in manufacturing and merchantile circles. Being personally in charge of the manufacture of the steel sheets, which are the basis of the galvanized sheet, he was keenly interested in learning of the many purposes for which such sheets, both black and galvanized, are used in Canada. After visiting Toronto, Hamilton, London, Montreal and Quebec, Mr. Lysaght left for Sydney, C.B., for the purpose of seeing the works of the Dominion Iron & Steel Co., in which enterprise British manufacturers are taking a deep interest.

The Western Electric & Mfg. Co. have just entered their third order with the Burt Mfg. Co. of Akron, Ohio, for Cross Oil Filters for use in their works.

Wave motors and tide power schemes have been almost endless in number, says a writer in Cassier's Magazine. The former have, in a few instances, been used for light pumping work at seaside places, but such pumping outfits have been very far from demonstrating that the wave motor could ever be seriously considered as a prime mover where large powers were demanded, in fact, the wave motor is little better than a toy. As to power from the tides, there is little to be said, except that such money has been wasted in vain endeavors to turn it to practical account. The tide-power scheme probably always will be alluring and also disappointing. The disappointment comes from the fact that very few people seem to take the trouble to figure out how much water and how considerable a fall are required to give any useful amount of power. A horse-power for a day of ten hours, for example, would require something like 120 tons of water falling from a height of 100 feet, so that a 500 horse power factory, say, would need 60,000 tons of water at a 100 foot head. On the basis of thirty-six cubic feet of water to the ton, there would thus be over 2,000,000 cubic feet of water, and this would make a fair sized pond, say about 1,000 feet long, 200 feet wide and ten feet deep. There is in these few figures something that may help to open the eyes of the tide-power plan inventor and of those who are in the habit of putting money into such things.

The Westinghouse Air Brake Co. have just ordered from the Burt Mfg. Co., of Akron, Ohio, a large Cross Oil Filter to equip their power house.

Editor Cary, manager of the Packard Electric Co., St. Catharines, Ont., has gone and done it again. This time his effusion takes the shape of a most beautiful alluminum desk calendar with thermometer, handsome enough for a present to the happiest bride that the sun ever shone on. The Calendar is perpetual, making the thing of beauty a joy forever, the thermometer attachment being evidently intended to indicate the fervor of the hot times the boys occasionally undergo. Mr Cary distributed these unique souvenirs to his friends at the recent electrical convention in Kingston, Ont., and there is where the utility of the thermometer was demonstrated. Mr. Cary informs us that the issuing of the calendar was in commemoration of the tenth anniversary, not only of the Canadian Electrical Association, but also of the Packard Electric Co. It constitutes a valued and appreciated ornament on the editorial desk.

J. C. Wilson & Co., Glenora, Ont., are supplying the Imperial Artistic Wood Turning Co. of Thorold, Ont., with a thirty-eight inch Little Giant Water Wheel to drive their new factory. Also with machine dressed gears, shafting, etc.

The works of the Canadian Portland Cement Co., at Marlbank, near Perth, Ont., were destroyed by fire Sept. 25. Loss about $60,000. The works will be rebuilt without delay. The plant was formerly the property of the Beaver Portland Cement Co., Montreal, but in May last was taken over by the Canadian Portland Cement Co., who have been very materially adding to and improving the plant, so that it was just getting in first-class working order, having a capacity of 500 barrels per day, and employing about 150 men.

The German Consul at Payta-Piara (Peru) dwells with exultation in his report on the discovery of large rubber forests on the Niera River, a branch of the Amazon, which can be reached from the middle of the tobacco plantations by an eight days' journey. Several German firms equipped at once a large expedition to start for the interior and to secure the right to collect the rubber. As the natives are very poor, it is expected that cheap native labor will facilitate the collection. A special road is projected, which will touch Iquitos, over which place it would be best to send all material, as it would be difficult to find a route which is shorter through the Piara district.—Kuhlow's.

Preparations are still going on among some manufacturing firms to cope with the demand that is likely to arise in South Africa soon for finished products. Quite a number of agents are to return during this month, and some 500 mine owners and managers are to leave England shortly for the Cape in order to be near at hand to commence work at an early date. The latest advices from Cape Town, however, dealing with commercial affairs say that merchants are gradually resuming business, but at first they only order in sufficient quantity to carry them from month to month. Army stores and provisions still make up the largest transactions of the day. This state of affairs is plainly demonstrated in the local market. While the orders for manufactured goods are small they keep arriving steadily, and if these do not come direct they are sent to this market via England. It is expected that the early revival of trade with South Africa will immediately increase the demand for manufactured iron, railway material, electrical goods, hardware and very extensively the call for mining and hydraulic machinery.—The Manufacturer.

J. C. Wilson & Co., Glenora, Ont., are now completing a double forty-four inch Little Giant Turbine for John Breakey, Esq., Chaudiere Mills, Que. This wheel is to develop 120 h.p. under a ten foot head of water.

Rankine in his Steam Engine bases his calculations of results with forced draft on an air supply of only eighteen pounds of air per pound of coal, while those upon chimney draft are based upon twenty-four pounds, and then remarks that "with a forced draft there is less air required for dilution, consequently a higher temperature of the fire, consequently a better economy of heat than there is with a chimney draft." So also D. K. Clark, in his work on the same subject, states that "the system of forced draft opens the way for increase of efficiency in facilitating the adoption of grates of diminished area in combination with acceleration of combustion."