Scientific American.

ESTABLISHED 1845

MUNN & CO., - - - EDITORS AND PROPRIETORS.

PUBLISHED WEEKLY AT

No. 361 BROADWAY, - - NEW YORK.

TERMS TO SUBSCRIBERS

One copy, one year, for the United States, Canada, or Mexico $3.00
One copy, one year, to any foreign country, postage prepaid. £0 16s. 5d. 4.00

THE SCIENTIFIC AMERICAN PUBLICATIONS.

Scientific American (Established 1845) ..... $3.00 a year.
Scientific American Supplement (Established 1876) ..... 5.00 "
Scientific American Building Edition (Established 1885) ..... 2.50 "
Scientific American Export Edition (Established 1878) ..... 3.00 "

The combined subscription rates and rates to foreign countries will be furnished upon application.
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MUNN & CO., 361 Broadway, corner Franklin Street, New York.

NEW YORK, SATURDAY, SEPTEMBER 23, 1899.

THE "OCEANIC."

The advent of the "Oceanic" to our port marks a new stage in the history of steamship construction. It introduces a true marine giant, as will be seen from the fact that the "Oceanic" is over fifty per cent larger than any of the huge vessels which have been launched in the past decade, and therefore constitutes in respect of size a class by herself. The largest vessel afloat, previously to the launch of the "Oceanic," was the "Kaiser Wilhelm der Grosse" of the North German Lloyd Company, whose full load displacement is 20,000 tons. The White Star liner, however, has been built to take advantage of the new 40-foot channels which are being dredged in New York Harbor, and on her full load draught of 35 feet 7 inches she will displace, according to the builders' calculations, 31,590 tons. It was stated by the officers of the ship that a cargo and passenger-carrying vessel of even larger dimensions, built on the lines of the "Cymric," is now under way at the Belfast yards. It is likely that the twentieth century will witness the construction of Atlantic liners whose mark will be set by this great ship of the year 1899. In view of the many contradictory statements as to the horse power and speed of the "Oceanic," we have ascertained from the officials directly concerned in her construction that on her trial trip she made 21·25 knots with an indicated horse power of 28,000 and a boiler pressure of 192 pounds to the square inch. For those of our readers who may not have an opportunity to see the "Oceanic," an excellent scale of measurement is afforded by the fact that from the top of her 19-foot smokestacks to the grate bars of the furnaces is 139 feet.

FINANCIAL PROBLEMS OF CUBA.

Figures just compiled by the War Department give a most encouraging tone to the financial problems of Cuba. Already, under the liberal and intelligent management of the United States government, the total income of the island, for the first six months of this year, exceeds all expenditures by the very handsome balance of $1,480,021.92. No doubt, this news will greatly surprise very many, who have hardly looked for such a result from a purely army management of affairs; as too many are apt to imagine that laxity, extravagance, and an absence of business methods are characteristic of military methods. As a matter of fact, this idea is based on a great misconception of the truth. During the period named the total receipts were $6,982,010.20, and the disbursements $5,501,988.28. Of the latter sum $1,712,014.20 was expended in sanitation, an outlay such as Cuba never dreamt of in Spanish days; $505,263.06 in the erection or improvement of barracks and army quarters; $443,563.19 in establishing and maintaining the rural guard of the island; $250,674.12 on public works; $293,881.27 for charities and hospitals; $242,146.01 for civil government; $723,281.38 in municipal management; $88,944.03 in aid of quarantine affairs. When we consider that, notwithstanding the report for July shows an even greater proportionate saving, it has been possible thus far this year to expend nearly one-half the total in those things which make for greater physical and moral cleanliness, altruistic endeavors largely neglected hitherto in Cuba, this showing is especially gratifying to our national pride. It is easy, in view of these facts, to understand why British capital is pouring into Cuba for investment, assured as it is of a stable, honest, and far-seeing rule for that sadly abused island.

MONEY SPENT BY TRAVELERS.

