A comparison of the cost of this system with that of the water-wheels, canals, races, and mechanism, for accomplishing the same work, will show a result no less strikingly in its favor, not to mention its applicability to falls too low to be worth improving by the ordinary methods.

Its applicability to the much discussed problem of utilizing the tidal power will be at once apparent.

The loss of power due to the disappearance of heat during expansion in the air engine, attaches to this method, as to others. M. Cornet's method of dealing with this difficulty, by the injection of water in the form of spray, would undoubtedly be preferable in mines. In factories, a jet of high pressure steam would probably be preferable.

In factories, this difficulty is much more than counterbalanced by the advantage offered for the economical employment of heat. 1000 horse power in the form of compressed air, may be increased to 1400 by raising the temperature of the air 200 degrees F. The 400 additional horse power is secured at an expense not exceeding ½ lb. oal per hour, per horse power.

Whooping Cough.—It is some years since Letzerich affirmed that whooping cough was due to a special fungus. The assertion has been lately confirmed by the researches of Tschamer. In the spittle of children who are suffering from the cough, there are little corpuscles, about the size of a pin's head, of a white or yellowish color, which pass through a series of characteristic changes, and which seem to be identical with fungi which are found on the peel of oranges, apples and some other fruits. By inoculating rabbits with these fruit fungi, and by causing men to inhale them, Tschamer produced convulsive coughs of many days' duration, with all the characteristics of whooping cough.—*Jahrb. f. Kinderheilcunde; Les Mondes.* C.

Sensitive Thermometer.—An optician in Paris has constructed a new metallic thermometer. The expansion of a small sheet of platinized silver is amplified by a system of levers, and the motion communicated to a dial needle, as in Breguet's thermometer. It has been very satisfactorily tested in the new balloon, " Ville de Paris.' —*Nature.* C.