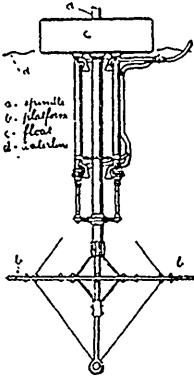


permission. A great grotto was hewn in the glacier, and lit up with candles, the myriad ice facets brilliantly reflecting the light. A group of Swiss girls sang very prettily their plaintive mountain airs, whose strains echoed down the icy corridor. An exquisite azure light filtered through the crystal roof and the ear placed against the wall could distinguish tinkling sounds of trickling water.—*En.*

THE FLETCHER WAVE MOTOR.—A motor, or power producer, operated by the waves of the sea has been recently successfully tried in England. It resembles a great steel buoy. A long, hollow spindle is maintained in a vertical position. Near its lower end is a platform, which, being far below the surface of the water, tends to resist any vertical displacement. An annular float surrounds the spindle and rises and falls with the waves.



Thus a pump-like action is produced between the moving float and the relatively stationary spindle, and this is utilized to produce power. In a recent experiment a large stream of water was thrown across a ship's deck. It is proposed to mount a complete electric plant upon such a wave motor, and have the dynamo driven by the same, so as to supply an electric lamp. This could give a self-supplying lighted buoy.

METALS MORE PRECIOUS THAN GOLD.—We commonly think of gold as the most valuable of metals, because it is the most precious of metals that are produced in sufficient quantity to be in common use. There are, however, several rare metals that are much more valuable than gold. Gallium, for example, is quoted in the market at \$3,000 an ounce avoirdupois. Most costly of all metals, save only gallium, is germanium, which is quoted at \$1,125 per ounce. Rhenium is worth \$112.50 an ounce; ruthenium, \$90 an ounce; osmium, \$26 an ounce; and palladium, \$24 an ounce. The last is about equal in value to gold. These metals are of no great commercial importance. Most of them are mere curiosities of the laboratory, having been discovered originally by accident, incidental to the analysis of

ores. It has been suggested that some of them might be coined, but the supply of them is too uncertain. That was the difficulty with platinum, which the Russian Government minted in the first half of the present century. Iridium is utilized to some extent for making instruments of delicacy which must have the property of not corroding. Its only important use is for tipping gold pens. For this purpose the grains of it, which are flat like gold-dust, are picked out with magnifying glasses.—*Am. Jour. Photography.*

NEW DANGER TO FIREMEN.—At a recent fire in the basement of a Chicago electric power-house, the firemen had great trouble in getting at the blaze. They had to chop holes in the floor of the dynamo room before they could get a stream on the blazing pile of waste. Not waiting for the dynamo to be shut down, they crept through the black smoke and turned a stream on the flames. In an instant they were flung to the ground with great violence, and the hose was sent flying into the air. A heavy current had passed along the stream and had shocked them. Though unconscious when rescued, they quickly recovered.—*Electric Review.*

PAPER PAVING BLOCKS.—Attempts were made in foreign countries in 1893 to mould paving blocks for streets from paper pulp, but with only partial success. In 1894 a section of a street was paved in Washington, D.C., with paper blocks, but owing to the crudeness of the methods in manufacturing them the experiment did not succeed. Since that time several paper pulp manufacturers have been experimenting, with the result that a great many new forms of pulp paving blocks have appeared. The blocks are made cube shape, and are compressed and dried by flasks, pressers and baking ovens.

UTILIZING SOLAR HEAT.—It has been estimated that the heat from the sun would sufficiently warm and illuminate 2,000,000,000 globes the size of our earth, and if there was some practical way of converting this heat into power, it would carry burdens and do all the work that lightning has been doing since it has been harnessed. Already many wonderful things have been accomplished by using the sun's rays. In Europe a newspaper has been printed by power from the sun, and distilling has been done to some extent. Salt water has been distilled, and cider and coffee have been made.