

tons. The permanent bunkers have a capacity of 1,052 tons. The "Manchester City" is expected to be ready for sea in about six weeks, and after undergoing her steam trials she will take up the regular service between Manchester and Montreal.

## Mining Matters.

W. A. Saunders is to put in another steam pump at the Golden Lode mine at South Unkake.

A number of productive oil wells have recently been sunk in Lambton county, at Inwood, Ont.

The Calumet, Que., Mining Co., has made another rich discovery on the Upper Ottawa. It is a new mine in which is said to be nearly 40 per cent of silver.

A Whitley concentrator is being put in by the Truro Foundry Co., at the Richardson mine at Isaacs Harbor, which will be tried on two batteries as a test.

The Bureau of Mines received a letter from Minneapolis, giving the assay of sand in the placer regions of \$1.50 to \$0 per ton, in gold. A ton of the sand has been shipped to the Toronto Mining School for experimenting.

The Hillsboro, N. B., manganese works, which have been temporarily closed down for two weeks on account of an accident to the machinery, have resumed operations again. The repairs to the manganese press have been made by J. Weir & Sons, Moncton.

The largest flow of oil since the Petrolea oil discovery was struck last month by Trotter and McIlhugh of Chatham, while boring on the Herbert farm, situated about two miles from Thamesville, Ont., in the Township of Zone. It is one of a number of wells that have been lately put down in the vicinity of Thamesville. The well when tested yielded 40 barrels per hour.

On June 18 a fire and an explosion occurred in the hoisting and compressor house of the Asbestos & Asbestic Company's works near Danville, Que. Two men were instantly killed, and one other man so badly injured that he died shortly after. The loss to the company's property is heavy, and the detention of operations will be serious, as a number of large orders were being filled. The exact cause of the explosion cannot be ascertained, though it took place by the ignition of dualine.

We observe the application for incorporation of the Eastern Townships Chrome Iron Mining and Milling Company (Limited), capital stock of \$50,000, headquarters Montreal; to produce and mill gold, silver, copper, chrome iron, etc.; the parties being R. Prefontaine, M.P., J. R. Fair, Montreal; C. A. Chenevert, M.P.P., Berthierville; J. U. Gregory, Quebec; C. King, Sherbrooke, etc.

The Bureau of Mines has issued a map of the corundum belt in Eastern Ontario, and is sending out a number of circulars, containing in concise form information concerning these deposits. The corundum bearing lands have an aggregate area of 50,000 acres. The mineral rights over nearly the whole of this tract are held by the Crown, and they have been withdrawn from sale and lease pending a report on the occurrence of the mineral and the methods of treating it, undertaken by the professors of the Kingston School of Mining. This report and a map of the region will be issued shortly.

Prof. De Kolb, of the School of Mines, Kingston, has been appointed inspector of mines for Ontario by the Local Government, in place of the Rev. A. Slaght, who died a few days ago. This office is in addition to the professor's present position, as he can perform the duties during the vacation season.

A. P. Lowe, of the Geological Survey staff, Ottawa, has left for eighteen months' field work in the interior of Labrador, continuing the line which he has been engaged upon for some seasons. It has been said that gold exists in Labrador in paying quantities, and an abundance of iron and of coal in different localities.

The first general meeting of the recently incorporated Canadian Mining Institute was held in the Windsor Hotel, Montreal, June 3rd, the president, John E. Hardman, in the

chair. The principal business was the establishing of headquarters, with a mining library, in Montreal. The library, which will be located in room 4, Windsor Hotel, will be stocked with books, of which the institute already possesses about 500 volumes, periodicals, papers, maps, etc., relative to mining matters. These will be at the service of those desiring to obtain information relative to the Dominion's mining resources. Reliable information will thus be disseminated. The Dominion Government has made a grant to it of \$1,000. A library committee was appointed, consisting of G. E. Drummond, convener; J. Stevenson Brown, H. B. de Courtenay, the president, and B. T. A. Bell, secretary.

—THE CANADIAN ENGINEER continues as interesting as ever to all engaged in metal, electrical, or mining work. It is monthly, only \$1 a year, issued by Biggar, Samuel & Co., Fraser Building, Montreal, and should be in the hands of all mechanics.—Truro, N.S., Daily News.

—The members of the Toronto Astronomical and Physical Society Toronto, had an address delivered before them on "Our Atmospheric Ocean," by F. Napier Denison, June 28th. The lecturer gave the causes of air currents, dealing with special features of cyclones. He pointed out the various effects of aerial movement upon lakes and oceans, illustrating his statements by producing weather charts. The stereopticon views all through the lecture added much to its interest. Mr. Denison leaves Toronto almost immediately for British Columbia, where he will take charge of the weather forecasting department of the Observatory.

—Under the authorization of an act of the New York Legislature, that state will establish a College of Forestry. A conference has already been held at Albany to decide upon the location of 30,000 acres of land to be purchased for the purpose. No particular plot of ground has as yet been definitely picked upon. The conditions which the authorities decided upon as necessary in seeking land for the new college were formulated by Dr. Fernow, formerly chief of the forestry division of the department of agriculture at Washington, now director of the new State College of Forestry at Cornell University.—From the Railway Review.

—The results of the tests of the Roehling system of fireproof construction, in which a concrete arch, strengthened with steel rods, constitutes the floor support, will, we think, be a surprise to those who have not known hitherto the value of concrete as a fire-resisting material. That an arch of this construction of 4 ft. span, only 3 ins. thick in the centre, could support a floor loaded with 150 lbs. per sq. ft., while a fire was kept under it for five hours, reaching a temperature of above 2,300 deg. F., or beyond the melting point of copper and even of cast-iron, and then after this heating and sudden cooling by a stream of water could withstand a load of 600 lbs. without fracture, would, says the Engineering News, be considered highly improbable had it not been proved by these tests. The competitive test between an arch of concrete and one of hollow tile, in which the latter failed, is one of the most important contributions to our knowledge of the ultimate resistance of fireproof floors which has been made for many years. The manufacturers of tile floors will no doubt have something to say in their own behalf in regard to this test, for it was not an official one, but as the matter stands it looks as if the concrete men had shown that in fire-resisting qualities their construction is at least as good as that which has heretofore been accepted as the best standard construction.

—The total supply of manganese ore for the last year, for which returns are available, was 408,079 tons, and of this we in Britain used some 128,000 tons. The quantity required has been steadily increasing, being now five times what it was ten years ago. This is in part due to its more extended use in high-speed engines, where weight is more important than first cost, and where, therefore, it is preferred for its high tensile strength. It is also more largely adopted now for warships, which are wood and copper sheathed, and therefore require manganese bronze, or some other metal which will not readily corrode. The percentage of manganese is in such cases very small, usually 2 per cent. to 88 per cent. of copper and 10 per cent. of tin in engine castings. Stem and stern frames run up to 15 and 25 tons respectively, while propellers often weigh 17 tons. But withal, the extensive use is somewhat surprising, for what is known as naval brass is more in