

interest of our debt to four and a half or five per cent. there is reason to hope that we may reduce our national expenses, including army, navy, pensions and interest, to the standard of \$5 per head, which Canada is approaching.

The sum of the whole report is, that Mr Derby comes to the conclusion that the best remedy for the existing evils of which he complains, would be a union between the Provinces and the United States securing free trade between them. He anticipates a rapid reduction of internal taxes, and an improving prospect of removing the present financial objections to a union. Such a union, if voluntary, would, he says, undoubtedly prove beneficial to the United States, the Provinces and to Great Britain; and in it, he thinks, would be found the best solution of all the questions between the States and England and also of all the questions between England, Canada and Nova Scotia. —*American Paper.*

SUGAR TRADE OF THE UNITED STATES.

THE New York Shipping and Commercial List publishes a statement of the sugar trade in the United States during 1863, from which we take the following statistics. The quantities are given in tons of 2,240 lbs.:—

	Tons.
Received at New York....	253,073
Boston	67,237
Philadelphia.....	66,121
Baltimore	53,458
New Orleans	19,706
Other ports.....	10,389
Total receipts.....	470,975
Stock January 1, 1863	25,746
Exports and inland shipments	8,246
Stock January 1, 1863	41,942
Consumption of foreign in 1863	445,633
1867	378,063
Crops of Louisiana, Texas, &c	33,000
Total consumption cane sugar	469,633
Total, 1867.....	400,063
1868	391,678
1865	320,809
1864	220,660
1863	284,303
1862	432,411
1861	363,819
1860	416,291

The manufacture of sugar from molasses continues to be prosecuted with great vigor, the sale of molasses for this purpose during the past year, and the yield of sugar being larger than we have ever before recorded, owing, however to the inferior quality of the crop of last year's molasses, the sugar product has not been as great per bhd. as in former years by at least 40 per cent so that at least while our estimates point to a consumption in the United States of nearly one-third more molasses—say about 160,000 bhd. against a consumption of 120,000 bhd. in 1867, the sugar produced therefrom has only been, say 72,000,000 lbs. or in round numbers 32,000 tons, against a yield of 26,700 tons in 1867. The sugar also was not of so good quality as usual, and sold at a less ready rate during much of the year, the stock left over at its close is larger than is generally the case at the end of the year.

The crop of Louisiana now about made is estimated at 100,000 bhd. The season has been unusually favorable—so much so, that at one time strong hopes were entertained that the yield would reach 125,000 bhd. but the weather has been recently less propitious, and the estimates have been reduced to the first-mentioned figures.

The planting interest of that State is much more hopeful, the crop has steadily advanced from a little over 100,000 bhd. in 1863—'64, to about 100,000 bhd. in the present year, with much reserved for next season's planting, and already with a favorable year, a crop of 260,000 bhd. for the coming season is talked of as not an improbable event.

Advises from the principal West India points indicate a full supply. Cuba last year turned out a crop nearly, or quite, one-fourth larger than was ever before made upon the island, and as it is from that quarter we receive the bulk of our supplies, the greatest interest attaches to the events now transpiring there. The insurrection has already interfered to some extent with grinding operations on the south side of the island, but it remains to be developed how far these injurious effects may be extended, and consequently our markets generally are in a waiting attitude. The prospect, until recently, was that the yield of the present season would fully equal, if it did not exceed, that of last year, and course of prices will depend very much upon the ability of the Spanish Government to suppress speedily, or prevent the spreading of, what has become rather a formidable rebellion.

A great difficulty surrounds the collection of statistics relative to the crop of maple sugar, much the larger part being consumed upon the farm; with our rather imperfect data we make the last year's crop about 23,000 tons.

The estimates for the consumption of raw in our States and Territories on the Pacific the past year are in the neighborhood of 19,000 to 19,000 tons, a very considerable increase on these figures is looked for the present year, as owing to unexpected short supplies and low prices for the refined article, the refineries of San Francisco were idle during a portion of the past year, besides which one or more of the establishments have recently considerably enlarged their works, with the intention of prosecuting the business with renewed vigor.

The cultivation of the beet root for sugar is yet entirely in its infancy, and the quality of sugar made

from it here, as well as the results of the sugar culture, as far as sugar making is concerned, are so in considerable that we make none other than this passing note of them.