Few have any conception of the enormous outgo of money earned in this country and spent by our leisure and traveling classes in Europe each year. It is now proposed, according to a chief of one of the Treasury bureaus, in Washington, to compile an accurate set of statistics upon this subject. Several years ago such an effort was made, but it was not carried out as thoroughly as it should have been. Even then, however, the total ran up to over $230,000,000 before the work was abandoned. It is promised now that the forthcoming investigation will be very thorough, including as it will data from steamships, railroads, custom houses, consular estimates, reports of special foreign agents, etc. Such statistics cannot fail to have great interest and value to students of political economy and, especially, to all interested in the problems of the distribution of taxation.

DANGER IN THE APPROACHES TO THE BROOKLYN NAVY YARD.

The disastrous grounding of the "Massachusetts" and the "Brooklyn," both of which occurred during the past twelve months, have drawn attention to the fact that a visit on the part of any of the deep draught vessels of the navy to the Brooklyn navy yard is fraught with positive danger, particularly at certain stages of the tide. In the case of the "Massachusetts," the existence of the shoal off Governor's Island was well known to the authorities, but the accident to the "Brooklyn" was in the nature of a surprise, for it was supposed that there was ample depth of water at the spot where she was supposed to have touched bottom. In the course of a survey made by the Coast and Geodetic Survey boat "Eagle," it has been found that the obstruction consisted of a sunken barge that lay about 200 yards out from the Hamilton Ferry slip in 30 feet of water.

It appears that this is not the spot on which the barge was sunk, the wreck having been carried there by the powerful tidal currents that sweep through the channels in this vicinity; and it is this very liability of a sunken and semi-buoyant wreck to be shifted that renders it such a menace to the safety of vessels of the deep draught of our battleships and larger cruisers. The War Department cannot do a greater service to the sister arm of the service than by making a thorough survey of the approaches to the Brooklyn navy yard and presenting a comprehensive scheme for clearing the channels and deepening them to an extent that will allow our battleships to leave and enter the yard at any state of the tide. Our two latest battleships are about to pass through these channels to prepare for their trial trips, and it would be a humiliating mortification if they should open their careers with accidents which are of such a nature that they might easily become disasters.

NEW WAYS OF USING THE BIG CORN CROP.

The corn carnival is the feature of the great valleys of the Central West "when the frost is on the pumpkin and the corn is in the shock," but with a crop of some 300,000,000 bushels to harvest there are tired souls and wearied bodies in the corn belt these fine autumn days. The promise of wealth and abundance of this world's goods brings consolation and joy; it is the prolonged labor without the monetary compensation that disheartens and dispirits. Never was there a more propitious corn carnival season than the present, and Kansas and the corn belt are jubilant. Crops are good, and prices are good. Corn is everywhere and everything. One cannot walk the streets of a Kansas town to-day without encountering witnesses of the State's wealth. There are corn neckties in the show-windows, corn-husk parasols and hats in the possession of fair women pedestrians, cornstalk canes jauntily swung by prosperous swains, and corn shoes and dolls for children everywhere. The manifold value of corn for household and personal adornment has been the feature of each succeeding carnival, and this year's creations have totally eclipsed anything heretofore witnessed.

But while the carnival emphasizes the ornamental side, there is an undercurrent of seriousness about this adaptation of corn and its by-products that more deeply concerns the people than an outsider might imagine. Corn was never used in so many different ways for commercial and manufacturing purposes as in the past year or two. If we cannot induce the Europeans to take our corn for household uses, we can manufacture it into different articles of commercial value which they must take. This seems to be the trend of thought in the corn belt, and new inventions and discoveries annually open up new consumptive markets for corn and its products. Corn is gradually entering into industries that seem far removed in every sense from this product of the fields. The queer corn shoes, corn hats, dolls, and neckties which were made and exhibited for celebrating the corn carnival stand in sharp contrast with the corn oil, corn cakes, and corn rubber.

