

## METAL IMPORTS FROM GREAT BRITAIN.

The following are the sterling values of the imports of interest to the metal trade from Great Britain during July and the seven months ending July, 1897, 1898 —

	Month of July.		Seven months ending July.	
	1897.	1898.	1897.	1898.
Hardware and cutlery .....	£5,825	£2,372	£37,755	£14,290
Pig iron .....	942	925	3,807	7,105
Bar, etc. ....	786	502	5,799	7,239
Railroad .....	17,368	8,190	37,654	23,007
Hoops, sheets, etc. ....	8,313	7,843	31,003	24,466
Galvanized sheets .....	6,083	8,294	25,458	32,461
Tin plates .....	5,959	12,123	94,942	85,598
Cast, wrought, etc., iron .....	1,943	2,295	19,277	18,637
Old (for re-manufacture) .....	1,080	499	2,577	3,574
Steel .....	6,099	5,040	29,537	32,897
Lead .....	3,699	4,170	10,959	16,460
Tin, unwrought .....	345	1,638	10,179	12,423
Alkali .....	2,289	3,587	17,649	24,597
Cement .....	1,934	2,270	8,489	12,222

## THE USE OF IMPROVED METERS IN ELECTRIC LIGHTING.

It has been found by experience, it is stated, that a central lighting station can supply 30 per cent. more customers on the meter than on the flat rate. This 30 per cent. really represents wastefulness, which is inherent in the nature of the average customer, and the flat rate. The investment in meters, and their proper care, makes the plant equivalent to one 30 per cent. larger. A central station which is in the electric lighting business for the profits on its investment can easily realize the great advantage in the use of meters. That many small villages and cities make but a small profit, or the income only sufficient to pay actual running expenses, is not surprising, in view of the waste and extravagance of the flat rate. These same stations may, by proper and economical use of meters, be made profitable. It is not necessary to point out the evils of the flat rate; but it is self-evident that many customers never take the trouble to turn out all or part of their lamps, and in places where the plant gives all-night service the lamps are left burning all night. A fallacy in flat rates is the basing of charges on 50-watt lamps. A 50-watt 16-c.p. lamp is somewhat of a rarity in the market, 60 watt being about an average, and many lamps are used taking more even—70 or 80-watts. In most small stations the voltage is kept above what the lamps were made for; even in the case of a 50-watt lamp the consumption will be higher. It has been found that most small stations, if they use 50 volts, keep the voltage at 55 or 60. These wastes are impossible to avoid in the flat rate. A meter measures the actual consumption of current. The central station gets paid for actual service given the customer, and it behooves the consumer to use his lights in the best and most economical way.

New Scheefer watt-meter for alternating current has been devised to correct various faults which were in the Scheefer meter, which has given such good results, states the Packard Electric Company in a recent circular. As will be noticed, the meter is round and has a rubber band placed around the circumference, over which is placed the other case. This rubber band should always be used, as it makes the meter perfectly dust and bug proof. It has been found that meters with cases of ordinary fitting are hampered with dust and dirt; and with such cases it is impossible to keep meters correct, necessitating frequent overhauling and cleaning. The Packard Company's new meter, if the case is properly put on with the rubber band, is perfectly air tight, and gives an assurance of its permanency. The binding posts will be seen to be insulated in a thorough manner, ordinary holes not being depended upon. The holes in the binding part are closed on end and insulated by hard rubber, making it impossible that anything can get through the post; and also making it unnecessary to tape or plug any holes. The moving parts are extremely light—at the same time not too delicate. The iron circuit in the magnetic system is practically a closed one, preventing stray lines of force from acting on other parts of the meter, and is therefore unaffected by outside influences. This closed circuit gives the maximum effect with the minimum energy possible in construction, the shunt winding

taking about 1-3 to 1-2-watt on 15,000 alternations, and not exceeding  $\frac{1}{2}$  to  $\frac{3}{4}$ -watt on 7,200 alternations. This meter is also said to be correct on inductive loads, and therefore can be used on fan motors or induction motors, arc lamps, etc.

## Industrial Notes.

Joseph Carrington is building a large addition to his tannery at Kingston, Ont.

Mayor Roy, of Levis, is negotiating with Montreal capitalists for funds for an aqueduct for that town.

Dr. Bryce of the Ontario Board of Health has reported that additional sewers are needed at Kincardine, Ont.

The Ontario Silver Co., Humberstone, Ont., has installed a second gas engine recently; the new one being 40 h.p. capacity.

H. Mooers & Co., of Kingston Ont., are about to build a new flour mill, which will be run in connection with their elevator.

Lancaster, Ont., village corporation is looking for some industry or industries to locate in the town. Good inducements are offered.

It is said that a shoe factory is soon to be established at Fredericton, N. B.; \$20,000 of the required capital has already been subscribed.

McDonald & Allen, manufacturers of door knobs, Kingston, Ont., have closed out. The plant has been bought up by Mr. Spencer, who will reorganize the business.

M. Fauteux has the contract of building the new hospital at Sault Ste. Marie. The work is estimated to cost \$20,000, and is to be completed by the 10th of January, 1899.

Engineer C. H. Mitchell, Niagara Falls, Ont., writes that the town is about to construct 8,700 lineal feet of 6, 8 and 10 foot concrete and brick walks, together with stone curbing and crossings.

The Peterboro, Ont., Light & Power Co., is about to commence the erection of a large water power station. The new station will cost between \$30,000 and \$40,000, and the company expects to develop about 2,000 h. p.

The contracts for the new iron bridge over the River Raisin at Lancaster were let, and Williams & Fallon, of Cornwall, Ont., have commenced work on the abutments. The Dominion Bridge Co. will supply the structural work.

The Ontario Board of Health has given Fort William, Ont., permission to take the supply of water from the Kaministiquia River three miles above the town, provided that the sewer outfall should be a quarter of a mile from the mouth of the river, emptying into the bay.

It has come to our knowledge that certain bogus or fraudulent firms in Holland are entrapping Canadian manufacturers in the iron trades, and we would sound a note of warning that no goods be shipped without security in some form. Could not our boards of trade look into the matter?

The demand for Clappison's magnesia sectional covering has been so great that it has become necessary to greatly enlarge the factory at Hamilton, Ont. Another story and a new engine room—an entirely new front—new machinery, etc., having been added. This goes to prove that a really good article, once used, is sure to be appreciated.

The hydraulic jacks recently shipped to the Intercolonial Railway Co. by the Lancaster Machine Works, are reported to be first-class articles giving great satisfaction. These jacks, although retaining the main original features of the Tangy jacks, have several improvements that place them ahead of all other makes. They are made in all sizes by the Lancaster Machine Works, Lancaster, Ont.

In the paragraph last month referring to the transfer of certain oil properties to the Bushnell Co., Ltd., of Sarnia, omission was made of the transfer of the National Oil Co., of Petrolia (owned by John Macdonald), at \$65,000. The price at which the Empire Oil Co., of London (owned by J. R. Minninnick), was transferred was stated to be \$4,000 instead of \$28,000.