do not care again to refer to the consequences to be dreaded from a real dearth of cotton in our markets. One good consequence is to be anticipated from the present alarm; it will destroy for ever the monopoly of the United States, and will convert our manufacturers to the judicious policy of free competition among many markets.—*Westminster Review.*

SHIP TIMBER AND ITS VARIETIES.

By Robert Murray, *Engineer Surveyor to the British Board of Trade.*

I. Acacia. II. Alder. III. Birch. IV. Box. V. Cedar. VI. Chestnut. VII. Cypress. VIII. Hornbeam. IX. Lignum Vitæ. X. Maple. XI. Mahogany. XII. Poplar. XIII. Sycamore. XIV. Walnut.

We propose to describe a few species of timber trees, of minor importance to the builder, but still useful for many purposes of construction.

Acacia is of small dimensions, seldom exceeding two feet in diameter, but when used in house-carpentery is very durable. It is harder, tougher and more elastic than the best oak. It is a valuable timber for tree-nails for ship-building: also, for posts and rails for fences, in which capacity it is very enduring.

Alder.—The wood of this tree lasts a long time under water, which renders it valuable for piles, water-pipes, &c. It has a close texture, a fine color, and works well under the plane, which makes it a favorite with the cabinet-maker. The best charcoal for gunpowder is made from this wood. When burned in the open air, 1,000 lbs. of the ashes yield 65 lbs. of potash.

Birch.—This wood is hard but not very durable. It is chiefly used for making cheap furniture and for firewood.

Box is a valuable wood, being very close-grained, hard and heavy, and cuts very clean under the chisel or graving-tool, being, therefore, used almost exclusively by the wood-engraver. Being susceptible of a fine polish, it is much used by the turner, mathematical instrument maker, &c. It is also very durable.

Cedar (*Cedrus pinus*) grows to a great size; the timber is resinous, of a reddish-white color, light and spongy in its texture, easily worked, but apt to shrink and warp if great attention be not paid to the seasoning. It was much valued by the ancients for its durability and preservative properties. The wood is odoriferous, and admirably adapted for joiner-work, being light and easily worked. Although a resinous wood, it contains but a small quantity of that substance. It resists the attack of insects.

Cedar, Indian, (*Cedrus deodara,*) is also a very large tree. The wood is very compact, highly impregnated with resin, and possessed of a hard and fine grain. Its durability, when exposed to the weather, is very great; some bridges constructed of it in India have lasted for five hundred years. It is much used by the Hindoos in their buildings.

Chestnut (*Castanea*) has been already mentioned as a very excellent timber for building purposes. The horse-chestnut, on the other hand, is a soft, inferior wood, of but little strength or durability. It resists moisture, however, and may be advantageously used for water-pipes under ground.

Cypress is a fine-grained wood, remarkable for its great durability and its freedom from injury by worms or insects. Owing to this property it was employed in Egypt for mummy-cases.

Hornbeam is a hard, heavy, tenacious wood, very close grained. It is much used for cogs of wheels and other engineering purposes, where the material is exposed to friction.

Lignum Vitæ is a very hard, dense wood, much used by millwrights and turners; its chief use, however, is for the sheaves of blocks. It is also employed by the engineer for lining the sockets of shafts, which are found to revolve in it with little friction and wear.

Lime, though a highly ornamental tree, and growing to a great size, is not of much value for its timber, which is soft and light, and deficient in strength and durability. Being close grained and smooth in its texture, however, it is well adapted for carving and cabinet-work.

Maple is a clean, white wood, prized for its lightness, and is used by the turner for making dishes, bowls and trenchers, and by the joiner for common furniture. As it is not liable to warp or split, it is readily stained to imitate mahogany and other woods.

Plane.—The wood of this tree much resembles the beach. It is used by the joiner and cabinet-maker, but is not remarkable for strength or endurance. It keeps best under water, and is used in America for quays and other marine works.

Poplar.—The wood of this tree (of which several kinds are grown in this country) is much used by builders for floors, especially as it does not easily split by driving nails into it, and it has the property of not readily catching fire. When used for this purpose, however, it requires from two to three years seasoning, as it shrinks much in drying.

Sycamore, when kept dry, is durable, but is readily attacked by the worm. It is a species of maple, and is possessed of similar qualities.

Walnut is one of the most valuable of English timbers. The wood is solid and compact, easy to work, not liable to crack or warp, and handsome in appearance; it is, therefore, much used for the better class of furniture. The screws of presses and gun stocks are generally made of it. The black Virginia walnut is the most prized. It prefers hilly, calcareous soils.

Willow is a soft, smooth, light wood, of little value; but, if kept dry, it will last a long time in situations where much strength is not required.

Yew was principally used of old for the making of bows, and is now a favorite wood with turners, from the smoothness and toughness of its grain, and from its taking a high polish. It sometimes attains an extraordinary bulk. At Gresford, near Wrexham, there is a yew 29 feet in circumference at a little distance below the branches; and in Dibden churchyard, New-Forest, there is a yew tree measuring 30 feet in girth at the ground, while others, of large size, occur at Iffley, Hampton Court, Dorly-in-the-Dale, Tisbury and other places. When found growing in churchyards, they may be generally reckoned as coeval with the church itself.

The weight or density of a timber is, in general, a sure index to its strength, the densest wood being at the same time the strongest and the most durable. The oak, as well as all other timbers, varies in its specific gravity, according to the soil which produces it, the density mainly depending upon the length of time occupied in the formation of the wood. Those trees which grow fast, from being located on moist, sandy soils, never produce such strong timber as others of slower growth. It has been found by experiment, that the bottom part of the trunk, with the corresponding branches, is denser and stronger than the upper part of the same tree. Those trees, which are suffered to complete their full term of growth before being cut down, have their heart-wood throughout of the same weight and strength, taking a cross section of the trunk at any one place, whilst those that are felled prematurely are found to possess these qualifications in the central portion of the wood only, which is then considerably harder than that immediately surrounding the sap-wood. In trees which have been overgrown, on the other hand, the central portion of the wood is the weakest, the process of natural decay always commencing in the heart of the tree. It is a common thing to see the heart of some fine tree (blown over by the wind, perhaps,) which, to an untrained eye, looks perfectly sound and flourishing, to be already disintegrated by the spreading filaments of the dry rot, which have attacked it so soon as its vigor began to flag. The age at which oak timber is at its prime is generally supposed to be from eighty to a hundred years, although this depends, as we have before explained, upon the nature of the soil on which it is grown. The weight of good oak timber is about 60 lbs. in the green state; and, when seasoned, about 50 lbs. If the seasoning is carried beyond this by artificial desiccation, the strength of the timber is impaired.

The decay of wood by the growth of fungus, denominated dry-rot, may be traced to the putrifying of the sap, when this has been left within the pores of the timber in the same condition as it exists in the living tree. The various means which are employed to arrest this destructive fermentation are, either to wash out the sap by long soaking in water aided by the action of the sun; to dry up the sap, either naturally by exposure to the sun and wind, or artificially by baking, or by heated currents of air; or else by injecting into the pores of the wood some metallic salt, to combine with the albumen and render it insoluble, or some antiseptic substance to preserve the vegetable tissue. The processes of natural seasoning and artificial desiccation, being those most in use for the preservation of ship-timber, will be found amply described in the article Ship-Building; also, the best mode of creosoting, although the latter process, from the increased inflammability and the strong smell it imparts to timber, is scarcely applicable to the building either of ships or houses. For the preservation of railway-sleepers and other wood-work out of doors, which is not particularly liable to danger from fire, the creosoting process has been proved to be most valuable. Its efficiency depends, in a great measure, upon the mode of operation, and the quantity of creosote injected into the timber, which should be done under pressure in a closed cylinder. The process is most applicable to fir and other soft woods, which should imbibe at least seven pounds of the creosote oil per cubic foot; oak imbibing not more than two or three pounds, even under a pressure of 120 pounds per square inch. This substance

seems to act, firstly, by coagulating the albumen; secondly, by furnishing a water-proof covering to the fiber of the wood; and, thirdly, by preventing the putrefaction of the sap by its antiseptic properties.

The various processes for the preservation of timber, by the absorption of metallic salts, have all more or less failed in practice, and are now very generally abandoned. These are known by the names of the inventors, as RYAN'S, MARGARY'S, BURNETT'S and PAYNE'S processes. The object sought by each of the three first of these methods was to coagulate the albumen in the capillary tubes of the timber and thus prevent or retard the putrefaction of the sap. RYAN used chloride of mercury for this purpose, dissolving, at first, one pound of the salt in four gallons of water; but as it was found that the wood absorbed about six or seven pounds of this costly salt per load, more water was added to lessen the expense, until the solution became so weak as, in a great measure, to lose its effect. This process has, therefore, been entirely abandoned. The salt employed by MARGARY was sulphate of copper, which, being much cheaper than chloride of mercury, could be used as a stronger solution. Its efficacy, however, has proved doubtful in many cases, while in not a few instances it has failed altogether. Better than either of the preceding is Sir WILLIAM BURNETT'S plan of injecting a solution of chloride of zinc, in the proportion of about one pound of the salt to four or five gallons of water. This process is still in use, and has certainly proved beneficial in a great many cases, but it cannot always be relied upon. PAYNE'S process consisted in the successive injection of two substances in solution; the first, a metallic or earthy solution, and the second, a decomposing fluid; the consequence being, that the capillary tubes of the timber became filled with an insoluble substance. The process of creosoting timber, already referred to, was first patented by Mr. BETHELL, in the year 1848. One great advantage of creosoted timber is, that it perfectly resists the attacks of marine worms and insects, as well as the white ant of India, which is more than can be said for timber prepared with solutions of metallic salts. Even that prepared with corrosive sublimate (as in RYAN'S patent) has no immunity in this respect, the albumen appearing to neutralize the poisonous property of the salt.

For ship-building purposes such chemically-prepared or "salted" timber is scarcely to be recommended, as it attracts much moisture and is very destructive to the metal fastenings. Empyreumatic oils and resinous solutions, although these certainly render the wood impervious to moisture, and preserve the iron or metal bolts from oxidation, are still very objectionable from the increased inflammability which they impart to the structure. The time necessarily required in preparing the wood with the preservative substance is also a great drawback to its employment in ship-building, where a delay of even two or three days, more especially in repairing, is often of serious consequence; and it should be remembered, the timber must be operated upon after it has been shaped or "converted." Timber may be very perfectly preserved from subsequent decay by long submergence in shallow salt-water, or, which is still better, in salt mud. When thus treated for a period of from ten to twenty years, the sap gets thoroughly washed out of the pores of the wood by the alternate absorption and expulsion of air or other gases caused by successive variations of temperature. It need scarcely be hinted, however, that such a mode of procedure, though sometimes

adopted in government dock-yards, would be ruinously expensive to the private ship-builder. Having pointed out the fatal objections generally attending the use of chemically-prepared timber for ships or houses, it remains to show what means can be employed (and that with tolerable certainty) for preserving the timber of these structures from premature decay. The means at our command for this purpose are summed up in the two words, "seasoning" and "ventilation;" namely, thorough seasoning or drying of the timber on shore, when this is practicable; but, by all means, good ventilation on board. If these well-known and universally approved principles were but carried out in an honest and common-sense fashion, we should hear but little of rotten gun-boats, or heavy repairs to frigates after a first commission. Though it is undoubtedly true that the closely packed timbers and double planking of a vessel of war present great obstacles to a thorough ventilation of the bottom, much may still be done by conducting currents of air down into the hold and between the timbers by means of wind-sails, or, if necessary, by fanners, worked either by steam or hand, and by so arranging the internal accommodation that there may be as little stagnation of air as possible. However well seasoned and dry the timber may be when the ship is launched, it will rapidly absorb moisture from the damp atmosphere of the hold, unless evaporation from its surface be kept up by a forced circulation of air.

It is certainly unbecoming the scientific character of the age that ships built hurriedly and cheaply, and of very inferior timber, by what are contemptuously called "slop" builders, are known to resist the ravages of dry-rot much better than the expensively and elaborately constructed ships of Her Majesty's dock-yards; nay, more, that these same "slop-built" ships, even when constructed entirely of green timber, (as they frequently are,) will last longer than a government ship built with the best seasoned oak.

The whole secret is, of course, the internal ventilation of the hold and frame of the ship. In a cheaply-built merchant-ship the timbers are spaced some distance apart, and the ceiling planks are not placed so close together as hermetically to seal the spaces between the timbers, the consequence being that good ventilation is maintained amongst the planks and timbers of the bottom and sides. Even when such a ship is built of green wood, the circulation of air is generally sufficient to season the timber in its place and prevent its decay, for the dry-rot fungus will not thrive in an atmosphere less moist and stagnant than that of an underground cellar. The shrinkage of green timber in such a case would also conduce to its preservation, by admitting the air between the ceiling planks.

These remarks are not intended to excuse the use of unseasoned timber in ship-building, a practice which should be resorted to only from dire necessity, but rather to show that if ships built of green timber can be preserved by what may be termed accidental ventilation, those built of seasoned timber should, *á fortiori*, be still more easily preserved by systematic ventilation. The action of heat in causing an upward current of air naturally suggests itself as a ready means of effecting this object on board ship. The dry-rot has been frequently arrested in a ship by thoroughly drying the timbers, holes having been previously cut in the ceiling planks to promote circulation. Yachts and other small vessels,

when not in use, may be preserved from dry-rot by hauling them out of the water in an exposed situation where the wind will get to them, keeping sky-lights and hatches open, and if a plank be removed from the bottom they are all the safer. Should they be entirely closed up, on the other hand, the dry-rot will flourish within like mushrooms in a hot-bed.

Sap-wood should always be removed from the timbers and planks of a ship, as, from its spongy texture and imperfect development, it is more liable to dry-rot than the heart-wood (besides being much weaker;) and when the dry-rot has once commenced, either in a ship or a house, it is rapidly propagated by contagion. The process of seasoning timber quickly by a current of heated air will be found amply detailed in the article Ship-Building.

Timber is bought and sold by solid measure, according to the number of cubic feet in the tree or log. The measurement of timber is therefore the operation by which these cubic contents are determined; that is, multiplying together the three dimensions, the mean length, the breadth and the depth of each log. If the log should vary much in size in different parts, then the length, breadth and depth of each of these parts must be multiplied together, and the contents of the log will be the sum of the products. When the log tapers, a mean breadth or depth is taken; the object in every case being, to attain the most correct approximation to the contents of the log. In measuring rough logs it is, however, usual to gird the log at the measuring place with a string, and then, folding the string into four equal parts, to assume this fourth part of the girth to be one side of the square area at the measuring place; which area, when multiplied by the length, will give the solid contents of the log. The arithmetical operation, simple as it is, is universally superseded by the more simple and far more correct plan of referring to published tables of contents, calculated for every foot in length of a log, and every quarter of an inch in the side of the square. Those most generally used for this purpose are in Hoppers' *Practical Measurer.*

In measuring standing timber the length is taken as high as the tree will measure 24 inches in circumference, less than which measurement is not considered as timber. At half this height the measurement for the mean girth of the timber in the stem of the tree is taken; one-fourth of this girth is assumed to be the side of the equivalent square area. The buyer has in general the option of choosing any spot between the butt-end and the half-height of the stem as the girding-place. All branches, as far as they measure 24 inches in girth, are measured in with the tree as timber. An allowance, which varies according to circumstances, is generally deducted for the bark. In oak it is from about one-tenth to one-twelfth of the circumference at the girding place; in other sorts of timber it is less. In all, however, this allowance depends much upon special agreement.

It is usual to speak of timber by the load, which means 50 cubic feet of squared timber, or 40 cubic feet of rough timber. A load of plank is dependent upon its thickness. Thus, it will require 200 square feet of three-inch plank to make the load of 50 cubic feet; therefore, the load of plank is the number of square feet of its respective thickness which is necessary to make the load of 50 cubic feet. Deals are measured according to their thickness and lengths, by the hundred, reckoning 120 to the hundred.

PRINCIPAL PLANTS AND THEIR USES.

EAGLEWOOD—BARWOOD—BRAZILETTO-WOOD—CASSIA—GUM COPAL—ACACIA.

WE are indebted for the following summary to the monthly *Chemist and Druggist*, London, 1861.—EDS. M. M.

ALOEXYLUM.—One of the two sorts of Calambac, Eaglewood or Lign Aloes, a fragrant substance, more grateful to Oriental nations than any other perfume, is the produce of the species *Agallochum*. LOUREIRO states that it consists of a concretion of the oily particles into a resin in the centre of the trunk, being brought on by some disease of which the tree ultimately dies. It is said to be stimulant, corroborant, cephalic and cardiac, and its scent is stated to be employed against vertigo and paralysis.

BAPHIA.—The dyewood, known under the name of Camwood or Barwood, is the produce of the species *Nitida*. It is stated to be employed, in conjunction with sulphate of iron, in the production of the dark red color of the English Bandana handkerchiefs.

BAUHINIA.—Fibers which are employed for the purpose of making ropes are obtained from the species *Parviflora*, *Racemosa* and *Vahlii*. A brownish-colored gum is said to be produced by the species *Emarginata* and *Retusa*. The buds and dried flowers of the species *Tomentosa* are said to be employed by the Indian practitioners in dysenteric affections. An astringent bark is yielded by the species *Variegata*, which is used in medicine, and also for dyeing and tanning leather. Various other species are reported to be employed in Brazil for their mucilaginous properties.

CÆSALPINEA.—Braziletto-wood, which yields fine red and orange colors, is said to be the produce of the species *Braziliensis*. Brazilwood, employed for dyeing red, rose-color and yellow, is stated to be yielded by the species *Crista*. Nicaragua, Lima or Peachwood, employed for dyeing red or peach-color, is produced by the species *Echinata*. The exact species yielding these three dyewoods cannot, however, be said to have been yet determined with certainty. The wood of the species *Echinata* is stated to possess tonic properties. The legumes of the species *Coriaria*, "the Libidibi, or Divi-divi pods," furnish us with one of the most astringent substances known; they are extensively employed for tanning purposes. The roots of the species *Moringa* and *Nuga* are said to be diuretic. An oil is stated to be obtained from the species *Oleosperma*. The legumes of the species *Papai*, termed Pi-pi, are employed for similar purposes to those of the species *Coriaria*, but are very inferior to them. The Bukkum, Bookum or Sappan-wood of India, used for dyeing red, is the produce of the species *Sappan*. The root known as Sappan-root, or yellow-wood, is employed for dyeing yellow.

CASSIA.—The seeds of the species *Absus* are very bitter, and somewhat aromatic and mucilaginous. They are employed in Egypt as a remedy for ophthalmia, under the title of Chichon, or Cismatan. The bark of the species *Auriculata* is stated by ROXBURGH to be employed in medi-

cine, and for the purposes of tanning and dyeing leather; the flowers are said to be used for dyeing yellow. The pulp of the fruit of the species *Fistula* (*Cathartocarpus Fistula*) possesses purgative properties, and is officinal in our pharmacopœia. That of the species *Braziliana*, which is probably only a variety of the above, has a larger, longer and rougher fruit. It is employed in veterinary medicine, under the title of Horse Cassia, and possesses similar properties. The several kinds of Senna met with in commerce consist of the leaflets of various species, but the exact species yielding some of them cannot at present be said to have been accurately determined. The species *Officinalis* var. *Lanceolata*, and the species *Obovata*, are generally considered to be the source of the Alexandrian Senna. The common East Indian, Mecca or Bombay Senna is considered by ROYLE to be the produce of the species *Officinalis* var. *Acutifolia*. PEREIRA attributes it to the species *Elongata* of LEMAIRE, while FORSKAL states it to be from the species *Lanceolata* of FORSKAL and LINDLEY. Tinnevelly Senna is said to be furnished by the species *Officinalis* var. *Elongata*. (*C. Lanceolata* of ROYLE.) These are the three kinds which are officinal in our pharmacopœias, and are generally employed in this country. Alexandrian Senna is frequently adulterated with the leaves of *Solenostemma* (*Cynanchum*) *Argel*. Nat. Ord. Asclepiadaceæ. The Asclepias, or Milkweed order, *Tephrosia Apollinea*. Nat. Ord. Leguminosæ, &c. These sophistications may at once be detected by the leaflets being *equal*-sided at their base, whereas the Sennas are all *unequal*. Tripoli Senna is stated to be the produce of the species *Œthiopica*, American of the species *Marilandica*, and Aleppo of *Obovata*.

CERATONIA.—The fruit of the species *Siliqua*, known as Carob, Locust, Algaroba Bean, ST. JOHN'S Bread, possesses a sweet, nutritious pulp, supposed by some to have been the food of ST. JOHN in the wilderness. It is said to be used in the south of Spain as a food for horses, and is now imported into this country as a food for cattle. Singers are said to chew it for the purpose of improving their voice. The seeds are stated to have been the original carat weights of the jewellers.

CODARIUM.—The fruit of the two species *Acutifolium* and *Obtusifolium*, known as Brown and Velvet Tamarinds in Sierra Leone, have an agreeable pulp, which is eaten.

COPAIFERA.—Several species of this genus, if not all, furnish the oleo-resin known as Balsam of Copaiba, the quality of which, probably, varies with the species. Among the principal species are probably *Coriacea*, *Langsdorfii*, *Multijuga*, *Officinalis*, &c. The species *Bracteata* and *Pubiflora* furnish the Purple-heart or Purple-wood of Guiana, which is largely employed for mortar beds and the manufacture of musket ramrods.

DIALIUM.—The species *Indicum* yields a fruit having a delicate, agreeable pulp, less acid than that of the Tamarind. It is termed the Tamarind Plum.

EPERUA.—The species *Falcata* is the Wallaba tree of Guiana, which, according to Sir R. SCHOMBURGHK, yields a very durable wood, of a deep red color, frequently variegated with whitish streaks. The bark is bitter, and is stated to be used by the Arawaak Indians as an emetic.

GLEDITSCHIA.—The species *Triacantha* yields a fruit similar to that of the *Ceratonia Siliqua*. In North America it is termed the Honey Locust.

GUILANDINA.—The species *Bonduc*, or Nicker tree, yields a bitter tonic

bark. The seeds are very bitter, emetic and tonic, and the leaves are stated to possess discutient properties.

Hæmatoxylon.—The species *Campechianum* yields the wood commonly known as Logwood, employed in medicine as an astringent and tonic, and also for dyeing and other purposes. It contains two crystalline coloring principles, hæmatin and hæmatoxylin.

