

THE METRIC SYSTEM PREFERRED.

The recent adoption, by iron and steel manufacturers throughout Germany, of standard classification, based on the metric system, is said to have been a great aid to them in securing trade. "This systematic procedure," says The Mechanical Engineer, Manchester, Eng., "has led other foreign countries to adopt the German classification, more and more to the disadvantage of British manufacturers. The consuls report that in Holland there is an undoubted preference for German sizes, based on the metric system, and that it is chiefly owing to this that Germany has obtained many orders for railway bridges and other material. He adds that, as regards pipes for waterworks, it is absolutely certain that the Dutch market is completely lost to Great Britain, so far as new works are concerned, from the same cause. He says that recently a Belgium firm obtained a large contract for water-piping in Holland, and was obliged to guarantee that the German normal classification should be adhered to. He concludes that in the growing competition of rival manufacturing countries the lead cannot be held by any country which has not adopted the metric weights and measures."

MINERAL WEALTH IN THE FAR NORTH.

Some testimony as to the value of the country north of Lake Wahnapiatae, and round Lake Tamagami, independent of the views of the commissioners lately sent into that district, is given in a late issue of the Sudbury News.

Mr. D. O'Connor, who returned recently from an extended prospecting tour of the Tamagami district, has given information to that journal leading to the belief that building of the proposed new railway into that country and the development of the undoubted mineral resources would mark the beginning of a new era of business activity and prosperity that would benefit not only Sudbury, and the district of Nipissing, but even a larger area.

Mr. O'Connor left Sudbury for Lake Tamagami on July 13th last, and reached the lake in three days, starting by way of Wahnapiatae Lake, proceeding up Metagamassing and Maskinonge lakes; thence through a string of small lakes leading into the Sturgeon river, down which his party traveled five miles, when they struck the road used to Tamagami lake.

"There is an enormous amount of pine, and the country is all wrapped in verdant foliage and green swards. The lands for agricultural purposes, too, in quality and area, will bear comparison with those to be found in any other part of the province.

"I found some very large quartz veins, which looked very promising; also some heavy deposits of iron and nickel. The latter will compare fully with any of the nickel in the Sudbury district that I have seen."

He speaks of meeting the Toronto commissioners, who were examining the district, and adds his belief that it would pay the Ontario Government to build such a railroad themselves, as it would enhance the value of their timber to more than the cost of building the road.

"I hope," he says, "the government will not act in the same way with prospectors up there as they did with the prospectors in the Wahnapiatae district, as I consider it would be injurious to both government and prospectors."

"Prospectors can get supplies, it seems, from the Hudson's Bay post on Bear Island, which is under the management of Mr. John Turner, a gentleman who will accord all information and kindnesses required by prospectors."

"Mr. O'Connor met several prospec-

tors, and in every case promising property had been struck—more especially among those prospecting on Lake Obibakia, as very few have prospected outside of this lake. The masses of diorite which are shown on the geological map in that country are a guarantee to prospectors."

At Mr. O'Connor's office, the Mining News representative was shown some fine samples of the ore brought from the Tamagami country, "which comprised gold, silver, copper, and nickel, and the indications of large and valuable deposits of these minerals are indeed bright and promising. Our informant is quite enthusiastic over the mineral wealth of this new country, as indeed are all other prospectors who have penetrated the mineral belt of the Tamagami."

GOLD PRODUCTION IN THE TRANSVAAL.

The impression has generally prevailed since the beginning of the present year that gold mining in South Africa reached its highest rate of production in 1897, and that henceforth the annual output would be materially smaller. This belief has been reflected in the stock market in London in the declining prices of "Kaffirs," and has been further strengthened by the stories of stagnation of business in the Transvaal region, of the surplus of unemployed labor there (chiefly clerks and adventurers from Great Britain), of the tyranny of Paul Kruger and by other doleful tales. Several of these statements are perfectly true, and yet the recently published official statistics of gold production in the Witwatersrand district for the seven months ended July 31st, 1898, show that the output was not only larger in each month than in the corresponding month of 1897, but that the aggregate value for the first seven months of 1898 was not far behind the total of 1897, and actually exceeded that of 1896. The following table shows the monthly output of this district for the first seven months of 1897 and 1898 in Troy ounces:

