

**Frozen Dynamite.**—Captain George Lebon recommends the use of an increased quantity of fulminate in dynamite cartridges, so that they can be readily exploded when frozen, thus obviating the necessity and consequent danger of melting them in cold weather. He mentions numerous experiments, at temperatures of twenty degrees below zero ( $-4^{\circ}\text{F.}$ ), in which charges were exploded without difficulty or failure.—*Ann. des Ponts et Chauss.* C.

**Wormwood as an Insectifuge.**—M. Poyrot having observed that the immense tracts of wormwood, upon the American plains, are free from insects of every description, is experimenting with the plant as a preventive of phylloxera. He finds no difficulty in cultivating the wormwood, and he proposes to mix the stalks with manure, or simply bury them in the ground in the neighborhood of the vines. His suggestions have been sent to the phylloxera committee of the French Academy.—*Comptes Rendus.* C.

**Aluminium as a Voltaic Element.**—Aluminium, like iron, has the remarkable peculiarity, when immersed in concentrated nitric acid and then placed in contact with ordinary aluminium, of exciting a galvanic current. It is thus possible to construct a battery from a few elements of aluminium alone, sufficient to decompose water and to bring a thin platinum wire to a brilliant glow. The aluminium in this arrangement is of course dissolved. It could, perhaps, be recovered by the means of zinc.—*Liebig's Annalen.* C.

**Preservation of India Rubber under Water.**—Great losses are often experienced by the users of india rubber tubing, on account of the brittleness which it often acquires in use. A writer in *Dingler's Journal* gives an encouraging account of his success in remedying the difficulty by laying the pipes in water which is often renewed. Even the thickest and stiffest tubes remain soft and pliable, without any perceptible diminution of elasticity, and he has been unable to discover any trace of injurious change. For some uses he soaks the pipes in melted paraffine. When they are kept in water they undergo great changes of color, and upon cut surfaces they often appear greasy and bleached, but all the changes seem beneficial rather than otherwise. Thin rubber bands, however, often become so brittle that they can be easily rubbed into small pieces by the fingers.—*Dingler's Journal.* C.