Hymenœa.—The species *Courbaril*, West Indian Locust tree, is supposed to yield Gum Anime, or East Indian Copal. The inner bark is stated to possess anthelmintic properties. The fruit contains a mealy substance, which is sweet and pleasant; when boiled and allowed to ferment it is said to form an intoxicating drink, resembling beer. The timber is close-grained and tough, and is employed by ship-carpenters for planking vessels, &c. The species *Verrucosa* probably yields some of the East Indian Copal. A species of this genus probably yields Mexican Copal. Brazilian Copal is thought to be furnished by several species of this genus, and by *Trachylobium Martianum*, a plant belonging to the same sub-order. Several species of the genus, together with *Guibourtia Copallifera*, are probably the source of the substances known as African Copal, African Yellow Gum and African Red Gum.

Mora.—The wood of the species *Excelsa*, a large tree, a native of Guiana, is largely employed for ship-building, under the name of Morawood.

Parkinsonia.—The stems of the species *Aculeata* furnish useful fibers.

Poinciana.—The leaves of the species *Pulcherrima* are stated to possess purgative properties, and the roots are said to be tonic.

Swartzia.—A powerful sudorific, known as Panococco Bark, is obtained from the species *Tomentoso;* the wood is stated to be very hard and intensely bitter. The seeds of the species *Triphylla* are stated to be excessively acrid.

Tamarindus.—The fruit of the species *Indica* constitutes the well-known Tamarind, which, when preserved with sugar, forms a very agreeable confection. The pulp is acidulous, sweet and agreeable, and is an officinal article in the *Materia Medica* of our pharmacopœia. It is employed in the preparation of a cooling, laxative drink.

Sub-Order Mimoseæ.

General Properties.—The production of gum and the presence of astringent principles are the chief characteristics. Some possess emetic qualities, a few are stated to be purgative, and a small number are reputed to be poisonous.

Principal Plants and Uses.

Acacia.—The various varieties of gum are obtained from this genus. Gum Arabic is principally obtained from the species *Vera* and *Nilotica* of Delile. The species *Arabica* and *Speciosa* yield East Indian Gum; the species *Affinis*, *Decurrens* and *Mollissima*, South Australian; the species *Karoo*, Cape; and the species *Adansonii*, *Seyal*, *Vera*, *Verek*, &c., Gum Senegal. The gum of one of the species is stated to constitute an important article of food to the natives of the Swann River. The wood of the species *Arabica* is employed in India for making wheels

and tent-pegs, and its bark is reputed a powerful tonic, and, together with that of the species *Catechu*, is extensively used under the name of Babool. The powerful astringent substance known as Cutch, or Catechu, is an extract obtained from the duramen or heart-wood of the species *Catechu*. It is largely employed for dyeing and tanning, and constitutes one of the officinal substances of our pharmacopœia. The flowers of the species *Farnesiana* are very fragrant, and yield, by distillation, a delicious perfume, to which powerful virtues have been ascribed. The wood employed in the construction of the stairs of the Crystal Palace in Hyde Park, at the Great Exhibition of 1851, and which, on its removal, was found to be but little worn, was the produce of the species *Formosa*, a native of Cuba. It is very hard, tough and durable, of a dull red color, and termed Sabicu. An intoxicating liquor is said to be prepared in India, by distilling the bark of the species *Ferruginea* and *Leucophœa* with jagghery water. The bark of the species *Melanoxylon*, a native of Australia, is sometimes imported, under the name of Acacia Bark. An extract of the bark, very valuable for tanning, is frequently imported. Another astringent product for tanning purposes is that imported under the names of Neb-neb, Nib-nib, or Bablah; it consists of the dried legumes or pods of the species *Nilotica*. The species *Seyal* is probably the Shittah tree, or Shittam-wood, of the Bible. The species *Varians* is said to be poisonous. Several species are much prized in our gardens for the beauty of their blossom and foliage.

Adenanthera.—A dyewood is yielded by the species *Pavonia*, called in India Ruktachundum, or Red Sandal-wood. (This must not be confounded with that produced by the Pterocarpus Santalinus.) The seeds are of a bright red color and perfectly smooth, and are said to be employed, under the name of Barricarri Seeds, in the northern parts of South America, for making necklaces, &c.

Entada.—According to Horsfield, the species *Pursœtha*, of Java, is emetic. The large brown beans are termed Gela, and are used by the natives for washing their hair.

Erythophlœum.—The species *Guineense* is the Sassy tree of Western Africa. It is used in certain parts of Africa, under the name of Ordeal Bark, or Doom Bark, as a supposed test of the innocence or guilt of persons suspected of great crimes, as secret murder, &c.

Inga.—The pods of the species *Fœculifera*, or Poix Doux, of St. Domingo, contain a sweet pulp, having purgative properties, which is used by the natives. Similar qualities are stated to reside in the pulp of the pods of the species *Vera*, and that of *Tetraphylla* is sweet and mucilaginous. The species *Vera* possesses astringent properties.

Mimosa.—The root of one of the Brazilian species is stated to possess poisonous properties. The roots of the species *Sensitiva* are said to evolve a most unpleasant odor, resembling that emitted from sewers in time of impending rain.

Parkia.—The seeds of the species *Africana* are stated to be roasted in the same manner as coffee, bruised, and allowed to ferment in water; when they begin to become putrid, they are well washed, pounded, and made into cakes in a similar fashion to chocolate. They are stated to be an excellent sauce for all kinds of meat. A pleasant drink is formed from the farinaceous matter surrounding the seeds, and a sweetmeat is also made from it.

JOURNAL OF NAUTICAL INTELLIGENCE.

I. Iron and Wooden Naval Vessels. II. Iron Ships. III. Revolving Ships' Rig. IV. New Patents. V. Light-House Service in Great Britain. VI. Contributions to Nautical Science. VII. Steam Ram, Defence. VIII. Masts of the Warrior. IX. Ship Great Republic. X. Names of New Gun Boats. XI. New Light-Houses.

IRON AND WOODEN NAVAL VESSELS.

According to the London *Mechanics' Magazine* the first question for discussion is the comparative value of iron and wooden ships-of-war. In favor of the latter we have a conservative party represented by Sir Howard Douglas, who is probably the ablest living advocate of "wooden walls." It is his opinion "that ships formed wholly, or nearly so, of iron, are utterly unfit for all the purposes and contingencies of war, whether as fighting ships or as transports for troops." In opposition to this opinion Mr. J. Scott Russell endeavors, and we think successfully, to establish:

1. That iron steamships-of-war may be built as strong as wooden ships of greater weight, and stronger than wooden ships of equal weight.
2. That iron ships of equal strength can go on less draught of water than wooden ships.
3. That iron ships can carry much heavier weights than wooden ships.
4. That they are more durable.
5. That they are safer against the sea.
6. That they are safer against fire.
7. That they are much safer against explosive shells.
8. That they are much safer against molten metal.
9. That they are much safer against red-hot shot.
10. That they can be made impregnable even against solid shot.

In a recent paper on the form of ships, by Robert Duncan, Glasgow, the following proportions for side-wheel steamers are given: Length, equal to ten times the beam; depth, six-tenths of beam; draught of water, seven-tenths of depth, or forty-two of beam; the co-efficient of displacement, fifty-five per cent.

IRON SHIPS.

As Sir H. Douglas has attacked the construction and sailing qualities of the Great Eastern, his opponent first disproves his assertions and predictions regarding her, and then states the facts regarding iron war-ships which have been ascertained by actual experiment. Experience has proved, first, that "when the thickness of a vessel's side is not more than half an inch, shots fired obliquely have glanced off the iron vessel which would have penetrated a wooden ship; second, that shots fired directly have passed through both sides of the ship, doing less damage to the ship directly and less damage by splinters than would have been the case in timber ships; third, that the shot holes have been as easily stopped, and more expeditiously and less expensively repaired than in wooden

ships; fourth, that their plates of wrought-iron, even five-eighths of an inch, are proof against shells; that iron plates four inches and a half thick are nearly impenetrable to shot fired from the heaviest nature of guns; and, finally, that plates six inches thick are practically impenetrable."

REVOLVING SHIPS' RIG.

The revolving rig of Capt. COLES, of this city, has just been applied to the square sails of the bark Liverpool, now lying at the dock a short distance from the Grand-street ferry, East River. The sails by this are worked from the deck; not a man is required to go aloft. A long roller is suspended in brackets connected with the lower yard, and the sail is wound up on this roller by revolving it with ropes or chains from the deck. The sail is rolled up exactly like a piece of cloth on a weaver's beam, and any amount of its surface can easily be taken in or exposed as required. This rig is exceedingly snug, and although the Liverpool (now somewhat old) is the first vessel to which it has been applied in this port, those who command her believe it will operate well, and save a great amount of labor, while it ensures greater safety. Such sails can be operated more rapidly than those which are rigged by the common method.

NEW PATENTS.

For an improved spring tackle for the sheets of fore-and-aft rigged vessels. WILLIAM WOODBURY, of Gloucester, Mass., patentee.

Mr. WOODBURY claims the spring B., in combination with the traveller C., and sheet E., operating substantially as described, for the purpose specified.

For an improvement in safety ships. E. S. WILLSON, of Saratoga Springs, New-York.

Mr. WILLSON claims a refuge cabin in combination with the layers of cement and water bed, air boxes and device for ventilation—the whole constructed and all its parts arranged substantially as specified.

For an improved life-boat. J. T. SCHOLL, of Port Washington, Wisconsin.

Mr. SCHOLL claims, first, the cylindro-conical life-boat constructed of separate slats, hinged together and capable of folding up, in combination with a water-proof fabric and metallic sheathing.

Second, he claims, in combination with the cylindrical part of the boat, the hinged folding heads.

This invention and improvement in life-boats consists, first, in constructing the body or hulk of the boat in the shape of a cylinder, terminating at each end in a cone, said cylinder and cones being made up of slats or staves which are covered on the outside with a suitable water-proof fabric and also with metal plates, all of which are jointed and hinged together so as to be water-tight, and to admit of being folded up. It also consists in two hinged heads capable of being folded up with the boat, which are within each end of the cylindrical part of the boat, and acted upon by springs, which springs and heads operate to prevent the boat from collapsing while in the water, and to keep the boat in a proper condition to carry passengers. It also consists in a revolving spring arm arranged on

the propeller shaft, in conjunction with certain spring valves which cover port-holes or ventilators through the cylindrical part of the hull, said arm being made to open the valves when the parts are above water. It also consists in a rolling carriage or platform furnished with seats for passengers, and arranged within the boat in such a manner that the boat or hull thereof will revolve independently of said platform.

THE LIGHT-HOUSE SERVICE OF GREAT BRITAIN.

According to the London *Times*, the authorities constituting the light-house administration of the kingdom are computed to be 174 in number. Of these about 170 are local authorities, empowered by various charters or customs to superintend the lighting and marking of coasts, rivers or harbors at particular spots. Then come three general authorities—the Trinity-house for England and Wales, the Commissioners of Northern Lights for Scotland, and the Ballast Board of Dublin, for Ireland. Lastly, there is the Board of Trade, which, by a recent act, requires certain prerogatives of chief control. In respect of the distribution of power, it may be observed that the Trinity-house has some authority over the Scottish and Irish boards, and the Board of Trade a controlling authority over the Trinity-house. In connection with this department, too, the general authorities have certain powers over local authorities, but they are not very commonly exercised or very extensively applied. Indeed, it is not to be supposed from enumeration that there exists any complete chain of responsibility or graduation of power. No such system prevails. It is true that the ultimate appeal lies apparently to the Board of Trade, and that board seems to have concerned itself actively with the finances of the service, but to have been rather more solicitous about economical administration than immediate inspection or superintendence. Such being the number and nature of the boards engaged, it is now necessary to say something about their constitution, and, for the sake of conciseness, we had better explain what elements they lack than what they comprise. In no one of the four governing bodies, though they are all differently constituted, is special knowledge of the subject exacted as a qualification for membership. The elder brethren of the Trinity-house having been mariners by profession, have certainly a general knowledge of the sea, but not necessarily any thing more. The Scottish board is principally recruited from the legal profession, the Irish board from a mercantile and commercial circles. As for the Board of Trade, it is, of course, notorious that its members, however able, are not selected for their acquirements in optical engineering, and of the whole matter the commissioners observe that "the government of light-houses in the United Kingdom, their management and construction, are all confined to bodies of gentlemen of various employments, none of which necessarily afford them an opportunity of acquiring a knowledge of those branches of science which bear upon light-house illumination." Very different is the state of things in other countries. In France, of course, the organization is perfect. There "lights are placed on a system that their lights should cross. They are inspected on system—the size of the flame, the quantity of oil to be consumed in an hour to produce a good light, the minutest detail is provided for and calculated to a nicety, and

the whole system hangs together and is under one man." In Spain the administration is similarly organized; in Denmark, Sweden, Norway, Holland and Austria, the service is under the Ministry of Marine. In the United States, Russia, Hanover and Hamburg, there are central boards of superintendence, constituted with special reference to the duties on hand. Even in Turkey, the service was conceived to be under the Admiralty, though the Ottoman "department" was "at a loss to furnish information."

However, we are not prepared to say that very much is provided by this array of contrasts, or by arguments to which most of our institutions would be exposed in a similar degree. We have our own way of doing things, and our way is not remarkable for simplicity or system. We are all for "self-government" and all against "centralization." We have a natural antipathy to "Boards" and we are in the habit of looking rather to results than to means. In short, if the light-house service of the kingdom is efficiently administered, we would not be likely to care much about the methods by which efficiency was attained. That would be the point, beyond doubt, on which opinion would turn, and here it is impossible to avoid remarking that the actual condition of our coast lights, as described by the commissioners, is really superior to any thing that could be expected after the description of the management. Complex and ill-organized as our system may appear, the result cannot be termed discreditable to us. The report frankly admits that Great Britain is better lighted than any other country except France, and nearly as that. The French, it must be remembered, had an immense advantage in commencing with a *carte blanche* only thirty or forty years ago, while we have a system which is the growth of ten generations. No doubt, the contrast is striking, and the effect, unluckily, is visible at very conspicuous points. The commissioners tell us that the harbor lights at Dover, Folkestone and New-haven "present a singular variety of faults, comprising among them nearly all those which can be committed in light-house arrangements." No sooner, however, does the British tourist leave his own shores than he comes at once at Calais, Boulogne or Dieppe, "to small but brilliant harbor lights, which are all dioptric, and in the construction and management of which there are displayed all the achievements of the science of illumination." Of course this is rather aggravating; but much the same may be said of a dozen other usages on the two sides of the channel. We are English, and our neighbors are French. In saying that we have said nearly all, and what is more, we doubt if any novelties of management will enable us altogether to unsay it. Many of our light-houses are admirably kept—the Scottish lights particularly, and the floating lights everywhere. In some respects we are even ahead of the French, for we supply our light-keepers with books and medicine-chests, whereas the French show no such consideration for their servants.

Still there is evidently room for reform. Much of the praise bestowed by the commissioners has been earned by the general authorities exclusively, the performances of the local authorities, with a few honorable exceptions, being greatly inferior. The evils, too, arising from want of uniformity, are truly serious. A danger signal in one place means safety in another. The system of buoyage varies everywhere; it is one thing in the port of Liverpool, and exactly the opposite thing in the port of Dublin. Even colors and flags do not always tell the same story, and of local

lights, buoys and beacons together, it is generally affirmed that they are managed on independent systems, without any uniformity, and with but indifferent results. After what we have said, the main features of the commissioners' proposals will probably be anticipated. They recommend the formation of a central Board, with a scientific staff. They consult the interest of existing bodies, by vesting the elections of certain of the new managers in the hands of the old authorities, with the reserve of a place to be filled by government, and they retain even an antiquity of title in styling the new board the "Trinity Commissioners for Lights." After adding four official members, they would connect the board for purposes of parliamentary responsibility, either with the Board of Trade or the Admiralty, and they conclude with a natural anticipation that their suggestions may result in an improvement of our light-house administration and increased security to the navigators of British waters. All this we place before the public as it is given. The discussion of the proposed scheme will follow soon enough, and we will only add, therefore, that in our opinion the results of this very thorough inquiry, though they have brought many defects to light, and suggested many reforms, ought really to make us thankful that a system so unpromising in appearance could be worked with such respectable effect.

CONTRIBUTIONS TO NAUTICAL SCIENCE.

The eighth meeting of the Literary and Philosophical Society was held at the Royal Institution, in February last, the Rev. H. H. Higgins, President, in the chair.

A paper was then read by Dr. Dobson, head-master of the Conway, entitled "Contributions to Nautical Science." Mr. Dobson said:—Of all men the sailor is most indebted to the mathematician, who has framed the rules which the sailor practices and relies upon; and computed the numerical data which the sailor takes from his nautical almanac, data which embody the practical results of mathematical problems of the very highest order of difficulty, and which have taxed the powers of the greatest mathematicians from Newton's time to our own. Nautical science, then, having thus been constructed by help of the higher mathematics, offers an ample field for simplification; and that such a process is most desirable, will be obvious when we reflect how essential a clear knowledge, both of the principles and practice of nautical science, is to that numerous and valuable body of men who are responsible for all the lives and property afloat. Such knowledge is more than ever indispensable in these days of steamships, clippers and rapid passages, when a merchant captain must strain every nerve, and, what is much worse, run every risk, in order to satisfy an exacting public, by making a passage in the shortest possible time. It is evident that the danger from an error in the reckoning of a dull-sailing vessel is much less than in that of a long, sharp clipper, on the principle, that the farther you go on the wrong road the more you go wrong. The first subject to which I shall ask your attention this evening is a question relating to practical navigation, and may be enunciated thus: "The direction of the wind and the course of the ship being known, required the direction of the sails, so that the ship

may make the most headway." This problem belongs to the most difficult class of *maxima* and *minima*, which are most successfully attacked by means of the differential calculus, and thus I first accomplished its solution. But, anxious to bring it within the reach of my pupils, I reconsidered it, and succeeded in solving it by means of plain trigonometry, and at last was rewarded by discovering the simple geometrical proof which follows. I am not aware that this problem has been published in any form. It is certainly not mentioned in any of the numerous English and foreign works on navigation that I have consulted.

In some of the most important practical applications of nautical astronomy, where two altitudes of a heavenly body are taken at an interval of a few hours, during which the vessel has been proceeding on her course, it is necessary to reduce the first altitude to what it would have been if it had been measured at the place where the ship is when the second observation is made. My second contribution to nautical science is a simple elementary investigation of the value of the correction to be applied to the first altitude to compensate for the "run" of the ship, as it is called. This value, of course, is well known; but the proof is well adapted for instruction, inasmuch as it has the advantage of placing clearly before the student the things which he is required to reason about, and is made to depend upon the rule for parallel sailings, the simplest case in spherical trigonometry. In this case, as in several others, I had the alternative of either investing a simple intelligible proof, or of giving the rule to my pupils without demonstration, and resting on authority alone, a mode of proceeding altogether inconsistent with sound teaching. These "contributions" were each of them accompanied by their appropriate mathematical proof.

At the conclusion of the paper, the Rev. J. Robberds made some remarks expressive of his gratification at the excellent and lucid style adopted by Mr. Dobson, which could not fail to be useful in the communication of information to his pupils.

LAUNCH OF THE STEAM RAM, DEFENCE.

The steam ram, Defence, was launched from the yard of Messrs. Palmer & Jarrow on the 24th of April, at Newcastle, England. The launch was of a most successful description; and the ship, as she floated to the other side of the river, was greeted by the enthusiastic plaudits of the assembled spectators and workmen. When fairly launched she drew about eighteen and one-half feet of water; and after the machinery is fitted up it is supposed that the draught will be nearly twenty feet. The next task was the removal of the vessel to the dock. A large cable chain unexpectedly giving way, however, the frigate suddenly grounded; and with all the efforts that could be employed, it was found impossible to get her off by that tide. The extreme length of the Defence is two hundred and ninety-two feet; breadth from the beams, fifty-four feet; the extreme depth, thirty-eight feet two inches. She is 3,669 tons register, and has been pierced for twenty-eight guns. The engines possess six hundred horses' power, and the speed at which the frigate is reckoned to sail is at the rate of ten knots an hour. After the manner of the Great Eastern, she is double-bottomed, and is iron-plated to the extent of one hundred

and seventy feet to two feet below the water-line. The bulkheads are covered by armor plates, which are furnished with plated doors of the same material. She is further surrounded by wing passages in the inside on each side, the object of these being to enable the men on board to pass along to plug up any holes made by guns. The armor plates with which the vessel is cased are of various lengths, from thirteen feet to seventeen feet, by about three feet three inches wide and four and one-half inches thick, and weigh from four to five tons each. Underneath the plates are eighteen inches of teak, beneath which lies the actual skin of of the ship. Strength and security seem to be the guiding mottoes by which the builders have been actuated. We consequently find that the armor plates have been bolted in with inch and a half bolts; and the edges have been "feathered and groved," similar to the deals of a floor. On the fighting deck and in the bulkheads are two doors, by the passage afforded by which cannon can readily be transferred from one part of the vessel to another. At the stern the new frigate is strongly fortified by an elaborate process, being intended to act as a steam ram; and with a prominently projecting beak, the workmanship is so arranged that a hostile ship would be struck under the water-line and immediately sunk. The stern falls in at the head between five and six feet, in the shape of the rudder; and at midships is a kelson forty-four inches in thickness, which is carried right up to the stern, and is also of immense durability. The upper and main decks are of iron; the fighting decks being composed of oak of about six inches in thickness. The magazines are within the armor-coated portions of the ship, and below the water-line; and when finished it is expected that she will be able to carry twenty 100-pounder Armstrong guns.—*Newcastle Daily Chronicle.*—The DEFENCE was floated off on the 25th without having sustained any damage.

THE AMERICAN SHIP GREAT REPUBLIC.

The GREAT REPUBLIC, said to be the largest sailing ship afloat, arrived in the Mersey on the 17th July from San Francisco, having made the passage in ninety-five days. She carries four masts, and she is 3,356 tons burthen. She has on board upwards of 3,000 tons of wheat, consigned to Messrs. FREDERICK HUTH & Co., Chapel-street. The GREAT REPUBLIC is at present anchored off New-Brighton, but when the tide answers she will go into the Huskisson Dock to discharge her cargo. She is commanded by Captain LIMEBURNER.

NAMES OF THE NEW GUN-BOATS.

