

AN ENGLISH ENGINEER ON THE METRIC SYSTEM.

In his address as chairman of the engineering section at the recent meeting of the British Association, Sir Douglas Fox, the eminent engineer, referred to the metric system, says the *Engineering and Mining Journal* in terms which apply to the United States quite as well as in Great Britain. He showed the advantages which could be secured by the adoption of the simple and harmonious system which is now used by so large a part of the civilized world. England, he said, was losing many customers who preferred to buy in France and Germany, because they would no longer submit to the variety of weights and measures in use in Great Britain, especially as those weights and measures are totally lacking in all system and coherence, and present, to people who are accustomed to the metric system, a chaotic mass of arbitrary units and divisions, which have nothing to recommend them but their antiquity. Even this is only comparative, and if we insist upon age as a recommendation, why would it not be better to go back to a still earlier period and use the Hebrew cubit, the Greek stadion or the Persian parasang?

The fact is that, as Sir Douglas Fox clearly pointed out, the system, or rather lack of system, which we cling to so obstinately, is superannuated, and its continued use is an injury to our trade, which will be more and more felt as that trade increases. The metric system is easily learned and understood, because there is a simple and natural relation between its measures of length, capacity and weight. A strong argument in favor of the use of the metric system here [in the U.S.] is that by common consent all over the civilized world it has been adopted by chemists and men of science. This has done a great deal toward making chemistry an international science and promoting the easy exchange of experiences and the rapid diffusion of new discoveries. The advantages gained in this direction are sufficient to show how much we would profit by the general adoption of the system.

The *Journal* thinks it quite natural than an engineer like Sir Douglas Fox, who has had the direction of important works in different countries and has come into contact with his co-workers of different nations, should see the advantages to be gained. "His advocacy of the metric system should have great weight with our engineers, who have been held back from aiding in the reform chiefly by the influence of a few men in the profession whose undue conservatism has been an injury to the country."

ANSWERS TO ENQUIRERS.

SUBSCRIBER, Brantford.—Would you kindly inform me through your columns whether a bank would be justified in refusing to cash a cheque which had been torn in two and pasted together again, being in order in every other respect. [If the cheque was in other respects correct and the funds in the bank were sufficient for it, the manager would not be justified in refusing payment because it had been torn across and pasted together.]

CORRESPONDENT, St. Thomas.—The company referred to in the Montreal letter of our Christmas issue is the St. Lawrence Insurance Company, promoted last summer under a charter obtained in 1886 from the Quebec Government by parties, several of whom have since died. It was organized in September last. Directors: Dr. J. G. Laviolette, president; Ernest Marceau, District Superintendent of Canals, vice-president; L. S. Papineau, civil engineer in Government employ; G. De G. Languedoc, engineer and valuator, and F. Gauthier. The last-named is the general manager. He was long employed with the Liverpool, London and Globe, and other companies. The capital authorized is \$1,000,000. The actual capital subscribed is not generally known, but is understood to be about \$100,000; a sum of \$25,000 is deposited with the Government at Ottawa. The company does not belong to the Underwriters' Association, but quote rates under the ordinary schedule.

BANKER, Port Hawkesbury, C.B.—Have made enquiry and given opinion of the concern on page 870 of last issue.

AN OLD COUNTRY FERRIS WHEEL.

Some of our readers may know that there is in England a sort of Ferris wheel, such as made such an attraction at the Chicago World's Fair. It was put up in the outskirts of London by the Gigantic Wheel and Recreation Towers Company, which held its third general meeting last month. The report of the company shows what kind of success the wheel proved as an attraction. From the opening of the wheel in May till it closed in October they carried nearly 400,000 people, and earned from rides on the wheel alone £20,237. On one bank holiday, Whit Monday, no less than 11,251 took the voyage into the upper air by means of the wheel. Discussing the terms of the report and balance-sheet, the question of reserve, the chairman said: "You have been wondering whether each succeeding year would see a reduction of the

dividend until the wheel finally ceased to attract people to it. It will cease to attract people in one spot, but it does not follow that it will not continue to attract people in other places. When our wheel has finished at Earl's Court it will not be old, and at the end of our lease we must be prepared to take it to pieces and rebuild it for a new public on a new site." And in order to do this, he proposed they lay aside a reserve, and he thought that £11,000 would be sufficient. He proposed that a dividend of 2 per cent. should be declared, and that £2,700 and accruing interest should be put to the reserve fund. This was accordingly done.

