

The Oreide of Gold.

This substance, of which so many articles called Jewellery are now made, is simply an alloy of copper and zinc—a brass of a peculiar color resembling “jeweler’s gold” of about 16 carats fine—copper and gold mixture. It is the invention of M.M. Mourier and Vallent—two Frenchmen. It was patented in France in December, 1854, and in the United States in March, 1857. Some of our daily papers have lately referred to this substance as if it were some new discovery; whereas, if they had consulted the pages of the *Scientific American*, they would have found it described in full on page 308, Vol. XII., old series, (June, 1857). It is composed of 100 parts (by weight) of pure copper, 17 of zinc, 6 of common magnesia, 3.60 salammoniac, 1.80 quick lime and 9 of crude tartar. The copper is first melted in a crucible, then the magnesia added, then the salammoniac, lime and tartar separately, and in powder. These are kept from contact with the air, and all well stirred for about 20 minutes, until they are incorporated together. The zinc is now added in strips, which are thrust under the scurf formed on the top of the crucible. The mass is now stirred, the lid put on the crucible and its contents kept fused for about 25 minutes; after which the crucible is opened, the slag skimmed carefully from the surface, then the molten alloy is poured out into ingot molds if it is required to be rolled, or into iron rolls if designed for castings. When designed for works of art, however, it is best to cast it into ingot form first, then melt it in a furnace and cast it. This alloy is very beautiful, and well deserves the name of “oreide of gold,” as it greatly resembles the precious metal. It is very ductile, and may be rolled into very thin leaf; but it is nearly as easily tarnished as common brass.—*Scientific American*.

The Whaling Business.

An article in a recent issue of the *Boston Commercial Bulletin*, contains some very interesting information on this subject. For many years New Bedford, Mass., has been known, not only as the greatest whaling port in the United States, but the whole world; it is now, however, falling fast from its former oily greatness. In 1857 there were 329 vessels of 111,364 tons belonging to New Bedford; but at the present time there are only 291 vessels of 98,760 tons, a decrease of 38 vessels and 12,604 tons. This reduction has not been caused by losses of ships at sea, but by their withdrawal from the trade, as the business has been very unprofitable for the past four years. The price of whale oil has been greatly affected by substitutes, especially coal oil, and the more general adoption of gas in cities and large villages. In 1860, the price of whale oil was only 50 cents per gallon, while in 1857 it was 73 cents, and this reduction of price was accompanied with another blow at whaling, namely, a very limited catch of whales. In 1857, the average catch was 800 barrels; last year it was only 500 barrels.

One-half of the whaling fleet is devoted to the sperm whale fishery, the other half to the right whale fishery. One-half of all the sperm oil obtained goes to England, and amounts to about 75,500 barrels annually, valued \$81,500,000. The right whale produces the whale-bone, most of which goes to Germany; the annual value of it is \$1,000,000. The amount invested in the whaling trade in New Bedford is \$10,000,000. Many of the merchants in that place are now looking around to see if they cannot enter upon a more profitable business. The total whaling fleet of the United States now comprises 514 vessels of 158,476 tons. There has been a total decrease of 141 ships in four years. In 1858 two hundred ships went to the North Pacific for whale oil; it

is expected that only one hundred will go this year.—*Ibid.*

Water-proof Cloth.

The Paris *Moniteur Industriel* states that 20,000 tunics rendered water-proof and yet porous, were served out to the French army during the late war with Russia. They were prepared in the following manner: Take 2 lbs. 4 oz. of alum, and dissolve it in 10 gallons of water; in like manner dissolve the same quantity of sugar of lead in a similar quantity of water, and mix the two together. They form a precipitate of the sulphate of lead. The clear liquor is now withdrawn, and the cloth immersed for one hour in the solution, when it is taken out, dried in the shade, washed in clean water and dried again. This preparation enables the cloth to repel water like the feathers of a duck’s back, and yet allows the perspiration to pass somewhat freely through it, which is not the case with gutta-percha or India-rubber cloth.

Starch from Potatoes.

At Stowe, Vt., there are five factories in which starch is made from potatoes. Each consumes about 20,000 bushels per annum, and eight pounds of starch is the yield of each bushel.—*Scientific Amer.*

TO INVENTORS AND PATENTEES IN CANADA.

Inventors and Patentees are requested to transmit to the Secretary of the Board short descriptive accounts of their respective inventions, with illustrative wood cuts, for insertion in this Journal. It is essential that the description should be concise and exact. Attention is invited to the continually increasing value which a descriptive public record of all Canadian inventions can scarcely fail to secure; but it must also be borne in mind, that the Editor will exercise his judgment in curtailing descriptions, if too long or not strictly appropriate; and such notices only will be inserted as are likely to be of value to the public.

TO CORRESPONDENTS.

Correspondents sending communications for insertion are particularly requested to write on one side only of half sheets or slips of paper. All communications relating to Industry and Manufactures will receive careful attention and reply, and it is confidently hoped that this department will become one of the most valuable in the Journal.

TO MANUFACTURERS & MECHANICS IN CANADA.

Statistics, hints, facts, and even theories are respectfully solicited. Manufacturers and Mechanics can afford useful coöperation by transmitting descriptive accounts of LOCAL INDUSTRY, and suggestions as to the introduction of new branches, or the improvement and extension of old, in the localities where they reside.

TO PUBLISHERS AND AUTHORS.

Short reviews and notices of books suitable to Mechanics’ Institutes will always have a place in the Journal, and the attention of publishers and authors is called to the excellent advertising medium it presents for works suitable to Public Libraries. A copy of a work it is desired should be noticed can be sent to the Secretary of the Board.