Indian names are to be given to the new gun-boats now building for the government. The boats building in Maine are to be named "KATAHDIN," "AROOSTOOK," "PENOBSCOT" and "KINEO." Those in Massachusetts, "MARBLEHEAD," "SAGAMORE," "CHOCURA" and "HURON." In Connecticut, "OWASCO," "KANAWHAT" and "CAYUGA." In New-York, "UNADILLA," "OTTAWA," "PEMBINA," "SENECA," "CHIPPEWA" and "WINONA." In Pennsylvania, "ITASCA," "SCIOTO" and "WISSAHICKON." In Delaware, "IAHOMA." In Baltimore, "PINOLA."

THE MASTS OF THE WARRIOR.

The masts, spars and other gear for the WARRIOR, iron naval steamer, have been put on board that vessel by the shipwrights sent from Woolwich dock-yard for that purpose. The main and foretopmasts are of large size and strength, each measuring sixty-five feet in length, and weighing rather more than three tons. The mizzen-topmast measures fifty feet, and its weight is about two tons. The fore and main-yards are each as large as the masts of many large ships, each measuring one hundred and five feet in length, and weighing upwards of six tons. The length of the mizzen-yard is seventy-one feet. The three topsail-yards are also of great size and strength, the two largest being each seventy-four feet long, and weighing about two tons. The whole of the masts, yards, &c., for the WARRIOR have been constructed of unusual strength, under the immediate superintendence of the officials connected with the masting departments at Chatham dock-yard.

The WARRIOR's chain cables, (two and three-eighths inch,) manufactured by Messrs. LENNOX & Co., have been tested at Woolwich and bore the strain of one hundred and one tons, ordered by the Admiralty as the regulated test, well.

NEW LIGHT-HOUSES.

Roman Rock Light.—False Bay, Cape of Good Hope.—Official information has been received at the Light-House Board through the Department of State, from the Colonial Government at the Cape of Good Hope, under date of the 17th June last, that a light will be exhibited from the new light-house on the Roman Rocks on the 16th September, 1861, which will supersede that shown at the light-vessel now moored a cable's length north of the rocks. It will be a *revolving white* light, showing a *bright* face for the space of twelve seconds *twice* every minute, which will serve to distinguish it from the Cape Point light in thick weather, as that light revolves only *once* every minute. The light will be fifty-four feet above the sea, and visible in clear weather from a ship's deck thirteen miles distant.

The light-tower is forty-eight feet high, the lower half of which will be painted black and the upper half white. From the light-house, Noah's Ark bears S. 56° W. 7-10 miles, and the Dock-yard clock W. by N. 1.65 mile.

N.N.E. $\frac{2}{3}$ E., $2\frac{3}{4}$ cables from the light-house, lies the *Castor Rock*, with only fifteen feet on it at low water, springs; its position is marked by a beacon, with a flag having the word "rock" painted on it. There are patches of nineteen and twenty-four feet between the Castor Rock and the light-house, which renders it necessary for large ships to give the light-house a berth of at least three and a half cables, when passing to the N.E., before hauling in for Simon's Bay.

In sailing for Simon's Bay, by keeping the light-house in line with Elsey Peak, bearing N. $\frac{1}{4}$ W., a ship will pass midway between the Whittle Rock and Miller's Point.

STATISTICS OF TRADE AND COMMERCE.

I. Sandwich Islands and Japan. II. Boston Imports from Liberia. III. The Ice Trade. IV. Failures in the Leather Trade. V. The Sugar Pines of the Sierras. VI. Banka Strait. VII. Trade with Thibet. VIII. The American War and German Commerce. IX. Decline of Salmon. X. Curious Japanese Documents. XI. France and America. XII. Scottish Commerce. XIII. Trade of Kurrachee. XIV. Trade with Turkey. XV. Trade and Products of Siam. XVI. New French Treaty. XVII. French Treaty with Turkey. XVIII. Mexican Coast Trade. XIX. French Wines. XX. Persian Cotton. XXI. Sugar and Coffee Trade.

SANDWICH ISLANDS AND JAPAN.

The steamer Surprise sailed from Honolulu June 16th, for Kanagawa, Japan, having touched there to take on board a fresh supply of coal. She is apparently a frail boat, entirely unfit for a sea voyage, and could not, probably, survive any severe storm. Yet, as she came from New-York around Cape Horn, she may reach her destination in safety. From Kanagawa she will cross over the Yellow Sea to Shanghai, where she is to be employed as a passenger and freight boat on the Yang-tse-Kiang River. Should she arrive there safely she will, no doubt, prove a handsome speculation to her owners, for she is most admirably adapted to the navigation of a large river like that, and will outsail anything that ever was floated there before her. Still, few could be induced to make a voyage across the Pacific in her, and, as a gentleman remarked, "none but a Yankee would ever attempt it."

BOSTON IMPORTS FROM LIBERIA.

The bark Justice Story has arrived from Monrovia, Africa, with palm oil, camwood, ivory, sugar, molasses, &c. This vessel took out the young man, Leo L. Lloyd, to Monrovia, some eight months since, with a large supply of goods from Boston merchants, who were interested in his success. She already makes handsome returns in African produce, and thus extends our commercial intercourse with that country, which we hope may be largely increased.

We understand that these African sugars and syrups are more valuable to the manufacturer, as they contain the full native strength of the article, the producers not having yet learned all the arts of adulteration of their more civilized competitors in the West Indies. We commend them to the attention of our dealers and manufacturers here, and trust the prices realized for them may lead to further shipments.

THE ICE TRADE.

The exports of ice this year from Boston, up to Aug. 1st, amounted to 74,065 tons, against 97,883 tons in same period last year. The Philadelphia *Journal* says the present price of ice in that city is 55 cents for 56 pounds per week, against 40 cents last year. The excuse of the ice companies

is, that there was almost a total failure in the home crop this last winter. Honolulu is again to be supplied with ice by the agent of the Sitka Ice Company, who will supply the article from Sitka, Russian-America. The schooner EMMA, on her recent trip from San Francisco to Mazatlan, took on board sixty tons of ice, shipped by the Russian-American Ice Company to Mazatlan, where they have an agency established for its sale. The supply of ice at Richmond, Va., is very limited. The ordinary use is stopped, that enough may remain for sickness and extraordinary occasions.

THE FAILURES IN THE LEATHER TRADE.

Mr. Commissioner PERRY, of the Liverpool Bankruptcy Court, gave a judgment in the case of Mr. THOMAS BARTON, a tanner and fellmonger, who was brought down in the great crash in the leather trade, his liabilities amounting to about £200,000. His Honor strongly denounced the reckless trading of the bankrupt—his extensive borrowing of capital at ruinous rates of interest—and his bill transactions with LAURENCE, MORTIMORE & Co.; (the acceptance and renewals he gave to that firm during three years exceeding £600,000;) and intimated that the certificate must be wholly refused and protection withheld. Notice of appeal was given on behalf of the bankrupt.

THE SUGAR PINES OF THE SIERRAS.

We were very tired when we dismounted at CLARKE'S log hut and canvass dining tent in the glorious forest, thirty miles from Mariposa—tired in body and in brain; tired by our seven hours of horseback riding, and by the perpetual feast of floral beauty and sugar-pine magnificence which had delighted eye and heart. But it did not require a long time to restore us. Half an hour's rest under one of the stately firs that towered above the cabin, and a cup of tea with our noon meal, fit for a mandarin, put us in good working trim for the afternoon's excursion. We were only five miles from the mammoth trees. An easy upland ride of an hour would lead us to the grove where the vegetable Titans we had so often read about, with a wonder tinged with unbelief, held their solemn court.

And I confess that I began to doubt, as the time for mounting again approached, as to the existence of the marvels. Was it possible that before sunset I was to stand by a living tree more than ninety feet in circuit, and over three hundred feet high? Think what these figures mean, my hasty reader, when transformed into solid bark and fiber. Take a ball of cord, measure off a hundred feet from it, cut it and tie the ends, and then, by the aid of four or five of your companions, stretch it into a circle, (if you have a parlor spacious enough to permit the experiment,) and imagine that space filled with a column of a vigorous cedar. Now conceive this tree rooted on the common near the entrance. What do you say to the idea of looking up its smooth trunk to a point higher than the topmost leaf of any elm on the Tremont-street mall, and of seeing there a bough thicker than the largest of those elms shooting out from it? What do you say to the fact that its plumes would nod a hundred feet above the vane at Park-street spire? What say you to the

possibility, if it lay hollow on the ground, of driving a barouche and four through it without their being able to touch the highest point of its curved ceiling "with a ten-foot pole?" Then think of it cut up into six thousand cords of wood.

The Mariposa grove stands as the Creator has fashioned it, unprofaned, except by fire, which, long before the advent of Saxon white men, had charred the base of the larger portion of the stalwart trees. We rode on for an hour, climbing all the time, till we reached a forest plateau, five thousand feet above the sea. This, in New-England, is the height of Mount Washington, where not a scrub can grow. Riding on a few rods, through ordinary evergreens with dark stems, we at last catch a glimpse of a strange color in the forest. It is a tree in the distance, of a light cinnamon hue. We ride nearer and nearer, seeing others of the same complexion starting out in the most impressive contrast with the sombre columns of the wilderness. We are now in the grove of the Titans. We single out one of them for a first acquaintance, and soon dismount at its roots. I must confess that my own feelings, as I first scanned it, and let them roam up its tawny pillar, was of intense disappointment. But then I said to myself, this is doubtless one of the striplings of the Anak blood—only a small affair of some forty feet in girth. I took out the measuring line, fastened it to the trunk with a knife, and walked around, unwinding as I went. The line was seventy feet long. I came to the end of the line before completing the circuit. Nine feet more were needed. I had dismounted before a structure eighty-four feet high, and should not have guessed that would measure more than fifteen feet through. It did not look to me twice as large as the Big Elm on the Common, although that is only eighteen feet in circumference, and this was twenty-eight feet in diameter. During the day I had seen a dozen sugar pines which appeared to be far more lofty. The next one we measured was eighty-nine feet and two inches in girth; the third was ninety feet. There are nearly three times as many of the giant species in this grove as in the Calaveras cluster. Divided into two groups there are six hundred and fifty of them within a space of one mile and three-quarters. Colonel Warren, the faithful and self-sacrificing friend of agricultural interests in this State, proprietor and editor of the *California Farmer*, measured the principal trees of one group on this ridge, some three years ago, and found one of 102 feet, two of 100 feet, one of 97 feet, one of 92 feet, one of 82 feet, one of 80 feet, two of 77 feet, three of 76 feet, and thus gradually diminishing, till more than a hundred trees were on his list that measured fifty feet and upwards in circumference. This crowd of majestic forms explains the disappointment in first entering the grove. The general scale is too immense. Half a dozen of the largest trees spread half a mile apart, and properly set off by trees of six or eight feet in girth, would shake the most volatile mind with awe.

Four days afterwards, on the homeward path by another trail, I struck off the track with one of our party to see some "big trees" that were reported to us as a mile from the path, near Crane's Flat. We found them. The first one we approached was the only one of the species in the range of vision, and reared its snuff-colored columns among some ordinary firs. How majestic it swelled and towered! My companion and I both exclaimed: "This is the largest tree we have yet seen; this

will measure more than a hundred feet." We gazed for a long time at its soaring stem, from which, a hundred feet above us, the branches that shot out bent suddenly upwards, like pictures of golden candlesticks in the Hebrew temple. It seemed profane to put a measuring tape upon such a piece of organized sublimity. But we wanted to know how much more than a hundred feet could be claimed for it, and I made the trial. It was just fifty-six feet in circuit, but little more than half the size of the monarchs in Mariposa, which it seemed to excel so much in majesty. There were a hundred trees in the Mariposa grove larger than this, and all of them together did not make half the impression on me that this one stamped into the brain at first sight.—*From a California Letter in the Boston Transcript.*

BANKA STRAIT.

It is estimated that upwards of 1,000,000 tons of British shipping pass annually through Banka Strait, the new channel lately discovered by Mr. W. STANTON, master and commander of her Majesty's surveying vessel SARACEN, in going to and returning from China. The *Straits Times*, in commenting on these facts, says: "The saving, therefore, effected in demurrage by the new route, to say nothing of the less chance of wrecks and other casualties, is almost beyond computation. Banka Strait has hitherto had a very unenviable reputation on account of the great number of accidents constantly occurring in the course of the dangerous and intricate passage. In the last expedition to China the majority of the men-of-war passing through got ashore, and some of them ran a very narrow escape of total loss. Her Majesty' ship TRANSIT, with troops, was entirely wrecked, but since the publication of the present chart not one vessel, adopting the new route, has got ashore. On the other hand, the passage of the Lucipara Channel is fast becoming impracticable to large ships, as the officers of the SARACEN found, in the course of their examination, that it was fast filling up."

TRADE WITH THIBET.

Mr. J. D. HOOKER writes to the *Times:* India, it is believed, will eventually become the greatest tea-producing country in the world. Central Asia, from Thibet to Siberia, inclusive, is the largest tea-consuming area in the world, but it does not produce a leaf of tea. Sixty miles only intervene between Thibet and the British tea plantations in Sikkim, but all the tea consumed in Thibet comes from China, 1,000 miles to the eastward, and over numerous chains of lofty mountains. The Russians are as great tea-consumers as the Asiatics, and they are rapidly pushing their outposts southward and eastward, towards the Himalaya; but neither does Russia contain in all her vast dominions one acre of tea-producing land. The Thibetans are, further, most eager to procure broadcloths, cutlery and a great variety of English wares and Bengal produce; for which they barter shawl wool, salt, borax, musk, flour, gold dust, amber, turquoises, copper, sheep, and ponies of a breed which is invaluable both in the plains and hills of India. With regard to the alleged difficulties of the passes, it is enough to state that every bit of wood used in house-

building in Thibet goes across the Himalaya, and that in one day I have counted several hundreds of yaks, mules, ponies, sheep, goats, dogs, men, women and children crossing a pass upwards of 18,300 feet high; every biped and quadruped loaded, according to its powers, with planks of wood, rice, millet, Indian corn, sugar, tobacco, spices, bamboos, rattans, cotton and silk stuffs, and numberless other products of the Himalaya valleys, to be bartered for brick, tea, Chinese crockery and the articles I have enumerated above. Again, no circumstance that came under my observation in India so surprised me as the fact that upwards of 1,000 continuous miles of British frontier were closed to British trade and enterprise; a frontier, too, that divided countries more diverse as to their physical characters, their natural products, and consequently as to their several wants, than any other two on the face of the globe. I have never ceased to urge, when opportunity offered, both in India and England, the importance of opening up this frontier by a route through Sikkim, believing, as I do, that the trade in tea between India and Thibet will eventually do more to benefit the latter country than, perhaps, any other whatever.

THE AMERICAN WAR AND GERMAN COMMERCE.

The present unfortunate state of political affairs in America does not yet appear to have had any effect on the transatlantic trade of the Elbe, which, in all respects, still occupies the high position which it has long maintained. Of this good evidence is given in the official returns of arrivals and departures at the neighboring city of Hamburg during the first seven months of this and the two preceding years, from which the following is an abstract:

ARRIVALS.

Jan. 1 to July 1.	*Transatlantic.*	*European.*	*Total.*	*Steamers.*	*Colliers.*
1859, ...	227 ..	2,466 ..	2,693 ..	622 ..	784
1860, ...	261 ..	2,720 ..	2,981 ..	667 ..	814
1861, ...	273 ..	2,821 ..	3,094 ..	641 ..	898

DEPARTURES.

				In ballast.
1859, ...	234 ..	2,445 ..	2,679 ..	624 ..	1,234
1860, ...	248 ..	2,627 ..	2,875 ..	653 ..	1,093
1861, ...	241 ..	2,717 ..	2,958 ..	626 ..	1,212

With regard to the arrivals from America it will be seen that there has this year been an increase over those of both of the other years; but as to the departures, a small falling off, as compared with those of last year, is beginning to be perceptible, though that is not to be wondered at; for, in the present condition of the States, a check has naturally been given to emigration, which could not fail to have some influence on ship-owners, who have been accustomed, to some extent, to rely on what they receive from passengers as a means of enabling them to meet the expenses of the outward voyage.

As far as the local trade of Hamburg is concerned, that, according to the financial returns of this year, as compared with the same period of last, is in all points of view satisfactory.—*Altona* (*August* 3) *Correspondence of the London Post.*

DECLINE OF SALMON.

The Fishery Commissioners of Ireland have reported to the Lord-Lieutenant that the salmon fisheries in 1860 were not so productive as in the preceding year, though the money value of the salmon captured probably exceeded that of many years past, and that there is reason to fear that under the temptation of the high price which this fish has attained in the market there has been a degree of over-capture which must eventually prove detrimental to the general interests. The number of fixed engines in the tideways, &c., on the seacoast has increased within seven years from 270 to 386. This mode of capture has now extended to an abuse, but, as it has been legalized by the legislature, all that the commissioners can do is to adopt as short an open season as the circumstances of each district or river require, and to enforce a strict observance of the close season. Much damage is done at milldams and factories by the salmon being tempted into the rapid current and killed by the wheels, but it is thought that means may be adopted for inducing the fish to follow the course of the river without injuring the working power of the wheel. The erection of fish-passes over weirs is found of very great service in affording the fish a free passage up to the spawning beds. The weirs are very injurious to navigation.—*London Times, August*, 1861.

CURIOUS JAPANESE DOCUMENTS.

The Consul at Hakodadi, Japan, has forwarded to the State Department the original Japanese vouchers, with the translations, for the expenditures made on behalf of the Consulate. They are very voluminous, considering the small amount of matter contained in them. One is a bill presented by Mr. Goo-so-go-yo-yau-kas-ke—whoever he may be—of Chig-gah-si-ma, Hakodadi, for sixty-two bundles of charcoal and two hundred and twenty sticks of firewood, furnished to sailors. The aggregate cost thereof, in Japanese currency, reaches the portentous figure of 48,550. Reduced to United States currency, the amount is $12 14. The bill, with signature and seal, fills three pages of Japanese paper.

FRANCE AND AMERICA.

The following statement appears in the *Proprieté Industrielle* of the 6th of June:

"Seriously occupied with the consequences which may result to French commerce, navigation and industry from the hostile disposition manifested by the two fractions of the American Union, the Chamber of Commerce of Havre wrote to the Minister of Agriculture, Commerce and Public Works, on the 4th of May, to testify its fears and to express the hope that measures will be taken by the government to protect the French interests which may be affected. It has just received the following reply from the ministers, to which it hastens to give publicity:

"'*Paris, May* 23, 1861.

"'Gentlemen,—You have done me the honor to communicate with me, on the 4th of this month, respecting the hostilities commenced

between the two fractions (*deux fractions*) of the former American Union, and of the first measures which have been the consequence of it. Finally, you express the wish that efficient steps shall be taken by the imperial government to secure the important interests of French commerce in those regions. As you have supposed, these interests are the object of my whole solicitude. I have placed myself in communication with my two colleagues, the ministers of foreign affairs, of the navy and of the colonies, and such measures have been taken that, in transactions with the United States, French commerce will receive no injury.

"'Receive, &c., E. Rouher.'"

A letter from Paris says: "You are aware that the French government, every year, publishes a large volume of statistics relative to trade and commerce. That of the present year has just appeared, and I shall have occasion hereafter to notice its principal features. For the present I may state that it shows that the actual value of all sorts of merchandise imported into France for consumption, in the year 1860, was 1,897,300,000f.; (£75,892,000;) in 1859 they were 1,640,700,000f.; and in 1858 they were 1,562,800,000f.; whilst the actual value of French articles exported, in 1860, was 2,271,100,000f.; (£90,844,000;) in 1859, 2,266,400,000f.; in 1858, 1,887,300,000f. In these items the precious metals are not included."

OPENING OF THE SCINDE RAILWAY.

(*From the Kurrachee Herald.*)

On the morning of the 13th May the first public train for passengers and goods ran from either terminus of the line, the crowd of passengers at the Kurrachee terminus being enormous. Since then, great numbers of passengers were being conveyed daily; the quantity of goods delivered by native traders for carriage, tax to the utmost the resources of the railway, one firm alone offering to enter into an arrangement for the conveyance of 140 tons per diem.

Sir Bartle Frere, on the 29th April, 1858, turned the first sod of the Scinde Railway, and, notwithstanding engineering and other difficulties, in little more than three years thereafter his successor has declared the line to be open for public traffic. The Scinde Railway is 114 miles in length, and is the first complete railway opened in India, and there appears every prospect of its being the first having its capital account closed, and paying a dividend on the capital expended on its construction.

The commissioner in Scinde has alluded in terms of commendation to the excellence of the arrangements of the administrators of the railway in India, Messrs. Neville, Warren and John Brunton; above all, calling attention to the fact that the workmen employed by the company upon the line, drawn from Scinde, Beloochistan, Bhawulpoor, the Deccan, Cutch, and from the confines of Persia and China, had all so conducted themselves that neither feuds or disturbances had ever reached the ears of the authorities. The most extensive engineering works on the line are two viaducts. The Mulleer viaduct is composed of Warren's patent iron girders, of 80 feet span, resting on stone piers, and is 1,860 feet in length. The Bahrun viaduct is built of hard, white, durable stone, found

on the spot, has thirty arches of 45 feet span, and is 1,782 feet long. This viaduct is described to be as fine a piece of masonry as can be seen in any part of the world, and has been executed by native contractors, chiefly Cutchees. The stations on the line are Kurrachee, Landi, Dorbajee, Joongshaie, Jeempeer and Kotree. Kotree, on the Indus, the port of Hydrabad, and the upper terminus of the railway, is vastly increasing in importance, from its steamers and railway, and from the establishment, by Europeans, of extensive saltpetre and other manufactories. Joongshaie, the mid-station of the line, possesses many local advantages, and is about twenty miles from the ancient town of Tatta, on the Indus. This station is evidently destined to be the nucleus of an active and enterprising community; the future town is being laid out, and building sites allotted. The Parsee and other native traders resident at Tatta have proposed to raise funds for a cheap railway or tram-road from thence to Joongshaie, and a considerable local traffic from the latter to Kurrachee has commenced.

Fully to appreciate the importance of the increase in the trade of the port of Kurrachee, it is necessary to call attention to the rapid and steady increase of the trade from the date of the conquest of Scinde, as shown in the following tabular statements, compiled respectively by the commissioner in Scinde and the Chamber of Commerce at Kurrachee. A direct trade is established between Kurrachee and London, Liverpool, Glasgow, Havre, Marseilles, the Mauritius, Calcutta, Bombay and the Persian Gulf.

Table of Imports and Exports of Kurrachee, prepared by the Commissioner in Scinde for the Government of Bombay.