CLEARING-HOUSE FIGURES.

The following are the figures of the Canadian clearing-houses for the week ended with Thursday, December 31st, 1896, compared with those of the previous week:

CLEARINGS.	Dec. 31st.	Dec. 24th.
Montreal	\$8,385,721	\$10,715,404
Toronto	5,285,008	6,893,281
Halifax	1,145,726	1,208,655
Winnipeg	1,353,819	1,602,124
Hamilton	720,724	619,897
St. John	489,212	603,068
	\$17,380,210	\$21,642,429
Aggregate balances this week,	\$2,556,383;	last week, \$2,632,394.

	Jan. 7, 1897.	Dec. 31, 1896.
Montreal	\$9,936,583	\$8,385,721
Toronto	9,428,973	5,285,008
Halifax	1,372,124	1,145,726
Winnipeg	1,515,409	1,353,819
Hamilton	714,281	720,724
St. John	589,272	489,212
	\$23,556,642	\$17,380,210
Aggregate balances this week,	\$3,736,931;	last week, \$2,556,383.

—In an article on Niagara Falls water power, *The Canadian Engineer* calls attention to the contrast between the industrial activity on the American side of the river (a consequence of the operations of the Cataract Construction Company), and the stagnation on the Canadian side, where they "have not turned a shovel." The journal named recites the bargain between that company and the Ontario Government in 1892, whereby it got a lease for twenty years of power derivable from the Canadian side of the Falls, work to be begun by May, 1897, and suggests that the company can well afford to pay \$25,000 or \$35,000 a year, and yet do nothing on this side of the river, since its interests lie on the United States side. But *The Canadian Engineer*, which is patriotically anxious that our water-power should not be tied up in the hands of a foreign company, does not inform us where the Canadian capitalists are to be had who will pay \$25,000, or any other sum, annually to the Ontario Government for the privilege of water-power to generate electricity.

—The Phenix Insurance Company of Brooklyn, N.Y., has made some changes in its Canadian business. In this province the agencies have been reduced in number to thirteen, in the largest cities and towns, all of which report direct to the home office. About seventy small agencies have been closed and transferred to the Western Assurance Company, which assumes the risk. Mr. L. C. Camp, who represented the company in Toronto for some years, has retired, and the Toronto business has been transferred to the office of Messrs. Wood & Kirkpatrick, which for legal purposes becomes the head office for Canada. In Manitoba and the eastern provinces the company has an agency in the large cities.

—From the report for last year of the director of the United States Mint it appears that the coinage at the mints during 1896 was as under: Gold, \$58,878,490; silver dollars, \$7,500,882; subsidiary silver, \$3,939,819; minor coins, \$869,337; total, \$71,188,468. Still more interesting is it to read the estimated production of the precious metals in that country for the year 1895. It was 2,254,760 fine ounces of gold, commercial value and coinage value equal at \$46,610,000; but observe the silver, the quantity of which was 55,727,000 ounces, the commercial value only \$36,445,000, but the coinage value, given it by law, \$72,051,000—almost twice as much.

—A convention of the National Association of Manufacturers is to be held in Philadelphia, on January 26th, 27th and 28th, and a committee, composed of leading Philadelphia manufacturers, is already engaged in formulating subjects for discussion, some of which will treat of national legislation to benefit commerce. The opening of foreign markets to American products is one of the chief aims of the association, and the South American trip taken by its delegates last summer demonstrates what co-operative efforts can accomplish.