The consumption of the various descriptions throughout the country may be stated as follows:—

	Tons
Cane sugar consumed in the United States on the Atlantic.....	459,633
In the States and Territories on the Pacific.....	18,500
Of sugar made from molasses.....	32,000
Of maple sugar.....	23,000
Total.....	513,133
Against a total consumption of all kinds in 1867, of	497,203
Increase	15,930
Or about 1½ per cent.	

The production of sugar throughout the world including the West Indies, for the year 1867, is estimated at 2,250,000 tons, of which Cuba produced nearly one-third, and the consumption for the same year 2,000,700 tons, of this Great Britain and her colonies consumed about 650,700 tons and the United States 467,300 tons—the two nations consumed nearly one-half the world's supply.

OUR DECLINING EXPORT TRADE.

WE have time and again directed attention to the fact that the restrictive financial policy of our Government is gradually reducing the volume of our export trade, at the same time that it stimulates the import trade, thus creating a heavy balance against the country to be liquidated by an exhaustive drain of gold and bonds, that may lead anon to serious results. Our commercial exchanges with the Argentine Republic affords a fair example of the one-sided condition of our foreign trade. The latest official report of our trade with that country is for the year 1863 when our imports thence increased twenty per cent, and our exports increased only two per cent, although in the same year England increased her exports to the same country forty-six per cent, France forty-five per cent, and Germany twenty-six per cent. The people of the Argentine Republic are willing to buy from us, but they are not willing to pay higher prices than they are obliged to pay for the same commodities in the markets of Europe, and so it is with other nations.

It is a self-evident proposition that, unless we shall succeed in reducing to practice a system of taxation which will cheapen the cost of production, it will be vain to look for an exchange of our products on equal terms with those of other nations. The cost of all, or nearly all, American products, is so enhanced by the burden of local taxation of all kinds as to compel them to enter the foreign market at a disadvantage. And the home market can only be secured to them by the imposition of a tariff as exorbitant as to be detrimental to commerce. Great Britain, perhaps, affords us a better example in the matter of levying taxes than any other Government. It is the settled policy of that Government to encourage production, by relieving products of every possible burden in the shape of taxation. It raises a larger amount of revenue than our Government does, but it raises it by so wise an adjustment of taxation, as not materially to enhance the cost of living as is the case with our system. The greatest portion of British Revenue comes from a few articles, mainly of luxury, such as spirits, tobacco, &c. and from the income from real estate. Our own policy is notoriously the reverse of this. Here, scarcely anything escapes taxation, and, in many instances, the taxes are accumulative. It is high time that the revenue laws were revised and arranged in accordance with the progress of the age. We have had far too much of shifting and capricious legislation, which renders our best market, in which to sell, and the poorest in which to buy. It is quite time that we had a system calculated to insure the largest revenue with the lightest burden of taxation, thus rendering the investment of industrial development secure, and, at the same time, affording American products a fair opportunity of competing with those of other nations in the markets of the world. —*New York Shipping List.*

AUTULTERATION OF TEA.

THE article by Dr J. C. Draper, in the March number of the *Galaxy*, on the method employed in the adulteration of tea, should receive careful attention both from dealers and consumers. The subject is one of much importance as the use of tea as a beverage is now almost universal. According to Dr Draper the means of adulteration may be divided into the following divisions; first, the substitution of inferior for superior varieties; second, the addition of leaves of other plants; third, the employment of what the Chinese call "lie tea," fourth, the coloring and re-dyeing of leaves that have already been used, or of those that have been damaged, so as to pass them off for good green or black tea. The greater part of the adulteration takes place, it is charitable to suppose, before the teas reach our shores.

The articles most used among the Chinese for the adulteration of tea is the *Cameia* plant, which so closely resembles the genuine that it has been classified by botanists in the same natural family. In England the leaves of the beech, elm, horse-chestnut, oak, willow, poplar and Hawthorn, are used for adulteration. These are dyed with rose pink, Dutch pink, carmalum of lead, sulphate of iron, Venetian red, soapstone, carbonate of lime, carbonate of copper, Prussian blue, indigo, and other dyes, so as to pass them off for good tea. The adulteration is so general that it is difficult to find a single sample of pure tea. By this method

black or green teas are manufactured, sometimes with no genuine tea at all for a base.

The "lie tea" of the Chinese is made, we are told, from the dust of tea leaves and the sweepings of the warehouse, to which portions of foreign leaves and sand are added, and the whole is made up with gum and paste into small masses which are colored green or black as circumstances require. The Chinese usually mark it "lie tea." They, however, use it for the purpose of adulterating other teas, but, at the same time, give a certificate of the proportion of true and false matter in the sample.