Year.	*Imports.*	*Exports.*	*Total.*
1843–44,.....	£121,150	£1,010	£122,160
1844–45,.....	217,700	9,300	227,000
1845–46,.....	312,900	40,500	353,400
1846–47,.....	293,400	49,300	342,700
1847–48,.....	287,872	154,730	442,680
1848–49,.....	344,715	107,133	451,849
1849–50,.....	419,352	114,378	533,731
1850–51,.....	425,831	196,461	622,293
1851–52,.....	489,220	244,222	733,343
1852–53,.....	535,690	376,337	800,000
1853–54,.....	508,793	376,310	885,103
1854–55,.....	575,196	346,893	922,089
1855–56,.....	629,813	604,440	1,234,253
1856–57,.....	685,665	734,522	1,420,187
1857–58,.....	1,081,100	1,078,100	2,159,200
1858–59,.....	1,540,600	1,044,200	2,584,800

SCOTTISH COMMERCE.

The advices from Dundee are more cheering, the home demand for linens having improved, and most manufacturers being now fully employed. Some mills which were on short time are now again in full work. Flax is firm, and a considerable business has been done in St. Petersburg and Riga, at higher rates. The shipments of jute from Calcutta, from the 1st of October to the end of May, were 273,100 bales, against 224,400 bales in the corresponding period of 1859–60. The demand for yarns is well maintained, and, altogether, affairs at Dundee

have been looking up of late. There has been rather more inquiry for wools during the past week, but quotations have exhibited little if any change, buyers still continuing cautious in their purchases. The last official returns, published with regard to the Scotch banks of issue, show an average weekly circulation of £4,284,782, being a decrease of £249,027, as compared with the previous month, and an excess of £1,535,511 over the fixed issue. The amount of bullion held by the banks was £2,591,610, being a decrease of £77,141, as compared with the preceding return. The Glasgow Gas Light and City and Suburban Gas Companies have just declared dividends, at the rate of 10 per cent. per annum. The movement of goods of all kinds, foreign and coastwise, at the port of Glasgow, amounted, in the last twelve months, to 1,366,327 tons, as compared with 1,192,475 tons in the preceding year, showing the gratifying increase of 173,852 tons, and that, too, while commercial affairs have in other quarters exhibited considerable depression.—*Times.*

TRADE WITH TURKEY.

A despatch from Her Majesty's Consul at Gallipoli to the Lords of the Committee of the Board of Trade, of which a copy has been transmitted to Lloyd's, announces that a weekly line of steam communication, under the English flag, has been commenced between Constantinople and Tenedos, calling at Rodosti, Gallipoli, and the intermediate villages on the coast of the Dardanelles, returning to Constantinople by the same route, completing the whole voyage in a week. Independently of the facilities given by this new enterprise to local commerce, it has operated in augmenting the export trade from Roumelia to the United Kingdom. In the absence of good roads in the interior, the development of the coasting trade by means of steamers, it is observed, is greatly conducive to the interests of British commerce; to importers of produce by enabling them to lay down the articles in which they trade at a cheaper rate in England; to exporters of manufactures, by facilitating the distribution, and thus augmenting the demand for their goods; to shippers, by facilitating both the export and import trade of Great Britain, and thus creating a greater demand for freights to and from the Turkish coast.

TRADE AND PRODUCTS OF SIAM.

A series of reports received from our Consuls on the trade of foreign countries has been issued by the Board of Trade, with a promise that they shall in future be published more speedily; this may easily be, for the present series relates to the year 1858. The longest report is from Sir R. Schomburg, British Consul at Siam. He states that a rapid development of the commercial resources of Siam has taken place since our treaty, negotiated in 1855, came into operation; but the Siamese government do not as yet appreciate the great advantages of a free commerce, and fear it may be favorable to foreigners and disadvantageous to themselves. Their principal export is of rice to China, and next sugar, of which ten times the present quantity might be produced if there were sufficient labor to be had; but the extraction of the juice of the cane

and its manufacture into sugar are carried on without any of the modern improvements for acquiring the largest possible quantity from the cane and a superior quality of sugar. The alluvial districts might produce as fine cotton as the United States, but there is a scarcity of laborers, and it is bulky for transport in canoes down the river. Her Majesty's government included among the presents forwarded to the sovereigns of Siam, a hydraulic press to compress cotton into bales. Coffee grows luxuriantly, and is of a superior description; it might be cultivated to an unlimited extent. A number of woods, the produce of the forests of Siam, may become of importance. The teak wood is considered the strongest and most durable timber of India, or perhaps of the world, only the greenheart of Guiana vying with it; but it had become scarce, and the supply had almost ceased. The takieng might perhaps rival it in size and quality, if examined more closely. Sir R. SCHOMBURG saw, at the building sheds of the first king, a log of this wood, which was being prepared for the construction of a war-canoe, measuring 135 feet, perfectly sound and without a flaw. It possesses the property of being easily bent by artificial means. There are many ornamental woods, the color and suitableness to receive a high polish of which would render them valuable articles of export. A beautiful dye, of a brilliant color, is prepared from the heart of the jack-tree, which might also become of importance. Sir R. SCHOMBURG had seen silk cloth manufactured in Siam, of a green color, with much more lustre than sap green; this green dye, he was told, was extracted from a vegetable substance, procured in the forests of the interior. There is said to be a varnish obtained by incision from a tree, probably the theet, on which neither the sun nor rain has influence, and hence it is employed for securing the gilding of idols; it might be advantageously employed for gilding monuments and ornaments which are exposed to the influence of the atmosphere. The balsamic resins of Siam also deserve attention. The betel nut is extensively cultivated, to be used as a stimulant; and so is hemp, for the sake of its intoxicating and narcotic qualities, it being used in the preparation of "guncha," which has the same effects as opium; but a considerable quantity of opium, of inferior quality, is produced in the tributary provinces of Siam, on the China border. Elephants abound in the interior of Siam. The hides are sent to China, where, having undergone a process similar to that of gelatine, they are considered a delicacy. The horns of the rhinoceros are said to possess medicinal virtues. The Chinese likewise attach fanciful virtues, medicinal and invigorating, to the bones of tigers and crocodiles, and the hairy-covered young horns of the deer.

TRADE WITH FRANCE UNDER THE NEW TREATY.

The railway companies appear to be endeavoring to provide adequate accommodation for the commerce arising out of the Anglo-French treaty. Already the South-Eastern Company and their allies, the administrators of the Chemin de Fer du Nord of France, have made arrangements for an expansion of their system of through traffic by passenger-train and *grande vitesse* organized since the treaty. Further facilities are about to be introduced, which will initiate almost a new era in the transport of parcels and merchandise between the two countries. The through rates

have been reduced and simplified. They show the charge either in kilogrammes or pounds, and include all the numerous imposts that, in the absence of such a system, have hitherto been found especially vexatious. For all weights over 200 lbs., there will be a uniform rate per 20 lbs., without any limit to the weight of consignments. One item may be quoted from the scale as illustrating the cheapness at which commodities may be conveyed between the two capitals, namely: for an ordinary parcel of 2 lbs., 1s. 4d., all charges included where no duty or entry. The French customs authorities have consented to permit the landing or shipping of the goods immediately on the arrival of the boat or train, without any detention at the port, the examination and other custom-house formalities being performed in Paris. This concession is the more important, as the boats must necessarily perform the voyage at night, so as to save time and allow until the afternoon of each day for the despatch of parcels from either metropolis, and it obviates the necessity for the detention which would otherwise arise to the traffic in awaiting customs' hours at the port. It may be hoped that the English customs will follow the example and extend a similar permission, which they have long since given as regards registered baggage, and in a modified form for small parcels, and thus enable the railways to afford the public still greater rapidity of transit, the most important element in continental traffic. As it is, consignments delivered at London-bridge station in the afternoon will reach their destination in Paris on the following day, and, *vice versa*, thus completing the transport in twenty-four hours. The new arrangement has taken effect.

PACIFIC MEXICAN COAST TRADE.

Announcement is made in the San Francisco papers that the steamship PANAMA would leave that port, May 1st, for San Blas, Mazatlan and Guaymas, touching at Cape St. Lucas. It is expected she will afterwards ply regularly between those ports, carrying specie, freight and passengers, and connecting regularly once a month with the Pacific Mail Company's steamers at Manzanillo or Acapulco. This arrangement will prove of immense advantage to the present and future trade of San Francisco with Mexico, and will also be of great service to the foreign merchants established there, as the want of a regular mail and specie carrying service has long been seriously felt. The *Alta* says:

"We hope every encouragement will be extended to this enterprise by our merchants engaged in the Mexican trade; and we know, that as soon as the steamer has made a few monthly trips, in accordance with the programme, such confidence will be felt in the arrangement as will not only insure the liberal patronage of the Mexican government and people, but will undoubtedly prove this new steamship line a most profitable one to the enterprising proprietors."

FRENCH TREATY WITH TURKEY.

The commercial treaty lately concluded between the French government and the Porte is to be valid for 28 years, with power to the con-

tracting parties to propose modifications at the end of 14 and 21 years. The existing customs' tariff is to endure for seven years only from the 1st of October next. This treaty confirms all the rights, privileges and immunities previously accorded to France. Foreign merchandise destined for Servia, Moldavia and Wallachia, is to pay customs duties only on entering the Principalities, and French houses exporting the produce of the Principalities will pay the customs' duties into the hands of the Moldo-Wallachian or Servian administration. No duty is to be paid on merchandise passing through the Straits, even should it be temporarily landed on the Turkish territory. The duty charged on merchandise imported into Turkey for the purpose of being sent to other countries, has been reduced to 2 per cent., and will be further lowered to 1 per cent. in eight years. French subjects are not permitted to import tobacco and salt into Turkey except on payment of the same duties as the Turks pay. Tobacco and salt, the produce of Turkey, are not to be subject to the payment of duty on being exported. French subjects are not permitted to import firearms, gunpowder or warlike stores, but fowling-pieces, pistols and arms for ornament are not included in the prohibition.

FRENCH WINES.

The quantities entered for home consumption for the first five months of this year, compared with the corresponding period of the two previous years, are as follows: 1859, 266,965 gallons; 1860, 535,995 gallons; 1861, 1,129,775 gallons; showing an increase over 1859 of 862,810 gallons, or 18,756 hhds.; and over 1860, of 593,780 gallons, or 12,908 hhds. Such an increase is wholly unprecedented, thanks to the commercial treaty and the reduction of the duty. The greatly reduced prices have, no doubt, greatly contributed to this result, and will go far to verify the predictions of the Chancellor of the Exchequer.

THE PERSIAN AMBASSADOR ON COTTON FROM PERSIAN ARABIA.

The following is a translation of a letter addressed to the President of the Royal Asiatic Society, by Mirza Jafer Khan, ambassador from His Majesty the Shah of Persia to the Court of St. James:

"From the circumstance that this well-wisher passed the springtime of his life in this island, and received at that time numerous marks of friendship and kindness, from great and small, among the natives of this country, he has, therefore, always been animated with a desire for the welfare and advantage of the British nation. At this present moment, by reason of the events occurring in the United States of America, a great deal of anxiety and discussion is to be observed as prevailing among the owners of cotton mills. Some have recommended Zanguebar or Australia—others, again, India and various places—as most fit for the cultivation of that most useful product; but this well-wisher takes the present opportunity to demonstrate his friendly feelings, by suggesting to the president of the Royal Asiatic Society that the province of Khuristan, now known by the name of Persia Arabia, is, from the circumstances of its vicinity to the sea, the fertility of its soil, the number of rivers—as, for instance, the Kerkha, the Karan, (Karun,) the Jarrahi,

Behbehan—better adapted than the aforenamed countries—that is to say, in fact, the very best place for the cultivation of cotton. From the foot of the mountain ranges of Luristan, Arabistan and Behbehan, as far as the shores of the Persian Gulf and of the Shattee-'l-'Arab, extends a vast country, the greater part of which is capable of being cultivated so as to produce any required quantity of cotton, sugar, opium or indigo. Even as things are at present, and in spite of the want of capital and of special knowledge among the people of those parts, a portion of the lands in question are cultivated near Shuster, Dizful and Fellahigga. It is related by the Arabian historians that, at the time when the dyke of the Karun, near Aliwak, formed a source of prosperity to the environs, it was customary to place on the dinner table of the Caliph at Bagdad, every evening, a tray of bread, with a thousand pieces of gold, as derived from the revenue of that district. For this reason the district received the appellation of 'Selletu-'l-Khubz,' *i. e.*, 'bread-basket.' Besides this, the ancient name of that region in the old Persian language is Khuzistan, and 'Khuz' means 'sugar.' By reason of its producing immense quantities of that product, the country became known as Khuzistan, *i. e.*, 'Sugarland;' and it is evident that the manufacturers of England may easily and speedily obtain from those regions any desired quantity of good and beautiful cotton. Many English travellers have visited those parts, and viewed them from one extremity to another, and have become well acquainted with its circumstances. From them, too, the truth may be learned. In short, should the ideas above set forth meet your approbation, the best thing to do would be to transmit a notice to the cotton-manufacturing firms, in order that they may appoint an agent with whom the necessary stipulations on both sides may be discussed, and a definitive understanding come to in the matter."

SUGAR AND COFFEE TRADE.

We are indebted to the monthly circular of Mr. H. E. Möring, New-York, for the annexed particulars:

Imports of Foreign and Domestic Sugars, from January 1st to August 31st, and from September 1st to December 31st.

Months.	*N. York,* 1861.	*Bost'n,* 1861.	*Phila.,* 1861.	*Balt.,* 1861.	Total of the Four Ports. 1858.	1859.	1860.	1861.
January,..... tons,	7,160	2,042	382	293	11,703	13,141	8,883	9,877
February,..... "	13,425	4,244	1,391	1,114	18,498	20,247	18,497	20,174
March,..... "	30,241	4,106	3,467	3,619	32,894	38,277	31,167	41,433
April,..... "	29,918	3,341	3,462	2,744	37,239	48,632	47,727	39,457
May,..... "	43,074	5,976	5,439	1,163	36,038	42,961	52,031	55,652
June,..... "	23,436	2,096	2,520	870	36,661	43,409	45,661	28,922
July,..... "	16,252	2,883	826	408	29,859	32,646	52,262	28,319
August,..... "	12,250	1,344	1,288	245	32,545	18,820	40,232	15,127
Total in 8 months,..... "	175,748	25,982	18,775	10,456	235,437	258,133	296,410	230,961
September,..... "	....	....	....	....	15,711	9,642	27,915	....
October,..... "	....	....	....	....	10,903	7,836	19,149	....
November,..... "	....	....	....	....	8,011	8,076	12,110	....
December,..... "	....	....	....	....	11,002	11,742	8,879	....
Total in 12 months,.... "	....	....	....	....	281,064	295,429	364,463	....

Stock of Sugar at the Four Principal Ports of the United States of America, on the 1st September, 1861.

Stock in	Total Tons. 1858.	1859.	1860.	1861.
New-York,	32,248	56,291	78,055	46,900
Boston,	6,755	9,137	14,541	11,451
Philadelphia,	4,449	7,491	5,458	1,880
Baltimore,	3,297	5,370	11,052	3,326
Total, 1st September,	46,749	78,289	109,106	63,557
" 1st August,	27,983	86,907	95,050	82,076
Decrease,	....	8,618	....	18,519
Increase,	18,766	....	14,056	....

Imports, Stocks and Distribution of Sugar in the Four Principal Ports of the United States.

Imports up to 31st of August.	1858.	1859.	1860.	1861.	*Average.*
New-York, tons,	165,659 ..	188,247 ..	204,886 ..	175,748 ..	182,384
Boston, "	28,351 ..	28,012 ..	38,458 ..	25,982 ..	30,201
Philadelphia, "	21,897 ..	28,140 ..	26,710 ..	18,775 ..	23,880
Baltimore, "	19,535 ..	18,734 ..	26,356 ..	10,456 ..	18,770
Total, "	235,437 ..	258,133 ..	296,410 ..	230,961 ..	255,235
Stock, January 1st, "	18,103 ..	15,333 ..	24,140 ..	56,394 ..	28,493
Total Supply in eight months, "	253,540 ..	273,466 ..	320,550 ..	287,355 ..	283,728
Deduct Stock, September 1st, "	46,749 ..	78,289 ..	109,106 ..	63,557 ..	74,425
Distribution in eight months, "	206,791 ..	195,177 ..	211,444 ..	223,798 ..	209,303
" Monthly Average, "	25,849 ..	24,397 ..	26,431 ..	27,975 ..	26,163

Stocks, Receipts and Distribution of Sugar in the Six Principal Markets of Europe, up to 1st August.

Stock, 1st August.	1858.	1859.	1860.	1861.	*Average.*
Holland, tons,	15,250 ..	10,000 ..	5,500 ..	19,250 ..	12,500
Antwerp, "	1,600 ..	2,400 ..	600 ..	2,950 ..	1,888
Hamburg, "	1,500 ..	3,500 ..	4,500 ..	6,500 ..	4,000
Trieste, "	3,150 ..	6,150 ..	2,450 ..	2,050 ..	3,450
Havre, "	1,000 ..	7,100 ..	6,150 ..	6,600 ..	5,212
Great Britain, "	100,050 ..	80,600 ..	118,300 ..	129,300 ..	107,062
Total, August 1st, "	122,550 ..	109,750 ..	137,500 ..	166,650 ..	134,112
" July 1st, "	127,400 ..	113,150 ..	155,950 ..	149,950 ..	136,611

Receipts and Deliveries of Sugar in Six European Markets.

	1860.	1861.
Total Stock, January 1st, tons,	125,250	90,850
" Receipts up to August 1st, "	379,150	460,500
Total Supply for seven months, "	504,400	551,350
Deduct Stock, August 1st, "	137,500	166,650
Distribution in seven months, "	366,900	384,700
" in July, "	72,800	71,550
Receipts " "	54,350	88,250

Imports of Coffee, Four Years.

	Year 1858.	*Year* 1859.	*Year* 1860.	8 *mos.*, 1861.
New-York, tons,	41,501	41,630	32,648	37,120
Boston, "	8,339	6,835	4,147	2,929
Philadelphia, "	10,310	12,907	6,699	6,065
Baltimore, "	14,498	16,837	12,581	8,236
New-Orleans, "	23,874	26,061	20,442	9,620
Total, "	98,522	104,270	76,517	63,970

Stock of Coffee at the Five Principal Ports of the United States of America, on the 1st of September, 1861.

Stock in		1858.	1859.	1860.	1861.
New-York,	tons,	4,755	6,888	1,982	10,850
Boston,	"	926	1,587	213	1,378
Philadelphia,	"	774	312	674	526
Baltimore,	"	1,070	1,956	1,072	1,043
New-Orleans,	"	2,500	714	429	86
Total, 1st September,	"	10,025	11,457	4,370	13,883
" 1st August,	"	6,051	11,545	3,033	14,211
Decrease,	"	....	88	....	328
Increase,	"	3,974	....	1,337	....

Total on hand, 1st September, 1861.

Brazil,	bags,	160 lbs.,	156,083
St. Domingo,	"	130 "	9,776
Laguayra,	"	110 "	6,328
Maracaibo,	"	120 "	12,743
Bombay,	"	150 "	600
Costa Rica,	"	120 "	317
Jamaica,	"	150 "	....
Ceylon,	bags and mats,	..	11,543
Java,	bags,	130 "	4,257
Singapore,	mats,	60 "	24,792

Imports, Stocks and Distribution of Coffee in the Five Principal Ports of the United States.

Imports up to 31st of August.		1858.	1859.	1860.	1861.	*Average.*
New-York,	tons,	27,903	30,901	20,082	37,120	29,002
Boston,	"	4,476	5,288	3,219	2,929	3,978
Philadelphia,	"	6,620	9,133	4,379	6,065	6,549
Baltimore,	"	8,714	10,737	7,215	8,236	8,725
New-Orleans,	"	12,234	16,984	11,282	9,620	12,580
Total,	"	59,947	73,043	46,177	63,970	60,784
Stock, January 1st,	"	22,740	8,910	13,595	9,149	13,598
Total Supply in eight months,	"	82,687	81,953	59,772	73,119	74,382
Deduct Stock, September 1st,	"	10,025	11,457	4,370	13,883	9,934
Distribution in eight months,	"	72,662	70,496	55,402	59,236	64,448
" Monthly Average,	"	9,083	8,812	6,925	7,405	8,056

Stocks, Receipts and Distribution of Coffee in the Six Principal Markets of Europe, up to the 1st August.

Stock, 1st August.		1858.	1859.	1860.	1861.	*Average.*
Holland,	tons,	46,400	40,350	31,400	23,050	35,300
Antwerp,	"	4,300	2,750	2,700	3,800	3,387
Hamburg,	"	10,500	6,500	6,500	11,000	8,625
Trieste,	"	3,600	2,050	2,500	4,050	3,050
Havre,	"	3,900	4,750	6,150	8,600	5,850
Great Britain,	"	10,700	7,800	7,750	7,100	8,337
Total, August 1st,	"	79,400	64,200	57,000	57,600	64,549
" July 1st,	"	81,600	59,150	56,500	52,550	62,449

Receipts and Deliveries of Coffee in Six Markets of Europe.

		1860.	1861.
Total Stock, January 1st,	tons,	52,250	45,100
" Receipts up to August 1st,	"	111,300	124,850
Total Supply for seven months,	"	164,050	169,950
Deduct Stock, August 1st,	"	57,000	57,600
Distribution in seven months,	"	107,050	112,350
" in July,	"	13,250	12,650
Receipts "	"	13,750	17,700

JOURNAL OF INSURANCE.

I. Statistics of Fire Insurance in New-York. II. London Fire Insurance. III. Fire-Proof Warehouses.

STATISTICS OF FIRE INSURANCE IN NEW-YORK.

Number of fires in New-York, 1854—1860. *Amount insured on property damaged and lost by fire. Amount paid for loss and damage by fire.*

	No. of Fires.		*Amount insured.*		*Amount paid for loss and damage.*
1855,.....	344	....	$3,140,930	....	$941,147
1856,.....	315	....	4,011,843	....	1,267,812
1857,.....	336	....	4,056,092	....	732,014
1858,.....	302	....	2,948,485	....	632,103
1859,.....	310	....	2,643,795	....	1,100,290
1860,.....	397	....	5,416,700	....	1,390,894
	2,004	....	$22,217,845	....	$6,064,260
Average of six years,.	334	....	3,702,974	....	1,010,710

With the exception of the year 1860, during which the number of fires was excessive, the return shows the normal regularity which the result of similar statistics in the Old World naturally led us to expect. The average number of fires per annum, as shown in the above table, is 334, from which 1860 differs by an excess of 63. The average in the years 1855—1859 is 321, and the greatest variation in any one year is reduced from over 15 per cent. to less than 7 per cent.