The one hundred and twenty-odd recipes for using corn as an article of food, which government experts published ten years ago for the benefit of benighted Europeans who did not appreciate this article of food, are not so important in increasing the consumptive demand as some of the recent discoveries. Corn oil for instance, which is extracted from the grain, has an extensive demand in various trades where vegetable oils are essential. Corn oil can be produced more cheaply than most of our vegetable oils because of the relative abundance of corn, and in the last year much of the oil has been used for table purposes. No attempt has been made to substitute for good olive oil, but judiciously mixed it will pass muster as a low grade table oil. It is also a fair lubricating oil; but its largest use is in the trades and manufactures. Paint mixers employ it quite generally, and also manufacturers of fiber and shade cloth. It possesses qualities that recommend it particularly to these industries, and the demand for it is annually increasing.

Corn rubber is a new article which is substituted for pure rubber in certain lines of goods. This cheap substitute is mixed with equal parts of pure Para rubber. The corn part of the substitute is taken from the refuse of the glucose factory. About five per cent of the corn in making glucose could not formerly be utilized, and this waste seemed absolute. The new corn rubber is manufactured from this apparent waste, and when mixed with pure rubber it produces an especially valuable compound. Improvements in this rubber substitute are made each year, and it has to a certain extent supplanted Para rubber for many purposes. This imitation rubber is from 25 to 50 per cent cheaper than pure rubber, but it has not been sufficiently perfected entirely to displace the Para article. The oil which is found in corn gives a pliability to the rubber compound that prevents it from cracking and breaking as most cheap grades of rubber do. Moreover, the oil of corn tends to prevent the rubber from oxidizing, a fault common to most India rubber.

There are five refineries of corn oil in the United States which use between 10,000,000 and 20,000,000 bushels of corn and corn waste. Besides the output of oil, the refineries have made nearly thirty other different products from the corn. But in spite of all these various products about 5 per cent was practically waste until the discovery of the rubber substitute was made. The spirits distilled from corn constitute another large industry, and recently the employment of the spirits in the manufacture of new grades of smokeless powder has greatly increased the demand for corn. The British government has been a liberal buyer of the spirits for this purpose, and the Japanese government has quite recently placed an order for several thousand barrels for the same purpose. An extensive European war would consequently send the price of corn "booming," because of its general need for food and because it would be in demand for the manufacture of large quantities of smokeless powder. The distilling companies are not only increasing in number, but the output of the largest is doubling. They absorb an enormous quantity of the farmer's corn and prevent a surplus that might otherwise reduce prices below the point of profit for the growers.

The comparatively new cattle foods owe their existence to the employment of corn in various manufacturing purposes. All of them have received scientific tests and the indorsement of experts in cattle feeding. The corn oil cake, which is really the refuse of factories, contains nutriment of a high order, and when properly fed, in conjunction with other foods, it is of great value to the animals and money in the pocket of the farmer. Gluten meal, gluten feed, and chop feed are other cattle foods that owe their origin to the different factories employed in converting corn into products of commercial and scientific use.

The manufacture of glucose has opened up a whole field of new industries, and the glucose made from corn enters quite extensively into the refining of syrups, jellies, and fruit preserves. It is also used by leather tanners and brewers. The sugar and starch made from corn form other branches of important industries. Different grades of grape sugar are made from the corn, and they are used by ale brewers and tanners, while the better grades are employed by apothecaries and confectioners. Pearl and powdered starch come from the corn, and also dextrin and flourin. The former is employed in the manufacture of mucilage and glue, and the latter is mixed with flour. The new uses to which these by-products of corn are put multiply rapidly, and every new employment of any of them makes a greater demand upon the corn crop. It is all along this line that improvements are being made which encourage the corn farmers and improve the future for them. If it were not for these several dozen different articles which are made from corn, the farmers of the corn belt would long since have been ruined. A crop of 300,000,000 bushels would simply swamp them, and make corn so cheap that it would not pay to harvest it. But with this enormous crop in view, the farmers are happy and jubilant, because there is sufficient demand for the product to keep the prices up.

WIRELESS TELEGRAPHY TO REPORT THE YACHT RACES.

The New York Herald has made arrangements for the exclusive use of the Marconi system of wireless telegraphy for reporting America's cup races off Sandy Hook. Signor Marconi and four assistants have sailed from Liverpool with all the necessary instruments for use in reporting the races, and the work will be done under the personal supervision of Marconi and his assistants, who have been engaged in experiments on