Adulteration number four can make no pretension above downright cheating. It is that of re-vamping exhausted and damaged leaves. This, observed Dr Draper, was at one time carried on to such an extent that, in 1843, there were eight establishments devoted to it in London alone. Agents bought the leaves at the coffee houses, and delivered them to the factories, where they were manipulated with gum, sulphate of iron and catechu, to restore the stringency, and then dried and roughly cured. If a black tea was to be made, the requisite gloss or facing was imparted by the judicious use of rose pink and black lead. If a green was required, the leaves were submitted to a dyeing similar to that employed by the Chinese, into which the use of Scheele's green, carbonate of copper, and other poisonous compounds, often entered.

The Doctor's theory—and we think it undoubtedly a true one—is, that the apathy prevailing among the consumers themselves is due, in a great measure, to the general use in this country of adulterated teas. Probably not one out of a hundred knows what a good cup of tea really is, and in case any suspicion is aroused as to its quality the matter is considered of too little consequence to warrant an investigation. The evil, however, is of no trifling importance, and consumers would do well to carefully examine the quality of all the tea they use. It can be purchased pure, and we have no doubt can be so obtained at any trustworthy grocer's. It is poor economy to purchase an wholesome food or beverage, however cheap they may be sold.

COTTON STATISTICS.

SOME highly interesting information in relation to the production and manufacture of cotton in this country, is contained in the recently published report of the National Association of Cotton Manufacturers and Planters. At the present time it appears that the number of cotton mills in the Northern States is 624, running 6,249,000 spindles, and consuming annually 355,262,000 pounds of the raw material. In the Southern States there are 618 mills, running 225,063 spindles and consuming annually 31,413,750 lbs. Compared with the number of mills in operation in the year 1860, there are some 1000 more, and the running more than tenfold. During last year the total consumption of cotton for manufacturing purposes was 450,000,000 pounds. At the usual rate of 400 lbs. to the bale, 1,125,000 bales were consumed or about one half the whole production of the United States. The aggregate consumption during 1863, in Europe and America combined, was 2,034,100,000 pounds, against 1,976,500,000 pounds in 1858, and 2,281,000,000 pounds in 1861. Since the first of January of the present year, the receipts of cotton in the city of New Orleans have already exceeded the whole receipts of 1867 and 1868. Up to the first of September, 1868 in that city, 669,000 bales have been received, up to the first of March of the current year 1,000,000 bales have been received. The total receipts at all the Southern ports, however, since the beginning of the year, are estimated at about equal to those of last season. New Orleans running up her large amount by reason of the great success of the planters who cultivate cotton in the region adjacent to her port. Last season the cotton crop in the Mississippi Valley was very light, this year it is correspondingly heavy. Unless some unusually disaster befall it is almost certain that the total yield of the Valley this season will reach 300,000 bales, which at average rates, will be worth in money, the enormous sum of \$90,000,000. It is estimated that the product of the whole South will exceed, in money value, \$200,000,000.

THE WIRE TRAMWAY SYSTEM.

IMPORTANT EXPERIMENTS NEAR LEICESTER.

TRANSPORT of loads by rope and pulley is a very old invention, if not literally, as in common parlance, "as old as the hills," certainly almost as old as the first efforts of digging anything valuable out of them. But nevertheless it does not seem to have occurred to men to suspend or support a line of rope on posts with bearing pulleys, and by driving the rope round drums at both ends, to produce at once a regular line of rope on posts with bearing pulleys, and by driving the rope round drums at both ends, to produce at once a regular line of road and a locomotive power for the transport of boxes and cars. This, however, is what Mr Hodgson, of Leicester, has now done simply, cheaply, and effectively, and in so doing has added, in our estimation, a very important auxiliary to the railway system especially in colonial, mountainous, and slightly populated districts. Indeed a number of cases exist in this country itself, in which the system may be applied with very great advantage. The plan now at work near Leicester has been established in connection with the granite works of Messrs Ellis, Everard & Co with a view to convenience as well as to a large saving in transport. Their quarries have to compete in the London market not only with Guernsey and Aberdeen, but locally they have to carry on a competition with an important quarry somewhat nearer to the railway line, and although they may have the advantage in the superiority of stone they have the disadvantage in carriage. The line of endless wire rope which Mr. Hodgson has just again