Column II. exhibits the amount reported as insured on the property damaged or destroyed by the fires. Taking the years from June, 1854, to May, 1860, as a basis, the amount *paid* is to the amount *insured* on the property as 27.96 : 100.

There are many interesting deductions which might be made from this table, though until much more detailed records are preserved, it will be impossible to reduce fire insurance to a mathematical basis similar to that which is now the groundwork of life insurance. The Fire Marshal is doing much, but his labors are not so valuable as they would be were the companies to publish a detailed report of the risks and losses of their respective business.

A rough estimate may be made of the amount of property insured in this city by assuming the amount of premiums on risks "up town" and "down town" as the total premium received for insurance in New-York. This was stated in Mr. Birney's "Assessment Report for account of Fire Patrol," as follows:

1859,.....	$2,196,367
1860,.....	2,142,500

If we assume the average rate per cent. of all the companies and for all hazards to be 40 cents, then the total amount of property insured in this will be—

In 1859,.....	$549,091,750
In 1860,.....	535,625,000

The assumption here is necessarily wide of the truth, because the two districts do not embrace all the property insured in the city, and the supposed rate per cent. is quite as likely to be in error as is the valuation of the property. On the basis of these figures the amount paid for loss is to the total amount insured in the city as 2003836 : 100.

It need not be explained that the more numerous the risks the less is the hazard. If all the property in the world were insured in one office, and if fire insurance were founded on even as correct statistics as life insurance, there would be but little chance of pecuniary loss, as the aggregate premiums would be equal to the aggregate loss. The only reason for the rejection of what are denominated special hazards is the difficulty of obtaining a sufficient number; and an office which taking but a few might be unfortunate, would be perfectly safe in assuming a large number. The smallness of loss compared with the amount at risk, as shown by the preceding tables, does not lead men of comparatively small capital to the conclusion that they might safely insure themselves because they feel that what might be a small loss to a company would be a serious one to them.

Suppose A. and B. engage in a game of chance, and commence each with a capital of $100,000. If they bet equal but small amounts, the game is as even as such a game can be. But if we suppose that A. has a capital of $100,000, when B. has but $1,000, it will be obvious on a moment's thought that it is impossible for them to play an even game. Let the stakes be for $500 each. If A. wins, he increases his capital but by one-half of one per cent., but B.'s loss is fifty per cent. of all he has.

In another view it will be seen to be impossible for any game of chance to be even. If two persons, starting each with equal amounts, bet all they have, the winner doubles his capital, but the loser loses *everything*, and there is no manner of proportion between *all* and *nothing*. That only should be put at risk the loss of which would not be ruinous, or better still, not inconvenient. This last is what the payers of the two millions per annum to the insurance companies of this city do. They stake a small premium against the security of their property. If no fire occurs, they lose the premium; if a fire do occur, they win the amount for which they are insured.

The reason why the companies can afford to give such odds is, that they are—if I may use the term—betting with a sufficiently large number to get an average. It is an obvious conclusion from this that the larger the business of a company is, and the more extended the field in which it operates, the greater will be the security which it offers. A large conflagration in this city might be ruinous to a company which had confined its business, or a large portion of its business, to the district in which the fire occurred; while another company, which had taken a larger field, might lose an equal amount with no damaging effect to its security and prosperity.

The amount of insurable property in the world not being unlimited, it follows in theory that the fewer companies there are, the lower might be the premiums. And on the contrary, that the more companies there are, the higher the premium would have to be; because, whatever the description of goods, it would be specially hazardous for any company to take but *one* risk. Almost no premium would be equitable in that case, but the same property might be insured for a trifle if the company, instead of having but *one*, had a large number.

In this city, however, the rule seems to be inverted; the more companies we have the more the rates are reduced. It is understood on all hands that the present rates are much too low, and it is probable that they will not be raised to a paying standard till our dividends, instead of being reduced, are annihilated. J. V. Y.

LONDON FIRE INSURANCE.

The prospectus has been issued of the new insurance company, formed under the auspices of the committee of merchants, brokers and others, appointed at the great meeting at the Mansion-house, London, on the subject of fire risks, on the 25th July. It is to be called the Commercial Union Fire Insurance Company, and the capital is fixed at £2,500,000, in shares of £50 each. The directors are all persons occupying excellent positions in the trade of the port of London, and as the movement in favor of the undertaking was commenced prior to that of the "Mercantile," already started, it would not be fair to complain of its introduction as a mere initiative effort to share the success of that scheme. Looking at the rapid increase of the property of the country requiring to be protected, there is probably an ample field for both; but it may be hoped that no further fresh ones will now be attempted or encouraged, at all events until it shall have been demonstrated that even the increased facilities now provided are inadequate for legitimate wants. The directors of the present company propose to take power to extend their operations to life and marine business, should it hereafter be thought desirable to do so.—*London Times, August*, 1861.

FIRE-PROOF WAREHOUSES.

In a recent debate at Liverpool, Mr. GLADSTONE referred to disastrous fires which had recently occurred, and he suggested that it was worthy of consideration whether or not they had the best possible construction of warehouses. He also called attention to a suggestion, that in constructing new warehouses the buildings should be detached, even if the space between did not exceed a brick's length. It would also be well to consider the manner in which goods were stored in warehouses, especially with reference to the storage of inflammable articles with goods which were not so. Another underwriter was of opinion that there was great risk of fire from the dangerous trades, sail-makers, ship-chandlers and others, which were allowed to be carried on in warehouses. Saltpetre had been stored there, but it was in the vaults underneath the warehouses, and accessible from the street, and it was stored there with the approval of the associated insurance offices in London. In respect to the dock warehouses, it was said the iron columns were all filled up with concrete, so that, in the event of a fire, if the iron were to run like molten lead, the building would remain precisely as firm as before. There was no wood used in the building, either, except in the tea warehouse, and, as the whole building was arched, there was very little risk of combustible materials passing through from one floor to another, and so causing fire. The committee had lately been considering the question of having a steam fire-engine as used in London and New-York, and from the evidence which they had collected it was believed it would be useful in Liverpool.

COMMERCIAL REGULATIONS.

I. Decisions of the Treasury:—Canary Seed.—Window Glass.—India Rubber in strips. Human Hair.—Tyrian Dye.—Caustic Soda.—Tanned Calf-Skins.—Yarns of the Tow of Flax.—Tare on Segars.—Swedish Iron. II. Oath of Allegiance. III. Repudiation in Tennessee. IV. Cotton in New-Orleans.

CANARY SEED.

Treasury Department, July 6, 1861.

Sir,—I have had under consideration the report of your predecessor in office, on the appeal of Messrs. Isaac Jeanes & Co. from his decision assessing duties at the rate of 10 per cent., under section 24 of the tariff act of March 2, 1861, on "Canary seed" as a non-enumerated article—the appellants claiming entry thereof free of duty under the provision, in section 23 of said tariff, for "garden seeds, and all other seeds for agricultural, horticultural, medicinal or manufacturing purposes, not otherwise provided for."

Canary seeds are not specially provided for by name in any provision of the tariff act of 1861, nor are they used, it is understood, for "agricultural, horticultural, medicinal or manufacturing purposes," but as food for birds.

The classification of seeds in the tariff of 1861 is the same as in the tariff of 1857, and it was decided by one of my predecessors that, under that act, they were to be regarded as "unenumerated," and, as such, liable to the duty therein provided for non-enumerated articles.

I perceive no just reason for changing that decision; and the assessment of duty at the rate of 10 per cent. is affirmed.

I am, very respectfully,

S. P. Chase, *Secretary of the Treasury.*

Wm. B. Thomas, Esq., *Collector, &c., Philadelphia, Penn.*

POLISHED WINDOW GLASS.

Treasury Department, July 6, 1861.

Sir,—I have had under consideration your report on the appeal of Messrs. Semon, Bache & Co. from your assessment of duty at the rate of $2\frac{1}{2}$ cents per square foot, under section 17 of the tariff act of March 2, 1861, on "Polished window glass, exceeding 10 × 15 and not exceeding 16 × 24 inches"—the appellants claiming the right to enter the article in question at the rate of $1\frac{1}{2}$ cent per square foot under the provision in the same section for "rough plate, cylinder or broad window glass," of the same dimensions.

The decision of this question depends upon the fact whether the glass in question is "rough" or "polished." Presuming the article to be "polished window glass," as represented by the official experts who examined it, and not "rough," as claimed by the parties, I am of the

opinion that the duty in this case was properly assessed; and your decision is therefore affirmed.

I am, very respectfully,

S. P. CHASE, *Secretary of the Treasury.*

HIRAM BARNEY, Esq., *Collector, &c., New-York.*

INDIA RUBBER IN STRIPS, UNMANUFACTURED.

Treasury Department, July 8, 1861.

Sir,—I am in receipt of your reports on the appeal of WM. H. HUSSEY, Esq., from your decision subjecting to duty, at the rate of 10 per cent., under section 24 of the tariff act of March 2, 1861, "India rubber in strips, unmanufactured," as a non-enumerated article, the appellant claiming entry thereof free of duty under the provision in section 23 of said tariff for "India rubber, in bottles, slabs or sheets, unmanufactured."

In accordance with the evident intention of Congress to admit "India rubber, unmanufactured," free of duty, I am of the opinion that India rubber, in strips, unmanufactured, may properly be regarded as coming within the scope of the provisions in the 23d section of the tariff of 1861, of "India rubber, in bottles, slabs or sheets, unmanufactured," and that it is entitled to entry free of duty.

I am, very respectfully,

S. P. CHASE, *Secretary of the Treasury.*

HIRAM BARNEY, Esq., *Collector, &c., New-York.*

HUMAN HAIR.

Treasury Department, July 8, 1861.

Sir,—I have had under consideration your report on the appeal of A. LAFORE, Esq., of Philadelphia, from your assessment of duty at the rate of 30 per cent., under section 22 of the tariff act of 1861, on "Human hair" imported by him. The appellant claims entry of the article in question at the rate of 10 per cent., under the provision made for "Hair of all kinds, cleaned, but unmanufactured, not otherwise provided for," in section 19 of said tariff.

The decision of this question depends upon the fact whether the hair in this case is cleansed or prepared for use. From an inspection of the sample, and the opinion of official experts by whom the article has been examined, I am satisfied that it should be subjected to a duty of 30 per cent. under the provision, in section 22 of the tariff of 1861, of "Human hair cleansed or prepared for use."

I am, very respectfully,

S. P. CHASE, *Secretary of the Treasury.*

HIRAM BARNEY, Esq., *Collector, &c., New-York.*

TYRIAN DYE.

Treasury Department, July 8, 1861.

Sir,—I have had under consideration your report on the appeal of JOHN SCHUMACHER, Esq., from your decision subjecting to duty, at the

rate of 20 per cent., under section 24 of the tariff act of March, 2, 1861, "Tyrian dye," as a "non-enumerated article, manufactured in whole or in part." The appellant claims entry of the article in question under the 20th section of the act of 1842, as bearing similarity in nature and the use it is put to, to "Articles in a *crude* state, used in dyeing or tanning, not otherwise provided for," made free by the tariff act of 1861.

It seems to be conceded, in this case, that the article in question is a manufacture, and that it is not enumerated in the tariff act of 1861. It will, therefore, fall within the provision made for manufactures not enumerated or provided for in the 24th section of the act of 1861, and be liable to duty at the rate of 20 per cent. *ad valorem.*

The application to this case of the 20th section of the tariff act of 1842, suggested by the importer, cannot be allowed. That section has exclusive reference to the classification of unenumerated articles subject to duty, but it cannot transfer a dutiable article to the free list.

I am, very respectfully,

S. P. CHASE, *Secretary of the Treasury.*

J. Z. GOODRICH, Esq., *Collector, &c., Boston, Mass.*

CAUSTIC SODA.

Treasury Department, July 8, 1861.

Sir,—I have had under consideration your report on the appeal of Messrs. WILSON & BROWN, from your assessment of duty at the rate of 20 per cent., under section 24 of the tariff act of March 2, 1861, on "Caustic soda," as a "manufactured article non-enumerated"—the appellant claiming entry of the article in question free of duty, by operation of the 20th section of the tariff act of 1842, as most resembling in material, quality and uses to which it is applied "soda ash," which is free under the tariff act of March 2, 1861.

Caustic soda is not enumerated in the tariff of 1861, and, being a manufacture, it falls within the provision made for manufactures, unenumerated or unprovided for, in the 24th section of the act of 1861, and is chargeable with a duty of 20 per centum *ad valorem.* The 20th section of the act of 1842 has no application to this case. That provision only refers to the classification of unenumerated articles subject to duty, but it cannot transfer a dutiable article to the free list.

I am, very respectfully,

S. P. CHASE, *Secretary of the Treasury.*

HIRAM BARNEY, Esq., *Collector, &c., New-York.*

TANNED CALF-SKINS.

Treasury Department, July 10, 1861.

Sir,—The appeal of S. MENDELSON, Esq., from your assessment of duty at the rate of 25 per cent., under the provision made for leather, in section 20 of the tariff of March 2, 1861, on "Tanned calf-skins," has been duly considered. The appellant claims entry of said article under the same provision, viz.: "Leather, *upper*, of all kinds, except tanned calf-skin, which shall pay 25 per cent. *ad valorem*," as "upper leather," and, as such, liable to duty at the rate of 20 per cent. The article in

question appears, from the report of the appraisers at your port, to be "tanned calf-skins." Assuming the correctness of that description, I am of the opinion that the duty was properly levied by you at the rate of 25 per cent. The provision in the 20th section of the act of 1861, on which the importer relies, imposes, it will be seen, in terms, the duty assessed by you.

I am, very respectfully,

S. P. CHASE, *Secretary of the Treasury.*

HIRAM BARNEY, Esq., *Collector, &c., New-York.*

YARNS OF THE TOW OF FLAX.

Treasury Department, July 10, 1861.

Sir,—I have had under consideration your report on the appeal of Messrs. HADDEN & Co., from your decision subjecting to duty, at the rate of 30 per cent., under the tariff act of March 2, 1861, "Yarns of tow of flax," as a manufacture of flax not otherwise provided for. The appellants claim entry of the article in question at the rate of 20 per cent., under section 24 of said tariff, as "an unenumerated article."

That the duty was properly assessed by you, at the rate of 30 per cent., I have no doubt. If they are to be regarded as "manufactures of flax," they would come within the provision in section 14 of the act of 1861, for "all other manufactures of flax, or which flax shall be the component material of chief value, and not otherwise provided for." If, however, as claimed by the importer, they are to be regarded as unenumerated because no provision is made, in terms, for the "manufactures of the tow of flax," they would still be liable to duty at the rate of 30 per cent., by operation of the provisions of the 20th section of the tariff act of 1842—"manufactures of flax" being the articles they most resemble in one or more of the particulars enumerated in that section.

I am, very respectfully,

S. P. CHASE, *Secretary of the Treasury.*

HIRAM BARNEY, Esq., *Collector, &c., New-York.*

TARE ON SEGARS.

Treasury Department, July 9, 1861.

Sir,—Your report on the application of Messrs. J. M. & D. WILLIAMS, to be allowed actual tare on certain segars in boxes, imported and entered by them at your port, is received.

The tare on segars in boxes is distinctly specified in the 58th section of the general collection act of the 2d March, 1799, and the rate therein prescribed appears to have been allowed in this case, viz.: 18 per cent. If the actual tare, as is alleged, differs materially from the rates prescribed in that section, the remedy is to be found in the provision which authorizes the officers of the customs, if they see fit, with the consent of the importer or consignee, to estimate the tares according to the rates specified in the invoice.

I am, very respectfully,

S. P. CHASE, *Secretary of the Treasury.*

J. Z. GOODRICH, Esq., *Collector, &c., Boston, Mass.*

SWEDISH IRON--TRANSHIPPED.

Treasury Department, August 19, 1861.

Sir,—Messrs. NAYLOR & Co., of your port, have made inquiry as to whether Swedish iron, shipped by way of London, Hamburg or Bremen, and from thence re-shipped to the United States by either Bremen, Hamburg or American vessels, will be subject to the discriminating duty of ten per centum provided for by the 3d section of the act of August 5, 1861.

Swedish iron, so imported, will not, in my opinion, be liable to the discriminating duty in question.

I am, very respectfully,

S. P. CHASE, *Secretary of the Treasury.*

HIRAM BARNEY, Esq., *Collector of Customs, New-York.*

VESSELS FROM SOUTHERN PORTS.

Ninety-five vessels entering this port from the ports of the seceded States, without the proper clearances, have, in the last few months, been fined $100 each, under the act of February 18, 1793, regulating the coasting trade. The fines have been paid, and the masters and owners have entered protest and applied for redress under the remitting act of March 3, 1797. In consideration of the fact that the ports from which these vessels sailed were in possession of persons in insurrection against the United States, an order has been issued by the Secretary of the Treasury instructing the Collector at this port to release the amount of fines paid in every case where it is proved that the masters and owners attempted to obtain proper clearances. Merchandise forfeited by the same parties is to be returned on payment of duties. The fines of seventy-five vessels have been refunded since June 1. Henceforth, where the violation of the revenue laws arises from the obstruction of their due execution in southern ports, the Collector at this port is instructed by the Secretary of the Treasury, before taking any serious action in the matter, to allow the parties interested to lodge a statement with him setting forth all the facts and circumstances relating to the case, which statement will be transmitted to the Treasury Department, together with the Collector's report and views of the particular case for consideration. While awaiting the decision of the department, *no fine or penalty will be imposed, nor any deposit in lieu thereof will be received.* The collector will not place any restriction upon the vessel or merchandise, but will permit the entry to be made in the regular way.

AN ACT

REQUIRING AN OATH OF ALLEGIANCE, AND TO SUPPORT THE CONSTITUTION OF THE UNITED STATES, TO BE ADMINISTERED TO CERTAIN PERSONS IN THE CIVIL SERVICE OF THE UNITED STATES.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it shall be the duty of the heads of the several departments to cause to be administered to each and every officer, clerk or employee, now in their respective departments, or in any way connected therewith, the following oath, viz.: "I do

solemnly swear (or affirm, as the case may be) that I will support, protect and defend the Constitution and government of the United States against all enemies, whether domestic or foreign, and that I will bear true faith, allegiance and loyalty to the same, any ordinance, resolution or law of any State convention or legislature to the contrary notwithstanding; and, further, that I do this with a full determination, pledge and purpose, without any mental reservation or evasion whatsoever; and, further, that I will well and faithfully perform all the duties which may be required of me by law. So help me God!" And that each and every such civil officer and employee in the departments aforesaid, or in any way connected therewith, in the service or employment of the United States, who shall refuse to take the oath or affirmation herein provided, shall be immediately dismissed and discharged from such service or employment.

SEC. 2. *And be it further enacted*, That the oath or affirmation herein provided for in the first section of this act may be taken before any justice of the peace or notary public, or other person who is legally authorized to administer an oath in the State or District where the same may be administered. And that any violation of such oath by any person or persons taking the same shall subject the offender to all the pains and penalties of wilful and corrupt perjury, who shall be liable to be indicted and prosecuted to conviction for any such offence, before any court having competent jurisdiction thereof. *And provided further*, That such offender shall be forthwith discharged from such service or employment.

Approved August 6, 1861.

REPUDIATION IN TENNESSEE.

The State of Tennessee having passed a law discriminating between creditors outside and inside of the Confederate States, the State Comptroller has issued the following notice:

COMPTROLLER'S OFFICE, *Nashville, Tenn., July* 3, 1861.

By virtue of an act of the legislature, passed the 1st inst., I hereby give notice that the interest upon all State bonds, or bonds upon which the State may be liable, will be paid at this place; provided, that said bonds are not owned now, or were not owned on or subsequently to the 15th of April, 1861, by citizens or corporations of the non-slaveholding States of the United States of America. Satisfactory proof of ownership, on and after the 15th of April, will be required by the affidavit of the holder, and other proof where the party is not personally well known, taken before a notary public, or other persons authorized to administer an oath in the county where taken. Citizens and corporations of friendly foreign powers will be paid in sterling or other exchange.

J. T. DUNLAP, *Comptroller.*

COTTON IN NEW-ORLEANS.

We have before us a New-Orleans circular, covering the recommendation of the cotton factors of that port to withhold cotton from market. It is as follows:

The undersigned, cotton factors in the city of New-Orleans, in view of the interests of all parties, recommend to their various customers and correspondents not to ship any portion of their crops of cotton to this city, or to remove it from their plantations, until the blockade is fully and entirely abandoned, of which due notice will be given. [Signed by 135 names and firm names.]

OFFICE OF BOARD OF UNDERWRITERS, *New-Orleans, July* 23, 1861.

At a meeting of the board, held to-day, the following resolution was adopted and ordered to be published:

Resolved, That no river insurance on cotton bound to this port, nor fire insurance on cotton in the city of New-Orleans, be taken until the blockade of the port is raised and its free navigation resumed. Cotton on plantations may be insured to the extent of three-fourths its value, provided it is stored in lots of not exceeding one hundred and fifty bales, and the lots at least three hundred feet apart.

JAMES H. WHEELER, *Secretary.*

The circular, which is signed W. Cox & Co., thus urges the necessity of the course required by the above documents:

"It is clear that, so long as the port continues blockaded, *no cotton can be sold*, and it would be bad policy to permit an accumulation in our warehouses. The enemy would be invited to attack a city whose successful investment would place in his hands a sufficiency of cotton * * * *to relieve him from the complications of the blockade.*

"Our cotton warehouses are crowded together in certain portions of the city, and *a single spark might kindle a conflagration unprecedented in the history of this country*, bringing ruin upon planter and factor, and disaster upon the Confederacy."

THE COOLIE SLAVE TRADE.

We are informed, that by a new law now enforced in Cuba, all coolie laborers, at the expiration of the seven years' apprenticeship for which they were imported, are required to choose between an immediate return to their native country or become "apprentices for life." It is likely to happen that in many cases these unfortunate creatures are unable to pay their passage-money, or that they fail to get seasonable information in regard to the termination of their stipulated term of service; in either case they are consigned to perpetual servitude. The effect of this is simply to transfer the slave trade from the coast of Africa to China and India, for few adventurers are likely to run the hazard of capture with a cargo of Africans on board, when they can obtain coolies with impunity, and perhaps get about as well paid for their trouble. It is, probably, a fact, that at present a smaller number of slavers are afloat than at any time for many years past, (chiefly owing to the depreciation in sugars and consequent falling off in the demand for labor,) while the coolie traffic is engaging increased attention. Negroes are more valuable than any other class as field hands, and consequently bring a larger price; but coolies do quite as well for general service.—*Journal of Commerce.*

CHAMBERS OF COMMERCE AND BOARDS OF TRADE.

