

IN THE WORLD OF PROGRESS

A significant matter in connection with the mission reports to the American board related to the conquest of China by Japan. "Five thousand Chinese students," they reported, "are in the schools of Japan, and China is rapidly filling with Japanese professors and teachers, and schools of lower grade and Japanese editors are connected with Chinese journals. A peaceful conquest of China by Japan is already in full operation."

John Isaac, after acting as representative for California in a conference with the horticultural authorities of Mexico, has just reported that he has discovered that six and perhaps more states in Mexico are harboring a foe to oranges which there is reason to dread if it should be permitted to enter California. He reports that he found thousands of oranges and mangoes have been destroyed within three months by the Mexicans in an attempt to eradicate the orange maggot, which has occasioned much damage. The orange maggot proceeds from the eggs of the insect known as the *trypeta ludens*. The fecundity of this insect is something astonishing.

Baltimore, which is having to start anew after its great fire, is now struggling with the problem of its sewage disposal. It was at first expected that the sewage might be turned loose into tidal water, as is done in Boston and New York. But the fact that Baltimore is not so near to the open sea as these cities, has led to doubt and probable reconsideration. The chairman of the sewage commission there, General Leary, has been inspecting the sewage disposal plant at Brockton, and present indications are that a filtration system will be adopted at Baltimore. The next step will be to get the advice of expert engineers on the subject.

A majority of the foreign members of the consulting board of engineers of the isthmian canal appear to favor a sea level canal. This fact may be of the greatest importance of their votes shall become necessary to decide that, which is the principal question requiring ratification at the hands of the board. No attempt has been made to pass on the question at any of the board meetings, but the fact is that the majority of the foreign delegates who have been closely studying the vast amount of data collected and laid before the board by the canal commission are at present of the opinion that a sea level canal would be better than a lock canal.

A decision by John W. Yerkes, commissioner of internal revenue at Washington, imposes upon patent medicines composed largely of distilled liquors the same tax that is paid on retailed liquor. This reverses a ruling made four years ago and necessitates the taking out of rectifying and liquor-dealing licenses by the manufacturers of such medicines. It requires that druggists and others handling such medicines must pay the usual retail liquor dealers' licenses. The ruling goes into effect December 1, but notices of the change will be sent out at once. Commissioner Yerkes' ruling seriously affects several well-known patent medicines and is expected to put an end to the practice in prohibition districts and throughout the Indian Territory of obtaining alcoholic stimulants sold as medicines.

The public schools of the Indian Territory have upwards of 15,000 pupils enrolled. They have now entered upon the last term under the auspices of the Indian nations, and unless congress takes some action previously the schools will close March 4 next and not reopen. The tribal governments expire by law on that date. The Indians have supported the schools out of their tribal funds at an annual cost of \$450,000. After the dissolution of the tribal governments, the funds will be distributed and apportioned, the lands having already been allotted, and there will be no trust funds to draw upon and no lands taxable for school purposes. Attention has been directed to this situation in strong language in the annual reports of the secretary of the interior, the commissioner of Indian affairs, the education division of the Indian bureau and the superintendent of public schools in Indian Territory in the last two years. The Cherokee nation last year had 5,922 pupils enrolled in four boarding schools and 175 day schools, the maintenance of which cost \$11,821. The Creek nation had 2,547 pupils in forty-nine day schools and ten boarding schools, which cost \$76,159. The Chero-

kee nation had 4,976 pupils in 160 day schools, ten small boarding schools and four large boarding schools, costing, all told, \$121,517. The situation in the Chickasaw nation is very muddled, as the superintendent of the territory was able to get reports from only two boarding schools last year, while the nation has fifteen day schools and five boarding schools. The reports were scattering and inaccurate, and entirely unsatisfactory to the superintendent and to the Indian bureau. This is the nation in which there has been juggling with the school certificates, for which several persons have been indicted.

Joseph Ramsey, Jr., president of the Wabash Railroad company, has thrown down the gauntlet to George Gould and will engage in a fight for the control of the Wabash system which will doubtless prove to be one of the most sensational struggles ever witnessed between railway magnates. Ever since Ramsey was deposed as president of the Pittsburg lines of the Wabash the feeling engendered by that action on the part of Gould has increased in bitterness, and the contest for the control of the system will be fought out in the annual meeting of the stockholders October 10. In furtherance of this fight Ramsey issued a circular letter to the debenture bondholders and stockholders of the Wabash company appealing for their proxies that he may represent them in this annual meeting. In his letter Ramsey reviews his service in the company for the last ten years; calls attention to the extensions and improvements he wrought; says the power and capacity for handling traffic is more than doubled, and the cost of this work, at least \$12,000,000, has been paid out of the net earnings. Concluding, Ramsey says "No one is better acquainted with the Wabash railroad, its capabilities, and its possibilities, than myself; I do not hesitate to say that with prudent, conscientious, and impartial operation, there should be at an early date some pecuniary return to its owners."