	1897.	1898.
January.....	314,826	209,832
February.....	297,975	211,000
March.....	325,907	232,067
April.....	335,125	235,698
May.....	344,160	248,305
June.....	344,670	251,529
July.....	359,343	242,479
Total.....	2,322,006	13,630,910

The most conservative estimates, based on the output of the first seven months of this year, bring the probable product for the year 1898 to not less than 4,000,000 ounces, equivalent to at least \$75,000,000. This is about \$20,000,000 more than the probable product of the United States, including Alaska. The explanation of the increased output in the Transvaal and decreased amount of labor employed is readily found in the fact that the mines are now operated by American mining engineers, who have introduced American labor saving machinery and other economic methods. These officials are now also introducing American furniture and household implements into their homes, and are even importing American cottages and dwelling houses, which are set up in this country and then taken apart and packed for shipment to South Africa.

The world's production of gold is no longer dependent upon accidental or sensational discoveries, such as those of the Klondyke, for the business of gold mining has been reduced to an exact science. One of the richest mines in the world—the famous Treadwell mine, in Alaska—yields but a very low grade ore, averaging less than 80 grains of gold to the ton—a quantity so minute that under old methods this ore would have been considered valueless; yet more than \$5,000,000 in gold had been shipped from the mine in 1896, since which time the

rock crushers have been doubled in number and capacity and the annual output of gold has been correspondingly increased. The production of gold in the United States and South Africa combined in 1897 was about equal to the entire production of the world in 1883, and was within 80 per cent. of the entire production of the world in any year prior to 1889.—Philadelphia Record.

NEW USES OF ALUMINUM.

Aluminum has lately found its way extensively into vibrating and reciprocating machines, both large and small. Here the advantageous use of the metal is entirely a matter of reducing the weight. Probably the best illustration of the use of aluminum in revolving machinery is in using an oil cup on the driving-wheel of a locomotive in connection with a driving-rod. With the increased speeds that the roads are now aiming to attain, it is necessary to increase the diameter of the driving-wheels, and consequently the tendency to break the shank of the oil cups materially increases, and with some of the large engines which have been built cups made of composition are frequently broken. These cups are now, and have been for some time, successfully cast in aluminum, and have given great satisfaction.—The Engineering and Mining Journal.

BRITISH TRADE WITH THE UNITED STATES.

A Washington despatch of Saturday last calls attention to the fact that British imports into the United States have fallen off greatly in the last year, while American exports to Great Britain have been increased; it has been announced from time to time during the year, but the full year's figures, just presented by the Treasury Bureau of Statistics, bring to the surface some interesting details not heretofore published. These show that while the exports from the United States to the United Kingdom have increased 12 per cent., the imports from the United Kingdom have fallen off 35 per cent. The exports from the United States to the United Kingdom, during the past year, were, in round numbers, five times as much as the imports from the United Kingdom, the figures of the Bureau of Statistics being: Imports from the United Kingdom, \$109,138,365; exports to the United Kingdom, \$540,860,152.

—A sort of object-lesson in war was indulged in by the military authorities in Halifax on Friday last. The troops were suddenly called out that morning to man the forts. It was daylight when the Leinster Regiment was paraded in the barrack square, and supplied with ball ammunition. The artillery, engineers and ambulance corps were soon on the streets, hurrying to the Imperial wharves, where transport steamers were in waiting to convey the troops to the forts at McNab's Island, and York Redoubt. The guns were charged with ball and shell, and were trained on old hulks and crafts off the harbor. They were soon demolished. The infantry were also supplied with ball ammunition. Dummy men were placed in the field and volleys of bullets fired at them. The men advanced first in skirmishing order, then in columns, followed by the final charge. It is stated that an order had been received from the War Office to test the efficiency of the forts and guns.

—A correspondent to the New York Press says: "People never speak of their sight; it is always eyesight. If that is correct then why not ear-hearing?" The Press replies: "Because there are various kinds of sight, and they must be distinguishable. These are hindsight, foresight, first sight, second sight, and after sight, front sight, on sight, etc."