CHAMBER OF COMMERCE OF NEW-YORK.

The regular monthly meeting of the Chamber was held Thursday, September 5th, Pelatiah Perit, Esq., President, in the chair. About twenty members present.

The following were elected members: Messrs. Benjamin G. Arnold, No. 125 Front-street; Frederick Sturges, No. 125 Front-street, and Joseph Willets, No. 113 Water-street.

On motion of Mr. George Opdyke, Dr. Francis Lieber, LL. D., Professor of History and Political Science in Columbia College, was elected an honorary member.

Mr. George W. Blunt moved that a special meeting of the Chamber be held on Monday, September 9th, at one o'clock, to elect three members of the Board of Pilot Commissioners for two years, as provided by the Revised Statutes, Vol. II., p. 429, viz.:

"There shall be, in the city of New-York, a board, entitled 'The Board of Commissioners of Pilots,' consisting of five persons, to be elected as soon as convenient after the passage of this act, and to hold their offices respectively for two years from the time of their election, and until others shall be elected.

"Three of such commissioners shall be elected by the members of the Chamber of Commerce of the city of New-York, at a meeting to be called for the purpose, to be specified in the notice for the meeting; and the certificate of the secretary of that body, or other officer regularly performing his duties for the time being, shall be *prima facie* evidence of such election."

Mr. George Opdyke said that, with the concurrence of the President and several members of the Chamber, he had prepared a few resolutions upon the subject of the war and condition of the country, which he would read:

Whereas, The progress of the war for the defence of the Union and Constitution has given evidence of a degree of strength and energy on the part of those who are madly striving to destroy them, which can be only subdued by the marshalling of an overwhelming force; and whereas, it is evident that to this end all the resources, both in men and means, in the loyal States will be needed if we would avoid a protracted struggle and secure the blessings of an early, honorable and enduring peace; and whereas, humanity and interest alike demand the speedy attainment of this end, therefore,

Resolved, That this Chamber, in view of the unexpected magnitude of the contest, deems it a duty to renew its pledge to the government of earnest sympathy and support.

Resolved, That the members of the Chamber, having entire confidence in the integrity and ability of the head of the Treasury Department, will exert their best efforts, individually and collectively, and in their connections with moneyed institutions, to strengthen the financial resources and credit of government.

Resolved, That this Chamber pledges to the government its unfaltering support in a vigorous prosecution of the war until every rebel has laid down his arms and every State returned to its allegiance. The contest, it believes, admits of no other termination, since any other basis of peace would dishonor the nation and prove to the world that our cherished form of popular government is a failure.

Resolved, That all the aid afforded to the enemy, either by supplying means of

prosecuting the war or by openly advocating their cause, is treasonable, and should be promptly punished with the utmost rigor of the law and by the stern rebuke of public opinion.

Resolved, That the decisive course recently adopted by the government and its commanding officers affords gratifying proof that the future of this contest is not to be controlled by the quixotic idea of prosecuting war in the spirit of peace, but that the guilty conspirators will be made to feel, both in their persons and their property, all the rigors that the usages of civilized warfare will justify.

Mr. OPDYKE said he had but a few words to say in support of the resolutions. It seemed to him that, in view of the exhibition of power on the part of the rebels, beyong any thing we had any reason to apprehend, calling for united and vigorous efforts on the part of the North to oppose them, the Chamber ought again to renew its pledges of support to and confidence in the government. It was well known that until a very recent period this contest, on behalf of the United States government, had been conducted with a great deal of mildness and leniency; so much so as, in the opinion of many, to retard our progress, weaken our strength and prolong the struggle. Recently, however, we had evidence that that policy was changed; and it seemed to him proper that the Chamber should express its hearty concurrence in that change.

Gen. P. M. WETMORE said the whole subject had been so recently exhausted in the eloquent argument presented by the Hon. Mr. HOLT, of Kentucky, that any advocacy of the resolutions just presented would be unnecessary. But he took the opportunity to remind the Chamber that on that floor, on the 19th of April, was first put forth to the country the tone which loyal men were expected to take upon this question. The key-note was struck here which, in a few days, was followed by the grand Union demonstration in Union Square. From this Chamber rang forth the trumpet-peal of patriotism which was heard to-day, and which would be heard to all time; and he rejoiced, as one of the merchants of New-York about to go off the stage, that the merchants, in their collective capacity, representing in this Chamber all the interests and duties and principles of commerce, had set forth the doctrine that loyalty was to prevail in this contest, and that the war was to be fought out to the end, preserving the rights, and duties, and interests, and laws of the Union under which we had lived for three-quarters of a century. He would also remind them that on that same day a group of capitalists assembled in a corner of the Chamber and took measures to subscribe ten millions to government, as evidence of the sincerity with which they supported the resolutions passed. The records handed down from the time of the revolution presented no page more honorable to the character of New-York merchants than the proceedings of the 19th of April; and he felt more than ever proud that he belonged to this commercial community. Commerce had always been true and loyal in our country, as New-York had shown when sending forth four loyal men to declare the principles of liberty in the first Congress held after the prostration of the Colonial government; and God grant that commerce, and the men who administered its duties and enjoyed its privileges might always be true to the country as had been the merchants of New-York in this great emergency which had come upon us.

WILLIAM K. STRONG cordially concurred in seconding the resolutions, and desired to add a few words from his own observation and inspection during the last two weeks at the seat of government, where he had been taking great interest in the movement of that gigantic machine, which

was now conducting the war that had been imposed upon us by rebellion unexampled in the history of the world. It afforded him pleasure, going there, as he had, with his ears filled by rumors prejudicial to the unity, to the power, stability and success of the government in this mighty war, that he was enabled, after an observation of ten or twelve days, to bear his attestation to the labors of the President and every member of his cabinet. Mr. S. spoke of the unwearied activity displayed by the Executive, the Secretaries, General SCOTT and General MCCLELLAN. He had returned from Europe, where he had intended to spend two years in travelling through the countries of the Old World and examining their institutions. Comparing them with our own benignant government, he was more than ever thankful that he was an American citizen. He would not disparage the intelligence and power of England, but she had not our freedom; he would not underrate the civilization of France, but citadels and police surveillance at every step was not what one accustomed to the freedom of this land could tolerate. He had left his family behind and come to contribute all he had of life and fortune to the preservation of this government; and in that spirit he heartily endorsed the resolutions. Speaking of our position as a commercial nation, Mr. S. said, that the war now going on here suspended one-third of the business of the entire world. Go to any of the commercial or manufacturing towns in England and France, and inquire "How is business?" "Very bad." "What is the difficulty?" "Oh! the war in America." "How much is your business reduced?" "Nearly one-half." The question was agitated as to how England and France would treat us. He would answer from his own observation, that England and France would study to preserve a neutrality as perfect as could be maintained.

The resolutions passed unanimously.

The following resolutions, moved by the Hon. F. A. CONKLING, were adopted:

Resolved, That the interests of commerce, which is the vital essence of every system of public credit, as well as the protection of the national territory, demand the most active measures on the part of the government for the defence of the harbors on the Atlantic coast.

Resolved, That the defences of the harbor of New-York, in their present unfinished condition, are deemed by competent engineers insufficient to the protection of this port, and that we earnestly invoke the attention of the public authorities to the necessity of perfecting a system of fortifications adequate to the security of the vast interests involved.

Mr. BLUNT mentioned that when the committee was in Washington, Gen. TOTTEN stated that Congress had provided means; that he had plenty of guns and carriages, and only waited for the forts to be finished.

Mr. CONKLING stated that by the act for additional appropriations, passed July, 1861, there was given

For Fort Richmond, Staten Island,.....	$ 10,000
For the fort on the site of Fort Tompkins,.....	50,000
For fort at Willett's Point,.....	100,000
For fort at Sandy Hook,.....	100,000

Gen. TOTTEN had stated the appropriations were sufficient.

On motion, Commodore SILAS H. STRINGHAM, United States Navy, was elected an honorary member of the Chamber.

On motion of Mr. DENNING DUER, it was

Resolved, That the thanks of this Chamber be tendered to the Hon. JOSEPH HOLT, of Kentucky, for his eloquent, powerful and patriotic address, delivered at Irving Hall, on Tuesday evening last.

Resolved, That he be requested to furnish the Chamber a copy, for publication and distribution, and that the Executive Committee be authorized to carry this resolution into effect.

On motion of Captain C. H. MARSHALL, the following resolution was unanimously adopted:

Resolved, As the sense of this Chamber, that the acknowledgments of every loyal citizen are due to the authorities who designed, and to the naval and military officers who executed, the recent operations on the southern coast of the United States; and that Commodore SILAS H. STRINGHAM, of the navy, and Major-General BUTLER, of the army, and the officers and men who served under them, have entitled themselves to the highest distinction for their skill and gallant bearing in accomplishing so important a result with so little sacrifice of human life.

The following gentlemen were nominated this day for membership at the next monthly meeting:

		Nominated by
JOHN JACOB ASTOR, Jr.,	85 Prince-street,	PROSPER M. WETMORE.
JONATHAN H. RANSOM,	39 Dey-street,	PROSPER M. WETMORE.
EDWARD MOTT ROBINSON,	88 Wall-street,	WILLIAM T. COLEMAN.
SELAH VAN DUZER,	N. Y. Exchange B'k,	PROSPER M. WETMORE.
EDWARD WILLETS,	363 Pearl-street,	FRANCIS S. LATHROP.

CHAMBER OF COMMERCE, CINCINNATI.

Annual Meeting of the Chamber of Commerce of Cincinnati, Tuesday, September 10.

The annual meeting of the Cincinnati Chamber of Commerce was held in the Merchants' Exchange Tuesday, September 10. The meeting was presided over by JOHN DUBOIS, Esq., Vice-President. The Superintendent's annual statement of the trade and commerce of the city was ordered to be printed for the use of the members. The financial report was presented, of which the following is a synopsis. The association is shown to be in a flourishing condition:

Balance in treasury, September 1, 1860,.....	$4,287 78
Receipts during year,.....	7,840 81
Total,.....	$12,128 59
Expenditures,.....	7,421 36
Balance in treasury, September 1, 1861,.....	$4,707 23

Sundry sums due to the Chamber increase the net assets of the Chamber, over all liabilities, to $5,974 98. The hall of the Merchants' Exchange has been renovated and repaired, at an expense of $590. Sixty-two new members were elected during the year. The membership now consists of 299 individuals and 234 forms. The officers elected for the ensuing year are as follows: President, JOSEPH C. BUTLER; Vice-Presidents, ISAAC A. OGBORNE, N. GOLDSMITH, J. D. MINOR, LEWIS FAGIN, S. W. SMITH and B. P. BAKER; Treasurer, GEORGE KECK; Secretary, JOHN A. GENO.

Mr. BUTLER, the successful candidate for President, being called upon, made a brief speech. He said he felt he owed his election more to a personal preference than to his qualification for the office, and that he felt himself honored in being elevated to a place which had been filled by so many older and much more distinguished merchants. In consequence of the peculiar existing circumstances, he might be permitted to say a word or two regarding the distracted state of our country. Whether this war be soon ended or be a long and tedious one, he felt well assured that the merchants of Cincinnati will always be found on the side of their country and constitutional law, and in opposition to rebellion and anarchy.

RAIL-ROAD, CANAL AND TELEGRAPH STATISTICS.

I. The Galena and Chicago Rail-Road Company. II. Watertown and Rome Rail-Road. III. French Railways. IV. The Great Northern Railway of France. V. English Railway Dividends. VI. British and Irish Magnetic Telegraph. VII. The Atlantic Cable. VIII. Telegraph to Siberia. IX. Rail-Road Telegraph Lines.

GALENA AND CHICAGO RAIL-ROAD COMPANY.

Abstract of Balance-sheet, 1857—1861.

	1857.	1858.	1859.	1860.	1861.
Road, &c.,	$ 8,879,804	$ 9,335,727	$ 9,339,390	$ 9,354,514	$ 9,352,481
Machinery,	168,731	59,734	50,302	48,858	43,413
Real estate,	23,138	23,138	22,706	21,432	20,334
Materials,	7,079	476,683	281,483	213,097	228,462
Bonds, &c.,	211,003	318,098	303,132	313,243	308,826
Miscellaneous,	459,319	70,367	110,192	145,557	150,867
Cash,	47,498	82,975	193,311	249,780	363,503
Total,	$ 9,896,572	$10,366,716	$10,300,516	$10,346,441	$10,469,886
Capital,	$ 6,013,100	$ 6,023,800	$ 6,026,400	$ 6,027,700	$ 6,028,300
3d dividend bonds,	600,000	600,000	600,000	600,600	600,000
1st mortgage bonds,	1,400,000	1,400,000	1,511,000	1,393,000	1,393,000
2d mortgage bonds,	906,000	1,847,000	1,738,000	1,629,000	1,520,000
Litchfield bonds,	52,015	52,015	52,015	11,200	11,200
Bills payable,	611,567	49,716	....	3,837	9,766
Scrip, &c.,	16,004	8,339	5,996	4,702	4,197
Dividend & coupon,	45,212	8,088	12,521	11,726	11,643
Sinking fund,	98,000	152,000	269,000	378,000	487,900
Surplus, &c,	153,720	82,975	198,636	250,687	335,212
Sundries,	953	141,783	4,949	36,589	77,269
Total,	$ 9,896,571	$10,366,716	$10,300,516	$10,346,414	$10,469,886

Statement of Cost, Earnings and Dividends from the opening of the Road.

Years.	*Cost of Road.*	*Mileage.*	*Gross Earnings.*	*Net Earnings.*	*Amount of Dividends.*	*Per cent.*
1849,	$ 433,429	40.50	$ 48,520	$ 29,812	$ 23,383	10½
1850,	695,507	42.50	127,686	78,782	47,711	15
1851,	1,326,706	84.50	211,310	123,948	62,914	15
1852,	2,230,189	92.50	473,538	286,162	149,973	20
1853,	4,143,656	187.50	799,013	439,814	353,155	16
1854,	6,552,163	211,50	1,506,710	820,193	546,519	17
1855,	8,429,043	249.50	2,315,787	1,252,042	986,524	22
1856,	8,979,804	249.50	2,416,344	1,120,851	1,095,590	20
1857,	9,435,721	259.50	1,640,807	719,555	301,115	5
1858,	9,339,390	259.50	1,547,561	620,328	241,024	4
1859,	9,354,514	259.50	1,369,441	546,420	120,528	2
1860,	9,352,481	261.25	1,462,752	652,261	180,834	3

WATERTOWN AND ROME RAIL-ROAD.

The Watertown and Rome Rail-Road Company (now under the new title of the Rome, Watertown and Ogdensburg Rail-Road Company) has

contracted with GEORGE B. PHELPS, of Watertown, to build the branch from the Forest House to Ogdensburg. This branch, so called, is nineteen miles long, and will form, in connection with the present line, railway communication from Rome to Ogdensburg, connecting at the former place with the New-York Central, and at the latter, by a ferry across the St. Lawrence, with the Grand Trunk and the Prescott and Altona Rail-Road. It is said that this will shorten the distance by rail, between Ogdensburg and Albany and New-York, thirty-seven miles.

FRENCH RAIL-ROADS.

The network of rail-roads in France measures at the present time 8,100 kilometres, (the kilometre being about 1,093 yards, the aggregate length may be set down at 5,030 miles,) over which travel 6,000 cars; are able to convey at the same time 150,000 travellers; and 42,000 baggage cars are capable of containing 336,000 tons of merchandise, or the cargo of seventy ships of the line. The motive power applied to these roads comprises 2,700 locomotives, of 800,000 horse-power, weighing, with their tenders, 122,000 tons, and cost 189,000,000 francs, about $37,000,000. Their total annual travel is about 43,000,000 kilometres, of 1,093 yards each. The consumption of fuel, corresponding to that travel, equals about 336,000 cubic metres, and that of the water reduced to steam, 3,500,000,000 of litres. (The litre equal to 11½ gallons.)

The Great Northern Railway of France is 967 kilometres (about 600 miles) in length; owns 456 locomotives and 10,783 cars of all kinds. In 1860 it carried 7,745,000 passengers and 3,890,000 tons of freight. Its receipts were, the same year, 60,607,000 francs, (about $12,000,000.) The following table, showing its receipts from 1851 to 1860 inclusive, shows the wonderfully productive capacity of the railway for developing business:

YEAR.	*Passengers.*	*Tons merchandise.*	*Receipts.*
1851,.....	3,098,000	584,000	$ 5,020,000
1852,.....	4,259,000	799,000	5,720,000
1853,.....	4,741,000	1,177,000	6,640,000
1854,.....	5,071,000	1,622,000	7,700,000
1855,.....	5,550,000	2,050,000	9,580,000
1856,.....	5,554,000	2,152,000	9,460,000
1857,.....	6,166,000	2,578,000	10,060,000
1858,.....	6,648,000	3,158,000	10,840,000
1859,.....	7,356,000	3,486,000	11,340,000
1860,.....	7,775,000	3,890,000	12,120,000

In stating the receipts in dollars we have calculated five francs to the dollar—near enough for a rough statement. Up to 1854 this road was only 710 kilometres in length. Of the sixty millions francs received in 1860, about twenty-seven millions was received from what is denominated *fast trains*, viz., passenger, baggage, etc.; the balance from *slow trains*, or merchandise. The earnings per kilometre in 1860 were 62,675 francs, against 59,930 in 1859. Of the 3,890,000 tons of merchandise carried in 1860, full one-half was coal—coal carrying being the specialty of this road. The dividends paid in 1860 amounted to 13 per cent. Only one railway in France paid larger dividends; the Orleans having paid twenty per cent. The market value of the different French railways is about as

follows, calculating the par at 100: Great Northern, 196; Orleans, 282; Paris and Lyons, 200; Strasburg, 117; Southern, 122; Eastern, 117; Bordeaux, 121. The other French securities also stand very high in the market: Bank of France, 290; Credit Foncier, about 250; Credit Mobilier, 146; Credit Industriel, 112.

ENGLISH RAILWAY DIVIDENDS.

The following table of the dividends declared in 1855, 1856, 1857, 1858, 1859 and 1860, together with the balances remaining over from the last half-year, (after payment of dividend,) we copy from the London *Money Market Review* for August, 1861:

Company.	Rate per Cent. per annum of Dividend Declared.												Balance from last half year.
	1855.		1856.		1857.		1858.		1859.		1860.		
	1st ½ yr.	2d ½ yr.	1st ½ yr.	2d ½ yr.	1st ½ yr.	2d ½ yr.	1st ½ yr.	2d ½ yr.	1st ½ yr.	2d ½ yr.	1st ½ yr.	2d ½ yr.	
Bristol and Exeter,	4½	4½	4½	5	5	5	5	5	5½	6	6	5½	£2,991
Caledonian,	3	2	1	3½	3½	5	3½	4	3¾	5	4¼	5½	10,596
Eastern Counties,	2¼	2¼	1	2½	2½	3¼	2⅜	3¼	2⅛	3⅜	2⅛	2⅜	5,620
Edinburgh and Glasgow,	2	2	2	2½	3	3¼	3	3¼	3¼	4	4	4¼	2,259
Glasgow and South Western,	3¾	4	4	5	5	4½	4¼	4½	5	5	5¼	5½	5,174
Great Northern,	2¼	6	3½	nil.	3-5	5 21-40	3⅜	6⅛	3⅜	7	4½	6¾	966
Great Southern and Western,	5	5	6	6	5	5	5	5	5	5	5	5	5,900
Great Western,	2	2½	2½	3	1	2	nil.	2½	2	3½	3	3½	13,001
Lancaster and Carlisle,	7	7½	7¼	8	8	9	9	9	9	9¾	9½	9¾	....
Lancashire and Yorkshire,	4	4¼	4½	5	5	4¼	3¾	4	4½	5	5½	6	22,008
London and North Western,	4¾	5¼	5	6	5	5	3¾	4¼	4¼	5¼	5	5¼	27,561
London and Brighton,	4 1-5	5 4-5	5	7	5	7	5	7	5	7	5	7	5,076
London and South Western,	4⅜	5⅝	5½	6½	4¾	5¼	4¼	5¾	4¼	5¼	4¼	5¼	1,792
Manchester, Sheff. and Linc.,	nil.	½	½	1	1	1	nil.	nil.	2-5	1	1	1½	1,103
Midland,	3½	3¾	4	4¼	4¼	5	4¼	5½	5¼	6	6½	7	3,726
North British,	nil.	nil.	2½	2½	2¾	2¾	2¾	2¾	3	3	3	3¼	1,005
North East.—"Berwick,"	3¾	4½	4	4¾	5	5	4¼	4¾	4¼	5¼	5¼	5¾	4,246
Do. "Leeds,"	..	..	..	..	2	2½	1⅝	2⅜	1¾	2¾	2¾	3	1,748
Do. "York,"	2	3¼	2½	3¾	4	4	3	4	3¼	4½	4¼	5	2,826
North London,	4	4	4½	5	4½	4½	5	5	5	5½	5	5½	580
North Staffordshire,	nil.	4	3½	3½	4	4	2	2½	3	4	4	4	3,859
Scottish Central,	5	5	5	5½	3½	5½	5½	5¼	5	5½	5½	5½	15,956
South Eastern,	2 17-20	4.8.4	3.3.4	5	3	4⅗	3	5	4	6	4⅗	6	2,055
South Wales,	3	3	3½	4	3¼	3¼	2½	2½	2¼	2¾	2	3	2,410

BRITISH AND IRISH MAGNETIC TELGRAPH.

The report of the directors stated that the gross income of the year 1860 amounted to nearly £90,000, against £74,000 in 1859, £73,000 in 1858, and £71,200 in 1857, the year when the two companies were amalgamated. This large increase was not derived from any one particular source, but partly from the extensions of 1859, and from a general growing use of the telegraph by the public. The net increase, compared with 1859, amounted to £6,600, and after paying the 7 per cent. preference dividend, the interest on the debentures, and a dividend at the rate of 5 per cent. per annum for the last half-year on the ordinary stock, there remained £2,000. The balance-sheet showed that £756,623 had been expended on capital account.