The new \$20 gold certificates which the officials of the bureau of engraving say is a great improvement over the old bill has a portrait of Washington in the center. This is surrounded by an ornamental border with a background of intricate lathe work, displaying denominational counters so arranged that no matter how the certificate may be placed in a pile of bank notes, the teller can readily determine its denomination. The essential thing in connection with bank notes is, the officials say, to make them as difficult as possible to counterfeit. With this end in view the underlying tint in yellow was used, and it was so arranged as to produce the figures "20" at the top and the words "in gold coin" at the bottom, in apparently a deeper shade of yellow than the tint. It is said that the design of this certificate is the most difficult to counterfeit of any so far issued by the government. The experiment of obtaining designs of notes from artists was made some years ago, but the judgment of the bankers was that, while they were beautiful pictures they were not bank notes.

The coffee, tea, and cacao trade of the world is the subject of a monograph just prepared by the department of commerce and labor through its bureau of statistics which will be published in the forthcoming issue of the monthly summary of commerce and finance. This report shows the enormous increase both in the cultivation and consumption of these stimulants which is one of the characteristic features of the last quarter of a century. In the case of coffee, which is an indigenous plant of Africa, the center of production may be said to have been transferred to South and Central America, about three-fourths of the world's consumption being furnished at present by Brazil. The terms "Java" and "Mocha," which in olden times indicated the source of origin, have now become mere characteristics of quality and blend. In the case of tea, the spread of culture precedes, in point of time, that of coffee. China, which may be said to have been the center of the tea trade in the earlier parts of the last century, has been superseded now by India and Ceylon, so far at least as imports into the United Kingdom are concerned. The cultivation of these two articles of popular consumption may be said to be restricted to certain well-limited areas, the bulk of coffee being raised at present in the central and southern part of the American continent, and tea being produced on the Asiatic mainland and ad-

acent islands. On the other hand, the consumption of these products, in the leading European and American countries at least, is far from being equally distributed. Roughly speaking, between two-fifths and one-half of the marketed coffee product of the world is taken by the United States, while one-half of the tea product entering the world's markets is taken by the United Kingdom. Another fact worth mentioning is that the rate of consumption of these two articles, wherever they have become part of the popular diet, tends to increase continually. Taking only those countries the statistics of which show considerable consumption of coffee, such as the United States, Germany, United Kingdom, Holland, Belgium, France, and Austria-Hungary, we find that the combined consumption in these countries has increased almost 60 per cent, from 1,140,740,000 pounds in 1884 to 1,816,447,000 pounds in 1904, as compared with an increase of population of about 30 per cent in the countries named during the same period. In the United States the total consumption has almost doubled in quantity, while the per capita consumption has increased about 26.9 per cent, from 9.26 pounds per head to 11.75 pounds per head during the period under consideration. Of special interest to the United States is the coffee industry of Porto Rico. Its "banner year" was 1896, when the island exported 58,763,476 pounds, valued at \$8,318,544. The fall in prices, which became acute about that time, combined with the hurricane of August, 1899, the change in money standard, and the partial loss of the Spanish, French, and Cuban markets, caused an abrupt decline, so that in the fiscal year 1900-1901 the exports were only 12,159,008 pounds, valued at \$1,678,988. Since then there has been a steady increase, the exports for 1904 being 34,329,927 pounds, valued at \$3,903,257. There is every prospect that the record of the banner year will soon be equaled, especially since Cuba, under the reciprocity treaty, grants to Porto Rican coffee a 20 per cent reduction of duty, and the vast market of the United States, which formerly took only trifling quantities, now absorbs a rapidly increasing amount of the Porto Rican product. The consumption of cacao has increased at a rate even greater than that of coffee and tea. Figures showing the world's production are available for the last decade only. According to an authoritative German trade journal, *Gordian*, the world consumption has increased from 142,212,611 pounds in 1893 to 280,981,266 pounds in 1904 or 97.5 per cent. The increase is especially heavy in the United States, namely from 17,494,936 pounds in 1894 to 62,848,917 pounds in 1903, or 759 per cent. Owing to the fact that cacao is consumed both in the solid and in the liquid form, its consumption in some European countries, such as France, Germany, and Holland, is now larger than that of tea. The following table shows the per capita consumption of coffee, tea, and cacao in some of the principal countries for 1903:

	Per Capita Consumption.		
	Coffee.	Tea.	Cacao.
	pounds.	pounds.	pounds.
United States.....	10.79	1.30	0.76
United Kingdom71	6.03	.91
Germany	6.80	.12	.81
France	6.27	.06	1.16
Holland	14.39	1.45	4.36

The Union Pacific railway gave a practical test at Omaha of gasoline motor car No 2, built by that company for actual service, before a large number of interested eastern railway officials. It ran from Omaha to Valley, Neb., and return, carrying fifty-seven persons, mostly railway officials, reaching a maximum speed of fifty-two miles an hour. The return trip was made in six minutes less than is taken by the overland limited, the Union Pacific's best train. The first car was built for experimental purposes, but this and others of the same pattern now in course of construction are built for regular service. The test was a most successful one and may result in a general adoption of this style of car for branch and suburban business by all the railroads of the country. It is built entirely of steel, and is equipped with every modern convenience. It is much lighter than wood constructed cars. The car has numerous appliances on which patents have been taken out by the inventors, who are young mechanical engineers and designers employed in the office of the superintendent of motive power and machinery at Omaha.