

are absent, whilst the explanations of others are, to say the least, extremely short.

Thus amongst botanical terms we fail to find Anatropal, Amphitropal, Amentum, Arillus, Androgynous, Pyxis, Basidiosporis, Paraphysis, Firmororis, and Pentameroris, and many others. Why should Bulbus be in and not Corne? In anatomy, why is the Calloso-marginal Sulcus inserted, and not the far more important Fissure of Rolando? Why is Redia omitted, and Eupnoea, and Achromatopsia, and Visual Purple, and Sphenotuform, and the Os Transversum, and a host of other terms at least as important as the Adductor tertii secundi digiti of Hylobalis? Post-frontal is in, why not Post-temporal? Kreatin is in, why not Kreatinine? "Brownian movement" might have been introduced. Peristome is given in relation to Vorticella and Crustacea, but is much more frequently used by the botanists in relation to mosses. Nevertheless, with all its shortcomings, it will, we doubt not, prove useful to the general reader. The definitions are, as far as we have noticed, accurate.

*The Art of Scientific Discovery, or the General Conditions of Methods of Research in Physics and Chemistry.* By G. GORE, LL.D., F.R.S. London: Longmans and Co. 1878.

DR. GORE, himself a distinguished and successful scientific discoverer, has attempted in the work before us to guide others in the path of discovery. We cannot think that he has to any great extent succeeded, although he has certainly produced a learned and interesting book. A large portion of it consists of logical dissertations culled from such well-known writers as Whewell, Thomson, Herschell, and Jevons, on various well-worn topics, such as Ideas, the Use of the Reasoning Power, and the like. We do not find any novelty in matter or treatment in all this, and think the greater part might with advantage have been excised or much curtailed. Another large and even less useful portion of the book is occupied with generalities, which are often mere trivialities. It is surely unnecessary to argue at great length that diligence, enthusiasm, and manipulative skill are required for scientific work, or that previous scientific knowledge is desirable. Yet these and similar matters fill three-quarters of the book, and it is, indeed, not until we come to the last two parts, on actual working in original scientific research and on special methods of discovery, that we find anything of real practical use. Amidst so much commonplace, there is some really useful matter, and the book is amusing reading from the great number of scientific stories and quotations which it contains.

#### HEALTH OF LARGE ENGLISH TOWNS IN THE FOURTH WEEK OF 1879.

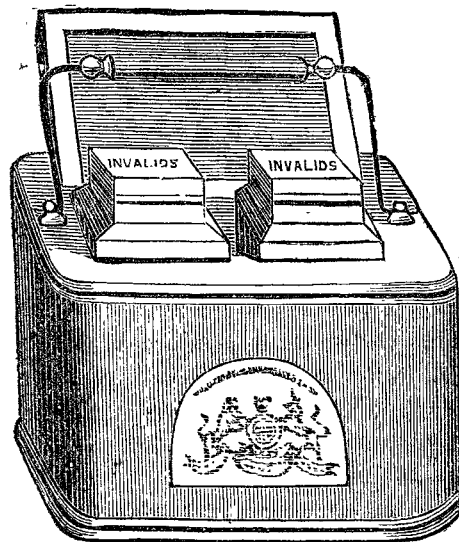
DURING the week ending last Saturday, 5272 births and 3717 deaths were registered in twenty of the largest English towns. The births exceeded by 90, and the deaths by 347, the average weekly numbers during 1878; the deaths, however, showed a decline of 262 from the high number returned in the previous week. The annual death-rate in the twenty towns, which had been equal to 27.1 and 28.1 in the two preceding weeks, declined last week to 26.3. During the first four weeks of the current quarter the death-rate in these towns has averaged 27.7, against 22.3 and 25.6 in the corresponding periods of 1877 and 1878. The January mortality in these towns has been higher this year than it has been since 1875, when it was equal to 30.1 per 1000. The death-rate last week in the several towns did not exceed 20.3, 20.4, and 20.9, in Nottingham,

Plymouth, and Bristol, whereas it ranged upwards to 31.4 in Liverpool, 31.4 in Sunderland, 31.7 in Salford, and 33.6 in Manchester. The high death-rates in Sunderland and Salford were mainly due to excessive zymotic fatality, while in Manchester and Liverpool a large proportion of the excess appears to have been caused by the exceptional fatality of diseases of the respiratory organs. The deaths referred to the seven principal zymotic diseases in the twenty towns were 444 last week, against 433 and 397 in the two previous weeks; they included 148 from whooping-cough, 139 from scarlet fever, and 55 from fever, each of these numbers showing an increase. The annual death-rate from these diseases averaged 3.1 per 1000 in the twenty towns, and ranged upwards to 6.1 and 10.0 in Oldham and Salford. Scarlet fever, measles, and whooping-cough showed fatal prevalence in Salford; scarlet fever, whooping-cough, and enteric fever in Oldham. The fatality of scarlet fever was also excessive in Newcastle-upon-Tyne, Sunderland, and Bradford. Whooping-cough was proportionately most fatal in Manchester, Leeds, and Hull. Small-pox caused 24 more deaths in London, whereas no fatal case was recorded in any of the nineteen large provincial towns.

### New Inventions.

#### GROUT'S PATENT INVALID'S FOOD-WARMER.

WE have had brought under our notice an apparatus specially constructed for use in the sick chamber. It is a metal chest, of oblong shape, with a hinged lid, and contains two porcelain jars, each of a capacity of one pint. Two kinds of food may be kept warm for twelve hours or more without any fear of savouring of each other. The size of the



warmer is 12+8+8 inches. As it obviates the necessity of constantly warming food over fires &c. in a sick room, it deserves a trial by the profession and heads of families. A smaller apparatus is made to contain one jar. The agents are Messrs. Savory and Moore, New Bond-street.

#### INVALID KETTLE.

MESSRS. J. ALLEN AND SONS have adapted a tube to an ordinary kettle, which answers the purpose of use for hot water in the sick room, and also projects the steam into the atmosphere of the apartment. The article is well constructed, strong, and cheap.

The same firm have a chamber utensil of iron, lined with either tin or enamel, which promises to be very durable.