TELEGRAPHIC COMMUNICATION WITH SIBERIA.

The St. Petersburg *Gazette* publishes the following article:—"The plan for establishing a telegraphic line connecting Europe, through Siberia, with the Pacific Ocean has, during four years, had time to take shape and form, so that at the commencement of the present year the supreme sanction was given to the project for constructing a telegraphic line in the countries bordering on the Amoor and the Oussouri, from Nikolaiewsk by Khabarovka to the port of Novgorod, (1,900 versts,) the most important point of the possessions recently annexed to Russia on the sea of Japan. The establishment of this line is undertaken by the Ministry of Marine, at its cost and under its direction; and at the same time the superior direction of the means of communication (Board of Works) has commenced the construction of a line starting from Kasan in the direction of Siberia, which proposes opening, at the end of the present year, a telegraphic communication from Kasan to Omsk, (1,900 versts,) and to continue it afterwards to Irkutsk, a distance of 2,475 versts from Omsk. Thus, probably, within two or three years on the one side there will be a telegraphic communication between Europe and Asia to Irkutsk, and, on the other hand, our new colonies on the Amoor and Oussouri will be connected with each other and with our principal ports on the Japanese waters. Thus, of the extent of 10,000 versts which the Siberian telegraph will embrace, there only remains the central portion, that of Irkutsk by Kiakhta to Khabarovka, about 3,500 versts, where as yet nothing has been settled; but it is beyond a doubt that as soon as the works actually projected shall have been successfully completed, this intermediate line will be constructed; and thus within four or five years at the least the gigantic project of a telegraphic communication from Europe to the distant lands on the shores of the Pacific Ocean will be realized."

RAIL-ROAD TELEGRAPH LINES.

The use of the telegraph by rail-road companies has proved of vast advantage in many respects, of which the one most readily perceived by the public, is the decrease of liability to accidents by collision. There are several of the long lines of rail-road that have built telegraph lines exclusively for their own use. Besides the principal office, operators are stationed at short intermediate distances, say ten or twelve miles. Every operator reports direct to headquarters as each train passes his station, and the clicking needle at the main office is thus constantly employed. The manager at headquarters is thus repeatedly "posted" as to the progress of each train. He has almost, literally, the movements of the trains before his eyes. If a crevasse or a land slide occurs, or a bridge is burned or carried away, or any other accident occurs, he can immediately provide a remedy. This vigilance is indeed expensive, but it is true economy.

A captain, lately a rail-road conductor, was drilling a squad, and while marching them by flank, turned to speak to a friend for a moment. On looking again towards his squad, he saw they were in the act of "butting up" against a fence. In his hurry to halt them, he cried out—*Down brakes! down brakes!*

COMMERCIAL CHRONICLE AND REVIEW.

THE month of September is marked by a favorable change in the business affairs at and near New-York. The heavy outlay of government funds, amounting to millions of dollars, has given an impetus to manufactures in New-England and New-York. The advices as to the English and the Continental grain harvests are such as to sustain the active shipments from this port. There are buyers of fall goods in our market from the West, giving some little activity to foreign and domestic dry goods. The imports at this port during the last month are about one-third as large as for the corresponding month in either of the last two years, showing a decline almost if not entirely without precedent at this season of the year. The receipts of specie and bullion have been smaller than for any previous month of the current year. The withdrawals from warehouse are somewhat large in proportion to the imports, showing, together with the imports, $11,500,000 for the month, and $156,295,000 for the eight months ending 1st inst. We annex our usual summary of comparative imports for four years:

FOREIGN IMPORTS AT NEW-YORK IN AUGUST.

ENTERED.	1858.	1859.	1860.	1861.
For consumption,..	$15,067,732 ..	$18,416,207 ..	$19,564,675 ..	$3,359,695
For warehousing,..	2,146,021 ..	2,964,044 ..	4,182,764 ..	2,660,457
Free goods,.....	2,342,741 ..	2,920,921 ..	2,050,665 ..	1,816,224
Specie and bullion,	67,682 ..	348,419 ..	140,750 ..	1,049,552
Total entered,...	$19,624,176 ..	$24,649,591 ..	$25,938,854 ..	$8,885,928
Withdrawn,.....	3,116,013 ..	3,296,084 ..	3,325,105 ..	2,614,652

The business for eight months has been as follows:

FOREIGN IMPORTS AT NEW-YORK FOR EIGHT MONTHS, FROM JANUARY 1ST.

ENTERED.	1858.	1859.	1860.	1861.
For consumption,..	$65,401,911 ..	$131,927,230 ..	$118,270,269 ..	$38,551,615
For warehousing,..	17,331,440 ..	26,173,802 ..	29,560,141 ..	33,102,133
Free goods,.....	15,298,266 ..	21,350,052 ..	19,816,231 ..	22,074,189
Specie and bullion,	1,882,940 ..	1,649,501 ..	891,938 ..	33,955,718
Total entered,...	$99,914,557 ..	$181,100,585 ..	$168,538,579 ..	$127,683,655
Withdrawn,.....	28,102,515 ..	17,406,868 ..	21,254,755 ..	28,611,202

The chief feature of the month, after the successful taking of the new loan by capitalists of interior towns, has been the enormous foreign export of corn, amounting to over two millions three hundred thousand bushels, valued at $1,122,000. The export of flour has also been heavier than for any one month in the year, the aggregate export of wheat, flour and corn being, for the month, $4,923,995, and for the cereal year ending 1st inst., $48,476,691, viz.:

	MONTH OF AUGUST, 1861.		YEAR 1860-61.	
		Value.		*Value.*
Flour,.....	297,243 bbls., ..	$1,411,904 ..	2,728,012 bbls., ..	$14,727,234
Wheat,.....	2,389,645 bush., ..	2,389,645 ..	23,859,147 bush., ..	28,059,226
Corn,.....	2,338,429 " ..	1,122,446 ..	9,268,729 " ..	5,690,231
		$4,923,995		$48,476,691

The total operations for each month of the past year are represented in the following tabular statement, the average prices being for those qualities usually embraced in our foreign export trade:

FOREIGN EXPORTS OF FLOUR, WHEAT AND CORN, FOR THE YEAR ENDING AUGUST 31, 1861, FROM THE PORT OF NEW-YORK.

	FLOUR.		WHEAT.		CORN.	
	Average price.	*Total value.*	*Average price.*	*Total value.*	*Average price.*	*Total value.*
Sept., 1860,..	251,688	$5 85	$1,472,374	2,228,924	$1 30	$2,897,601	189,726	68 c.	$128,014
Oct., " ..	270,892	5 75	1,557,629	2,600,226	1 22	3,172,275	260,098	66	171,665
Nov., " ..	228,678	5 70	1,303,465	2,472,162	1 28	3,164,367	599,531	70	419,672
Dec., " ..	187,565	5 25	984,716	2,027,145	1 15	2,331,217	851,870	66	511,122
Jan., 1861,..	168,959	5 70	963,066	832,169	1 26	1,048,533	613,261	72	441,548
Feb., " ..	186,868	5 60	1,046,461	1,060,995	1 26	1,336,853	603,751	70	422,626
March, " ..	171,589	5 50	943,464	972,688	1 25	1,215,860	789,664	68	536,971
April, " ..	211,140	5 60	1,182,384	999,843	1 28	1,279,799	1,057,004	70	739,903
May, " ..	200,008	5 50	1,100,004	1,729,108	1 25	2,161,385	799,151	68	543,423
June, " ..	271,593	5 50	1,493,761	3,577,243	1 20	4,292,692	768,968	57	438,312
July, " ..	281,779	4 50	1,268,006	2,968,999	1 00	2,968,999	397,276	54	214,529
Aug., " ..	297,243	4 75	1,411,904	2,389,645	1 00	2,389,645	2,338,429	48	1,122,446
12 months,..	2,728,012		$14,727,234	23,859,147		$28,259,226	9,268,729		$5,690,231

If our computation is correct, the average value of flour exported, per barrel, has been, for the past year, about $5 40; for wheat, per bushel, $1 18; and for corn, 61 cents. The export from this port alone being in excess of forty-eight millions of dollars, and likewise in excess of the aggregate export of breadstuffs and provisions from the whole United States for either of the past two years, and largely in excess of breadstuffs export from the country for three years past. We recur to the summary published in our September number, page 268, showing the total export of breadstuffs and provisions from the United States, viz.:

	Export value of Breadstuffs.		*Export value of Provisions.*		*Aggregate of Breadstuffs and Prov.*
1857,.....	$55,624,832	....	$19,043,020	....	$74,667,852
1858,.....	33,698,490	....	16,984,795	....	50,683,285
1859,.....	24,893,413	....	13,412,578	....	38,305,991
1860,.....	27,590,298	....	17,681,552	....	45,271,850

We now annex a tabular statement of provisions exported from this and other ports for 1861, compared with the year ending September 1, 1860:

FOREIGN EXPORTS OF PROVISIONS FROM UNITED STATES PORTS, EIGHT MONTHS, 1860 AND 1861.

	Liverpool.	*London.*	*Other English ports.*	*Other foreign ports.*	*Totals,* 1861.	*Totals,* 1860.
Beef,.....tierces,	17,533	13,153	2,362	395	33,443	57,916
" .....bbls.,	1,699	3,191	156	23,054	28,098	46,492
Pork,.....tierces,	32	1,076	....	55	1,163	2,340
" .....bbls.,	7,811	6,499	1,083	86,238	101,631	92,459
Hams and bacon,....cwt.,	312,707	83,528	26,261	33,302	455,798	193,080
Lard,..... "	225,641	17,725	92,768	161,989	498,123	240,588
Butter,..... "	57,994	4,594	12,550	31,519	106,657	85,483
Cheese,..... "	144,436	8,106	11,981	12,916	177,439	138,323

The following table will show the aggregate value of the above shipments for the past two years. These figures are according to the average

market value at New-York, and differ materially from the Custom-House valuations in the treasury reports:

FOREIGN EXPORT OF PROVISIONS FROM UNITED STATES PORTS, EIGHT MONTHS, 1860–1861.

	Total, 1860.	*Average price.*	*Aggregate value.*	*Total,* 1861.	*Average price.*	*Aggregate value.*
Beef,.....tierces,	57,916	$16 00	$926,656	33,443	$15 00	$501,645
" .....bbls.,	46,492	11 00	511,422	28,098	10 50	295,029
Pork,.....tierces,	2,340	21 00	49,140	1,163	18 00	20,934
" .....bbls.,	92,459	15 00	1,386,885	101,631	13 00	132,120
Hams and bacon,..cwt.,	193,080	9 00	1,737,720	455,798	7 00	4,102,182
Lard,..... "	240,588	12 00	2,887,056	498,123	10 00	4,981,230
Butter,..... "	85,483	15 00	1,282,245	106,657	14 50	1,546,526
Cheese,..... "	138,323	7 00	968,261	177,439	6 50	1,153,353
			$9,749,385			$12,733,019

The importation of dry goods for the month of August has been exceedingly slight, less than fifteen per cent. of the value for August, 1860. Adding the quantities withdrawn from warehouse, the aggregate placed on the market is only $3,674,624, of which the following tabular statement conveys the details:

IMPORTS OF FOREIGN DRY GOODS AT NEW-YORK FOR THE MONTH OF AUGUST.

Entered for Consumption.

MANUFACTURES OF	1858.	1859.	1860.	1861.
Wool,.....	$4,312,916 ..	$5,250,619 ..	$5,295,056 ..	$799,175
Cotton,.....	1,789,745 ..	2,154,979 ..	1,606,459 ..	155,850
Silk,.....	3,526,725 ..	4,864,855 ..	5,330,309 ..	633,241
Flax,.....	839,927 ..	997,540 ..	757,300 ..	116,234
Miscellaneous,.....	613,826 ..	932,431 ..	980,597 ..	155,399
Total,.....	$11,083,139 ..	$14,200,354 ..	$13,969,712 ..	$1,859,899

Withdrawn from Warehouse.

MANUFACTURES OF	1858.	1859.	1860.	1861.
Wool,.....	$911,951 ..	$989,517 ..	$677,418 ..	$768,912
Cotton,.....	204,568 ..	188,039 ..	250,799 ..	225,636
Silk,.....	305,353 ..	142,475 ..	252,843 ..	648,746
Flax,.....	202,568 ..	113,755 ..	114,279 ..	145,487
Miscellaneous,.....	84,643 ..	42,720 ..	57,042 ..	25,944
Total,.....	$1,709,083 ..	$1,476,506 ..	$1,352,381 ..	$1,814,725
For consumption,.....	11,083,139 ..	14,200,354 ..	13,969,712 ..	1,859,899
Total on market,..	$12,792,222 ..	$15,676,860 ..	$15,322,093 ..	$3,674,624

Entered for Warehousing.

MANUFACTURES OF	1858.	1859.	1860.	1861.
Wool,.....	$239,236 ..	$380,120 ..	$422,654 ..	$636,601
Cotton,.....	105,683 ..	236,627 ..	356,876 ..	71,223
Silk,.....	73,243 ..	141,549 ..	128,081 ..	853,742
Flax,.....	54,270 ..	121,655 ..	71,547 ..	41,140
Miscellaneous,.....	18,969 ..	66,602 ..	40,174 ..	73,728
Total,.....	$491,401 ..	$946,553 ..	$1,019,332 ..	$1,676,434
For consumption,.....	11,083,139 ..	14,200,354 ..	13,969,712 ..	1,859,899
Entered at port,...	$11,574,540 ..	$15,146,907 ..	$14,989,044 ..	$3,536,333

For the whole year 1861, embracing eight months only, the total amount of dry goods put upon the market has been a little over thirty millions; of which more than one-half was in goods withdrawn from bond. We annex the particulars for four years:

IMPORTS OF FOREIGN DRY GOODS AT THE PORT OF NEW-YORK FOR EIGHT MONTHS.

For Consumption.

MANUFACTURES OF	1858.	1859.	1860.	1861.
Wool,.....	$ 11,980,604	$ 26,369,976	$23,948,703	$ 6,292,684
Cotton,.....	6,676,304	18,004,221	11,906,656	2,650,226
Silk,.....	12,381,859	25,478,077	26,491,404	6,994,480
Flax,.....	2,955,195	7,474,910	4,884,295	1,371,761
Miscellaneous,.....	2,396,258	4,185,036	4,302,362	1,640,351
Total,.....	$ 36,390,220	$ 81,512,220	$ 71,533,210	$ 18,949,502

Withdrawn from Warehouse.

MANUFACTURES OF	1858.	1859.	1860.	1861.
Wool,.....	$ 3,518,346	$ 2,260,921	$ 2,444,682	$ 4,564,101
Cotton,.....	3,151,898	1,308,321	2,087,538	3,539,426
Silk,.....	2,887,009	719,331	1,289,176	3,957,163
Flax,.....	1,746,616	770,699	652,371	1,421,428
Miscellaneous,.....	1,028,634	313,870	449,782	662,611
Total,.....	$ 12,332,503	$ 5,378,142	$ 6,923,549	$ 14,144,429
For consumption,...	36,390,220	81,512,220	71,533,420	18,949,502
Total on market,.	$ 48,722,723	$ 86,885,362	$ 78,456,969	$ 33,093,931

Entered for Warehousing.

MANUFACTURES OF	1858.	1859.	1860.	1861.
Wool,.....	$ 1,731,492	$ 2,700,241	$ 2,762,060	$ 5,433,005
Cotton,.....	1,547,538	1,148,549	1,962,508	3,669,568
Silk,.....	988,141	667,047	1,266,116	4,813,025
Flax,.....	649,230	559,242	362,053	1,339,394
Miscellaneous,.....	437,277	342,592	465,574	847,445
Total,.....	$ 5,353,678	$ 5,417,671	$ 6,818,311	$ 16,102,437
For consumption,...	36,390,220	81,512,220	71,533,420	18,949,502
Entered at port,.	$ 41,743,898	$ 86,929,891	$ 78,351,731	$ 35,051,939

The exports from New-York to foreign ports show a cessation in specie, while the exports of domestic produce exceed those of any previous year in the history of the port:

EXPORTS FROM NEW-YORK TO FOREIGN PORTS FOR THE MONTH OF AUGUST.

	1858.	1859.	1860.	1861.
Domestic produce,.....	$ 4,660,272	$ 5,150,710	$ 8,012,814	$ 9,652,301
Foreign mdse., (free,).....	102,674	374,707	76,083	57,965
Foreign mdse., (dutiable,).	224,438	790,646	191,270	176,582
Specie and bullion,.....	2,201,802	6,409,783	7,454,813	3,600
Total exports,.....	$ 7,189,186	$ 12,725,846	$ 15,934,900	$ 9,890,448
Total, exclusive of specie,	4,987,384	6,316,063	8,480,087	9,886,848

We may assume that the commercial features for the present month and the next four months will not vary essentially from those of July

and August. We have ample indications that the European demand for our grain and provisions will continue.

EXPORTS FROM NEW-YORK to FOREIGN PORTS FOR EIGHT MONTHS, FROM JANUARY 1.

	1858.	1859.	1860.	1861.
Domestic produce,.....	$38,012,626 ..	$38,524,357 ..	$54,294,389 ..	$80,682,529
Foreign mdse., (free,)...	955,698 ..	2,139,807 ..	1,936,507 ..	1,946,619
Foreign mdse., (dutiable,).	2,782,282 ..	2,812,536 ..	3,516,331 ..	3,875,911
Specie and bullion,.....	17,363,257 ..	49,658,774 ..	35,598,550 ..	3,264,058
Total, exports,.....	$59,113,863 ..	$93,135,474 ..	$95,345,777 ..	$89,769,117
Total, exclusive of specie,	41,750,606 ..	43,476,700 ..	59,747,227 ..	86,505,059

The average custom-house receipts for August were about fifty thousand dollars per day, an aggregate of $1,558,824, against the sum of $3,946,830 for August, 1857. We annex details for four years:

CASH DUTIES RECEIVED AT NEW-YORK.

	1858.	1859.	1860.	1861.
First six months,....	$11,089,112 ..	$19,912,181 ..	$18,389,679 ..	$10,585,335
In July,.....	3,387,305 ..	4,851,246 ..	4,504,066 ..	2,069,591
In August,.....	3,545,119 ..	4,243,010 ..	4,496,243 ..	1,558,824
Total since Jan. 1st,	$18,021,536 ..	$28,606,439 ..	$27,389,988 ..	$14,213,750

The shipments of produce in August, for two years, have been extraordinarily large, and yet are largely exceeded by those of August, 1861:

EXPORTS FROM NEW-YORK TO FOREIGN PORTS FOR THE MONTH OF AUGUST.

Year.	*Produce and Mdse.*		*Specie.*		*Total.*
1846,.....	$2,621,038	....	$57,589	....	$2,678,627
1847,.....	4,979,108	....	66,000	....	5,045,108
1848,.....	2,420,115	....	331,031	....	2,751,146
1849,.....	2,308,817	....	359,368	....	2,668,185
1850,.....	5,614,946	....	1,441,736	....	7,056,682
1851,.....	3,617,117	....	2,673,444	....	6,290,561
1852,.....	2,608,262	....	2,935,833	....	5,544,095
1853,.....	4,997,960	....	1,183,973	....	6,181,933
1854,.....	5,256,746	....	4,548,320	....	9,805,066
1855,.....	4,655,139	....	2,609,393	....	7,264,532
1856,.....	5,913,003	....	3,202,053	....	9,115,056
1857,.....	5,337,449	....	6,271,717	....	11,609,166
1858,.....	4,987,384	....	2,201,802	....	7,189,186
1859,.....	6,316,063	....	6,409,783	....	12,725,846
1860,.....	8,280,167	....	7,454,813	....	15,734,980
1861,.....	9,886,848	....	3,600	....	9,890,448

NOTE.—The article in our present No. (pp. 353—368) on the Amoor region must claim the earnest attention of the mercantile world. There is no doubt that the Amoor, with its neighbors, the Japanese islands, offer a wide field for observation and for commercial enterprise. We have the pleasure to record the fact, that both ends of the magnetic telegraph, which will eventually encompass the earth, are now in working order, viz., in part between the Mississippi and San Francisco, as the eastern terminus; and one thousand miles or more eastwardly from Moscow. In connection with this remark we add, that on the 29th ult'o the

brig TIMANDRA arrived at San Francisco in thirty days from the Amoor River, with a cargo of hides. Thus we had, on the 19th of September, by aid of the telegraph and the above arrival, advices from the Amoor to the 1st of August, only fifty days. An arrival at San Francisco from Petropolowski, on the southern border of Kamschatka, a part of Asiatic Russia, is also chronicled in August last.

The Russian government have adopted a more favorable policy towards foreigners, in consequence of which there has been a large influx of merchandise, and all kinds of business has been overdone. Merchants from the interior were purchasing but sparingly; the stocks in the country being so large, the markets were much depressed. The stocks of goods were heavy, and prices of all kinds ruled low. The late prohibition on the importation of teas in Russian Siberia and the seaboards was only temporary; new and large quantities had been received this season from China, and admitted free of duty, while at Kiachta, the great inland tea dépôt, and the only place where its importation was previously allowed, the old duty of thirty cents per pound on black and fifty cents on green was still enforced. One of the new river steamers, lately arrived from Boston, was loading a full cargo of teas for the head waters. The KASSAWITCH was also loading a general cargo at Sitka. It is announced that the government telegraph from Cikutish to Nicoloefski, across the continent of Asia, will be commenced this season, and pushed forward to completion as early as possible, under the superintendence of Mr. ROMENOFF.

There are no articles in the New-York market that have undergone greater fluctuations this year than those included in what are termed "Naval Stores," viz.: rosin, turpentine, tar and pitch. The advance in some cases within the past six months exceeds two hundred per cent. The following tabular statement will give the reader an idea of the market values of these articles and of oils, during the past three years. The supplies from North Carolina having been checked by the war, high prices will prevail, probably, for the remainder of the year:

NAVAL STORES.	*Sept. 18th*, 1860.	*March 19th*, 1861.	*Sept. 17th*, 1861.
Rosin, common,..... per 310 lbs.	$1 40 @	$1 20 @ $1 25	$4 00 @ $4 12½
" white and pale,.... per 280 lbs.	4 00 @ $6 00	4 00 @ 4 50	7 50 @ 9 00
Spirits turpentine,..... per gall.	40 @ 41	35½@ 36	1 25 @ 1 30
Crude " ..... per bbl.	2 80 @ 2 85	2 65 @ 2 70	10 50 @ 11 00
Tar,..... per bbl.	2 60 @ 2 70	2 20 @ 2 25	4 87½@ 5 00
Pitch,..... per bbl.	1 70 @ 1 80	1 60 @ 1 70	4 25 @ 4 50

OILS, &C.	*Sept. 18th*, 1860.	*March 19th*, 1861.	*Sept. 17th*, 1861.
Palm, [cask,] first quality,.....per lb.	$0 08 @ $0 08¾	$0 08½@ $0 09	$0 08½@ $0 09
Linseed, city made,..... gall.	59 @	60 @ 62	59 @ 60
Whale, refined bleached spring,. gall.	58 @ 60	58 @ 60	45 @ 50
Sperm, spring unbleached,..... gall.	1 50 @ 1 55	1 50 @ 1 60	1 40 @ 1 45
Lard, No. 1, winter,..... gall.	92½@ 1 00	95 @ 1 00	68 @ 70
Tallow,..... per lb.	09¼@ 09½	08½@ 08¾	07½@ 07¾

FOREIGN CORRESPONDENCE

OF THE MERCHANTS' MAGAZINE AND COMMERCIAL REVIEW.

LONDON, *September 6th*, 1861.

To the Editors of the Merchants' Magazine:

THE leading financial features of the month were the sudden changes in the bank rate of discount. At the close of July the rate was 6 per cent. at the bank; a rate adopted on the 16th of May last. On the 1st of August the rate was reduced one per cent., viz., to a minimum of 5 per cent. On the 15th of August a further reduction took place to 4½ per cent.; and on the 29th a third change was made to 4 per cent. The fall witnessed during the last month has not often been exceeded in rapidity. In their present measure the bank directors have been guided solely by the bullion reserve and the condition of the Continental exchanges, which appear fully to justify the reduction. The fall in the rates in the open market to a point still below the new charge at the bank goes further to confirm the action of the bank; but our soundest financial men deem these changes prejudicial, and consider a low rate of discount as fostering speculation. The exchanges on the Continental cities remain generally in a satisfactory position, and gold continues to flow into the bank. Any further reduction in the same direction will probably be weighed by the directors with great deliberation, considering the deficient harvest in Scotland and Ireland, and the belief that in England the result is below an average.

In Lombard-street the demand for money was brisk, but the rates for good bills did not exceed 3⅝ to 3¾ per cent. It is worthy of record that, notwithstanding the repeated reductions in the Bank of England charge, business at that establishment last week was slack.

In consequence of the alteration at the bank, the joint-stock banks have reduced the rate allowed for deposits from 3½ to 3 per cent., except that the London and Westminster allow only 2 for sums below £500. The discount establishments will henceforward give 3 per cent. (instead of 3½) "at call," and 3¼ (instead of 3¾) "at notice."

The cotton question is really the paramount topic in commercial and financial circles throughout England. There are so many interests connected with as well as subordinate to the supply of cotton, that the minds of our leading men, both in and out of Parliament, are deeply concerned in solving the two problems: First, as to fresh sources of supply; and, secondly, as to the probabilities of (and proper measures to) adjustment between the Northern and Southern States of America. A meeting of merchants connected with the East India trade, and other parties interested in the question of cotton supply, was held here on the 29th ult., to consider the propriety of forming a joint-stock company, with adequate capital, which should establish agencies in the interior of India, to purchase the cotton from the grower "as it leaves the pod," clean it by machinery, press and pack it on the spot into bales secured

by patent metallic bands, transport it to the coast, and there sell it by sample at public auction. The promoters of the company deprecate interfering with the functions of either the grower or the exporting merchant, but claim to stimulate the production of cotton by aiding the operations of both; of the grower by giving him a ready buyer on the spot, and enabling him to free himself from the usurious middleman, who at present buys his cotton; and of the merchant, by supplying the market with well-packed cotton of uniform quality, on the sample of which, exhibited in his offices, he could buy as confidently as is done on samples in the Liverpool market. It is assumed that as the European agents of the company would exercise discrimination in the selection of cotton, the growth of better qualities would be thereby encouraged, but in respect to the complaints of its generally inferior quality, it was explained that this was not owing so much to the accident of growth as to the deterioration and adulteration to which the cotton is subjected in its passage in the present course of business from the hands of the grower to the exporting merchant. It is thought that many kinds of East India cotton would be made worth ½d. to ¾d. per pound more in the Liverpool market through the operations proposed for this company.

STOCKS OF COTTON IN LIVERPOOL EACH MONTH DURING THE YEARS 1860 AND 1861.

	Stock of American Cotton in 1861.	*Other Cotton.*	*Total*, 1861.	*Total*, 1860.
January 4,	371,650	157,780	529,430	526,620
February 1,	483,470	175,250	658,720	594,490
March 1,	692,200	161,140	853,340	749,810
April 5,	789,350	152,490	941,840	906,070
May 3,	816,860	173,830	990,690	1,016,630
June 7,	896,760	251,890	1,148,650	1,358,630
July 5,	836,610	271,690	1,108,300	1,298,490
August 2,	735,550	284,110	1,019,660	1,239,780
September,	....	....	....	1,020,860
October,	....	....	....	834,370
November,	....	....	....	668,520
December,	....	....	....	577,980

A very novel and unprecedented event has just taken place at Liverpool. At that port no less than 15,000 bales of Surat cotton were last week exported to New-York—a proof that the "cotton famine" has already affected seriously the New-England States.

A few days since we had a stock of 950,000 bales, of which 680,000 bales were American. Then we had 300,000 bales of East India cotton at sea on the way here; in addition to which we may calculate on receiving 200,000 bales from there before the 1st of January, 1862. Some well-informed persons think it will be considerably more. Of Egyptian, Brazil and other cottons we received last year, from now till the end of the year, 70,000 bales; and under the stimulus of high prices I feel justified in assuming an import of 100,000 bales by the 1st of January, 1862. This would make our total supply up to the 31st of December next, 1,550,000 bales, from which deduct export, same as last year, 200,000 bales, leaves a supply available for home use of 1,400,000.

By the Bombay *Exchange Price Current* of July 27th last, it appears that the shipments of cotton to Great Britain are still progressive. For the first six months of 1861 the shipments of cotton from Bombay to Great Britain were 626,759 bales. For same months in 1860, 299,571

bales. The whole shipments of cotton from Bombay to Europe, from January 1, 1861, to July 23d, 1861, were 744,000 bales. In addition to this, it is computed that there were then at Bombay, in 22 ships loading, at least 44,000 bales, and 30,000 more ready for shipment. The aggregate for the first seven months of 1861 is 818,000 bales. The shipments to China had fallen off some thirty thousand bales. The new crop begins to appear in October, and has been stimulated by high prices.

Apropos to this vexed question, it will not be amiss to give you the significant remarks of a cotemporary, the London *Shipping Gazette:*

"We and our neighbors across the channel may suffer serious inconvenience from a short supply of cotton—a species of inconvenience which is in store for the mill-owners of Massachusetts as well as of Manchester—*but we are not going to add to the difficulty by involving ourselves in a naval war with the Northern States—a war in which it is very doubtful that we should have the co-operation of France.* The present conflict in America will not be without its influence upon the future destinies of this country and of France, if it is learnt to distrust for the future the American source of the cotton supply, and to look to other regions for that which we have been accustomed to derive almost exclusively from the Southern States."

And the *Times* states that the wise policy of working short time as a precaution against the contingencies of the cotton supply, and of the glutted state of distant markets for manufactured goods, continues to make progress. According to the Manchester *Guardian* of this week, several spinning and weaving establishments at Staleybridge, Oldham, Preston, Blackburn, Burnley and Clitheroe, have limited their operations *to four days a week.*

Fires of late have been frightfully on the increase, and the rates of premium have been largely and suddenly advanced; let these heavy losses go on in the same ratio, and our underwriters urge *that it will not be a question of merely raising the premium, but of whether certain descriptions of property will be insurable at all.* What is wanted is a stringent building act, something like that which has made Liverpool what it is. Since that act (which unfortunately is only local) has come into operation there, about 900 warehouses have received certificates of having adopted the improvements required by it, and the result is, that the premium of insurance on these very premises has fallen from 35s. per cent. to 6s.

That fire insurance ought largely to increase there can be no doubt, and that it would largely increase were the enormous government duty to be entirely abolished, our companies believe, although on this subject there are differences of opinion, as will be seen by the following extract from the recent report of the Commissioners of Inland Revenue:

"The steady increase of the fire insurance duty is worthy of notice. It is very striking when viewed as representing the value of the property insured in the form of the following account:

Years.	*Account of Property Insured.*		*Amount of Farming Stock Insured, (free of duty.)*
1850,.....	£773,021,000	.....	£61,805,352
1860,.....	1,039,891,000	.....	73,309,898
Increase,.....	£26,687,000	.....	£11,504,546

The British government have for many years promoted commercial intercourse with foreign countries by means of extensive and liberal mail arrangements. It is now officially announced, that, with a view of affording to the public more frequent opportunities than at present exist for forwarding letters to Bermuda, it is intended in future to despatch a mail for Bermuda by each of the CUNARD packets proceeding to New-York. These extra mails will be conveyed from New-York to Bermuda by means of private ships, as opportunities offer. The postage upon letters forwarded by this route will be 9d. for a letter not exceeding half an ounce in weight, 1s. 6d. for a letter above half an ounce and not exceeding one ounce, 3s. for a letter above one ounce and not exceeding two ounces, and so on for heavier letters. This postage must be paid in advance, or the letters will be liable to an extra charge on delivery. Upon newspapers a postage of 1d. each must be prepaid. A like sum of 1d. will be collected on their delivery, to cover the United States' transit rate of postage.

The beneficial effects of extensive mail facilities by sea are every year more fully demonstrated, with the immense advantages to commerce from judicious government aid. The CUNARD Company are at present engaged in reorganizing their steam fleet, by the sale of some of their steam vessels and the construction of more powerful ones, furnished with all the modern improvements. A short time since the ETNA was sold to the Inman Company, and we have now to record the sale of the JURA to the Montreal Ocean Steamship Company, for the Canadian mail service. The JURA is a fine screw steamer, of about 2,200 tons and 400 horse-power, and did good service as a transport during the Crimean war. In the course of two or three months the CUNARD Company will have two new steamers completed, from the workshop of Messrs. ROBERT NAPIER & SON, which will probably be the finest specimens of their respective classes in existence. One is the SCOTIA, a paddle steamer, about 700 tons larger than the PERSIA, and the other the CHINA, screw steamer. Both vessels are intended for the mail service between Liverpool and New-York.

The report of the select committee, appointed to consider the circumstances which induced the government to abrogate the Galway postal contract, has been laid before the House of Commons. The committee express their approval of the conduct of the Postmaster-General, but urge that, as the Atlantic Steamship Company will shortly be in possession of an efficient fleet of ships, they deserve the favorable consideration of the government, should it be deemed advisable to re-establish a postal service from Ireland to America.

Steamship-building on the Clyde is more active than before reported. Messrs. SCOTT & Co. have launched a screw, of 580 tons, named the LOUIS NAPOLEON, which is now being fitted with engines of 130 horse-power by the Greenock Foundry Company. She is built for a Marseilles firm, and is a sister ship to the COMTE BACCIOCHI and the ROI JEROME, constructed last year by the same builders for the same parties. Messrs. TOD & MACGREGOR, of Patrick, who recently launched a screw of 419 tons, have almost completed a similar steamer for the same parties, and they have an order for a third steamer for the same trade. The hopes of increased commercial intercourse with France, in consequence of the recent treaty, have induced the establishment of a new line of screw steamers, to run from Havre and Bordeaux to the Clyde. The steamers will leave every fortnight.

THE BOOK TRADE.

1. *Hopes and Fears; or, Scenes from the Life of a Spinster.* By the author of "The Heir of Redclyffe," &c. New-York: D. APPLETON & Co.

This last book of Miss YONGE's we consider decidedly unsuccessful. A religious novel which leaves an anti-religious impression, is a failure as a literary production and an offence to every thoughtful reader. The authoress has put cleverness at a discount, but has labelled dullness "Piety," and commands us to like it.

If we were as good as some of her model blockheads, we should be able to love the odious creature, just for being told so; not having arrived at that advanced stage of Christian culture, we only shake our heads at it, and ponder upon the confidential remark of a pert little friend, "I suppose sister MAG's a Christian, but she's so ugly-good, I had as lief she wasn't." All the characters in this story are divided into the good and the bad—the sheep and the goats—with a strong fence of religious reserve between them. The goats are dancing, prancing, frisky little creatures; full of life and fun; always peeping through the fence; quite inclined to good-fellowship, and ready to jump over or creep under, upon the least encouragement. But the sheep stand in serried file, prepared to butt to the earth the first unwary victim who dares to invade the sanctity of their side, and they never stop crying, "Go away! go away! we are saints and you are sinners! go away! and don't blat through the bars, you disturb our meditations."

We like the goats, but the sheep bore us villainously, and, if we may be allowed to borrow our young friend's phraseology, we should characterize them thus: ROBERT, ugly-good; PHŒBE, stupid-good; PENDERGRAST, silly-good, and SPINSTER, sentimental-good. The only one that is pleasant-good is HUMPHREY, and he, to prevent us from attaching ourselves to goodness in any form, is extricated from his mortal coil in an early chapter. Every one of them seems to be perfectly satisfied with his own spiritual condition; they have fortunes left them, and become popular in society and successful in love. As for the goats, poor wretches! they have a pitiful time enough; sickness, poverty, and banishment, the loss of friends and lovers, personal disfigurement and mental deterioration, are a few of the little casualties which befal them. From such premises we necessarily draw the conclusions that good people are dull, that wicked people are clever, and that the moral accounts of both are settled up each new year's, like a butcher's bill, and the proper recompense put into execution immediately thereafter. But we do not believe this, because it is directly opposed to our own experience, which, if not large, has yet been decided.

The wickedest people we know are those with the feeblest minds; the best people we know are those with the noblest intellects and deepest culture; and as for every one's getting what they deserve in this world, the simplest child knows better.

Neither do we think that Miss YONGE meant to teach such a lesson; the tenor of her former books is enough to indicate the opinions she holds; it is only her strong desire to make goodness attractive and evil repellant that has beguiled her into coaxing and scaring, and caused her to forget that such weak allies, "make truth suspected."

2. *The Silent Woman.* By the author of "King's Cope," &c. Boston: T. O. H. P. BURNHAM. New-York: SHELDON & Co.

The author of this novel shows far more talent than industry; the plot is passably good, the conception of one of the characters, (that of LENA,) is very charming, the conversations are sprightly, even brilliant at times, but the construction of the book is extremely negligent. The title has no apparent connection with the story, nor the majority of the mottoes with the contents of the chapters. The changes of time and place are made with ludicrous abruptness; for example, persons on the lawn are presently said to leave the *room;* people at supper suddenly begin to comment on the dullness of the morning; and a lady and gentleman in a drawing-room enter at once into a discussion about an equestrian upon the road in advance of them.

There is not a shred of deep feeling in the book, of any kind; not for want of occasion, truly, for there are two deaths in the first chapter, and half a dozen more before you arrive at the last; but then, as the author very aptly remarks, there is no use in describing this sort of thing, for those who have been through with it know, ah! too well, what it is, and to those who have not, words are a blank. It is no doubt a charity to spare the uninitiated, yet we cannot suppress the surmise that it may also have been a personal accommodation to the writer. It is a pity that one who can so well entertain his readers by his vivacity and wit, should be so very heedless; for the cleverness which he perhaps supposed would atone for all deficiencies, is, to a great extent, neutralized by his own indolence.

3. *An Abstract of the Returns made to the Lords of the Committee of Privy Council for Trade, of Wrecks and Casualties which occurred on and near the coasts of the United Kingdom, from the 1st January to the 31st December*, 1860, *with a statement of the number of lives lost and saved; of the amounts granted out of the Mercantile Marine Fund as rewards for the salvage of life, for contributions towards the maintenance of life-boats, and for expenses in connection with the Mortar and Rocket Apparatus for saving life, during the same period; and a precis of the special inquiries instituted into the causes of such wrecks and casualties, by order of the Board of Trade, with charts.*

This is an annual official report of great value. The wreck chart accompanying the report shows the locality of every casualty (including collisions) attended with loss of life, distinguishing the number of lives lost, and the direction of the wind in each case; showing also the present life-boat and rocket and mortar stations on the whole coast. That portion of the Irish channel approaching Liverpool indicates the largest number of losses. The approaches to the Thames, to the Bristol channel and to the river Thames are also prolific in heavy marine losses. In addition to the marine statistics of the year 1860, this Parliamentary document shows the comparative losses, partial losses, collisions, loss of life, insurance, for each year, 1852–1860, with a mass of valuable details. Some attempts have been made, in New-York, to prepare marine statistics of a similar character for the United States, but the efforts were not seconded by government or individual companies. The Treasury Department could, with advantage, prepare such statistics as a branch of commercial information. In the absence of governmental support the State of New-York might inaugurate a system of commercial and marine statistics; and the marine insurance companies of this city would derive much advantage from such information after a series of years.

4. *Explorations and Adventures in Equatorial Africa; with accounts of the manners and customs of the people, and of the chase of the gorilla, the crocodile, leopard, elephant, hippopotamus and other animals.* By Paul B. Du Chaillu, corresponding member of the American Ethnological Society; of the Geographical and Statistical Society of New-York, and of the Boston Society of Natural History. With numerous illustrations. New-York: Harper & Brothers. 1861.

M. Chaillu exhibited the curious collection of natural history specimens exhibited about a year ago in this country. The wonderful stuffed specimens of the giant ape, the gorilla, whose very existence had almost been deemed a fable, and the curious kaloo kamba, the great ape that so imitates humanity in its habits, besides numerous other specimens of birds and beasts entirely unknown to naturalists, were trophies of the adventurous Frenchman's zeal, courage and perseverance. Du Chaillu's explorations were made in a different direction from those of other African travellers, and his adventures are of the most interesting and exciting character. We have prepared for this number some curious extracts from this work in reference to the trade and commerce of Africa. (pp. 369—373.)

5. *Tom Brown at Oxford. A sequel to "School Days of Rugby."* Part 2. Boston: Ticknor & Fields.

This excellent story gives a most faithful picture of English University life, and is told in a familiar, easy and natural style, and describes the career of hundreds of young Englishmen of the present day in the story of Tom Brown and his fellow students. As a graphic description of English life, it is most excellent; and as a story quite interesting. The reader is pleased to learn that Tom at last, after many tribulations, is happily married to his true love, Mary Porter.

6. *The British Quarterly Reviews.*

We suggest to our readers that the present time is favorable to subscribe to these valuable and interesting works, re-published by Messrs. LEONARD SCOTT & Co., New-York. The articles which appear in these various reviews, in relation to American affairs, are all worthy of attentive perusal, since they give, from different points of view, the opinions of intelligent Englishmen, belonging to various parties, (conservative, whig, free-church, liberal and tory,) on our disturbances. "Blackwood," for July, contains ten articles, all of which are marked with those traits of power and brilliancy for which MAGA has long since become distinguished.

The Edinburgh Review, for July, contains articles on—1st. Popular Education. 2. ALBERT DUROR. 3. Carthage and her Remains. 4. The Novels of FERNAN CABALLERO. 5. WATSON'S Life of PORSON, the Greek Scholar. 6. The Countess of Albany, the last of the STUARTS and ALFIERI. 7. BUCKLE'S History of Civilization. 8. Travels of M. CHAILLU. 9. Church Reform in Italy. 10. Count CAVOUR. Mr. BUCKLE, according to the critic, "is not a writer who gains upon us by a further acquaintance with his works. * * He relies too much upon a well-stored common place book and a rapacious literary appetite." Of M. DU CHAILLU the critic says: "We should be glad of a little more of that precise and simple evidence which distinguishes reality from romance."

7. *The Westminster Review*, for July, is the 139th number, or the thirty-fifth year of its existence. The subjects are—1. SCHLEIERMACHER, the Philo of modern times. 2. The Salmon Fisheries of England. 3. The critical writings of H. TAINE. 4. Considerations on Representative Government. 5. The Countess of Albany—ALFIERI. 6. Africa, by M. CHAILLU. 7. BUCKLE'S Civilization. 8. Christian Creeds and their Defenders. 9. Contemporary Literature.

"The Westminster" maintains that "Mr. BUCKLE has many great qualifications which give him an especial claim to hearing." * * The reviewer concludes, that "as a great effort to illuminate one of the most important questions which at present can occupy men's consideration, it is entitled to the sympathy and admiration of all impartial readers."

8. *The London Quarterly Review*, for July, takes up M. DE QUINCEY and his writings, who reached the seventy-fifth year of his age, notwithstanding his addiction at one time to opium eating. 2. MONTALEMBERT on Western Monarchism. 3. KENNEDY, HENRY, SINGLETON and OWGAN, as translators of Virgil. 4. Ancient Law, by HENRY SUMNER MAINE. 5. Scottish Character. 6. Russia on the Amoor. 7. CAVOUR and Italy. 8. Democracy on its trial. 9. MILL on Representative Government.

The "Quarterly" *buckles* on to the "History of Civilization," and exclaims, "How can he hope to be accepted as a scientific investigator of history who shows himself so full of passion and prejudice as Mr. BUCKLE does throughout this work?" Our commercial readers will find the article on the *Amoor* without any *love* towards Russia or the United States; but we commend to the merchant's attention both the review and the work which forms its text. The reviewer takes occasion to say that "the systematic occupation of the Amoor River by the Russians was as indefensible by the law of nations as any of the aggressions to which we are in the habit of referring as some of the worst results of popular government in the New World, and proves that *a low sense of international morality is the characteristic alike of democracy and of despotism.*" Should Mr. BUCKLE ever stretch his pen to the consideration of the progress of civilization in the Western world, we fear that the recent history of the United States, especially as to Texas, Central America and Africa, and especially as to the internal war of the year 1861, will stamp us as possessing a very low sense of international morality.

9. *The Law of Nations affecting Commerce during War; with a review of the jurisridiction, practice and proceedings in Prize Courts.* By FRANCIS H. UPTON, LL. B. One volume octavo, pp. 312. Published by J. S. VOORHIES, N. Y.

To the legal profession and to merchants this is a valuable compend of the law of maritime warfare and prize, including the law of belligerent and neutral rights—of blockade—of contraband—the right of search—of capture—re-capture—joint capture—military salvage, &c., in application to the existing war in the United States. The appendix contains the numerous proclamations of the year 1861; letter from Sir W. SCOTT to Mr. JAY; prize rules of the United States Court; statute provisions of the United States for distribution of prize fund, &c.

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