

Atlas of Chemistry. By VICTOR V. BRANFORD, M.A. Part I. (Edinburgh: E. and S. Livingstone.)—The diagrams or tables drawn up by Mr. Branford are similar to those inscribed upon the blackboard by most lecturers on inorganic chemistry. They appear to us to form an excellent skeleton or framework upon which the student may gradually build up his knowledge of chemical science. It is comforting to observe in the preface that the author has a wholesome aversion to that abuse of "cram" which consists in dissociating abstract statements of scientific facts and principles from the concrete substances and causal connections for which they stand. We are glad to see the announcement that this is only the first part of a complete series of similarly constructed tables.

Insanity; Inebriety; Crime. By R. J. KINKEAD, A.B., M.D. (Dublin: McGee. 1888.)—These interesting papers by Professor Kinkead are reprinted from medical and other journals. In the first paper the author effectively replies to the dictum of Baron Bramwell, who restricts the law on insanity to its narrowest interpretation—the knowledge of right and wrong. Dr. Kinkead properly points out that insanity is a disease, often commencing with immoral acts which are not recognised as the outcome of an abnormal mental state. Punishment is no remedy for madness, and the insane should be confined in an asylum till cured. In other papers cases are given illustrative of the practical injustice of the present legal practice. Persons unmistakably labouring under disease have been sentenced for criminal offences when they should have been treated as patients requiring seclusion and remedial treatment. The learned professor treats of inebriety in similar fashion. He contends that it is often a disease, calling not for penal measures but for therapeutic care. While he admits the plea for the punishment of healthy persons who give way to intoxication, he shows how such a procedure must fail when applied to inebriates who are dominated by the intemperate habit, or in whom the indulgence depends on inherited or acquired morbid predisposition. The inebriate, like the mentally unsound, ought to be secluded, subjected to new and curative environment, and treated with a view to cure of his disease. The criminal law, in its treatment of both the inebriate and the insane, is unjust and cruel. It looks calmly on the growth of the morbid impulse, the genesis of the crime, and declines to interfere to prevent crime; but when the diseased condition has eventuated in an offence, then law tries the offender for his life, very often for an offence which it might have prevented.

Comments upon Report of Committee on M. Pasteur's Treatment of Hydrophobia. By Surgeon-General C. A. GORDON, M.D., C.B. Pp. 96. (London: Baillière, Tindall, and Cox. 1888.)—This pamphlet is a criticism of the Report of the Committee appointed by the Local Government Board to inquire into the Pasteur method of treating hydrophobia. As Surgeon-General Gordon modestly conceals his own views on the subject of the nature and treatment of hydrophobia, we think it due to our readers to draw the same from his evidence before the Select Committee of the House of Lords on Rabies in Dogs, 1887. After having stated that rabies may arise as the result of any injury (Question 2,286), Surgeon-General Gordon was asked by Lord Belper (Question 2,288): "Do you think that if, for instance, you broke your leg you might take hydrophobia in consequence?" And to this he made answer: "Yes, bearing in mind the view I take that hydrophobia is not a specific disease." Surgeon-General Gordon's views are thus somewhat out of the common, and although we may, for his sake, imagine that some persons (Miss Cobbe, for instance) could be found to agree with him in believing that those who break their legs are in imminent risk of developing hydrophobia, we fear that his remarks will not receive the attention he invites from the profession and the Committee in question.

Des Principes Constitutifs de la Méthode Dosimétrique. Par le Dr. BRÉCHY, Paris Institut de Médecine Dosimétrique. (Ch. Chanteaud et Cie. 1888. Pp. 119.)—This pamphlet will not repay the trouble of perusal. It is a somewhat rambling essay on the nature of disease and the principles which should guide us in treatment, the so-called "dosimetric" method of Dr. Burggraeve being given the preference. According to the author, diseases vary greatly in their dynamic character, while all medicines may be regarded as divisible into two classes—those which increase and those which depress vitality. It is urged that these considerations should guide us entirely in our treatment. Further, the form of administration should be the granule.

Such teaching, along with many other opinions which are expressed at great length—for example, that strychnine is contra-stimulant, antiphlogistic, and *hyposthénisant* in its action—are not in accord with those of scientific medicine, and seem to us unworthy of serious consideration.

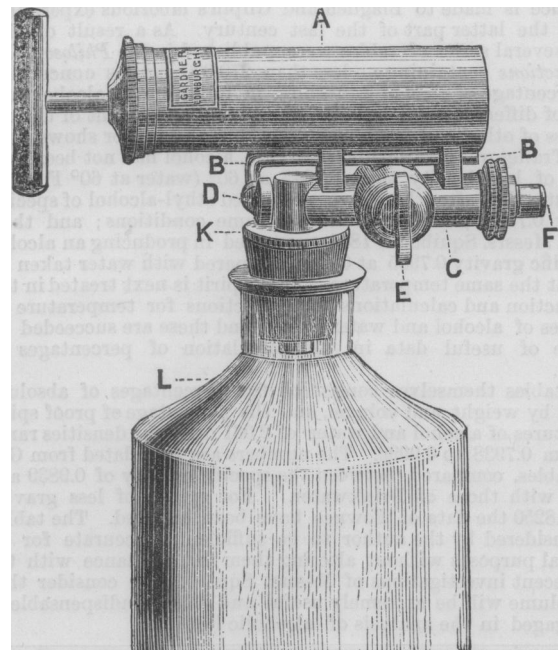
REPORTS AND ANALYSES AND DESCRIPTIONS OF NEW INVENTIONS, IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

A NEW FORM OF ASPIRATOR.

By DR. JAMES FOULIS, Edinburgh.

THE drawing represents the instrument rather more than half size. The instrument consists of a syringe A, and of an air-tube B, communicating with the syringe, by means of which air is withdrawn from a bottle, and of a wider tube C, through which fluid pours into the exhausted bottle L. These three parts are so combined and attached to each other as to form one instrument, the parts of which are not separable at any time, and are indestructible under ordinary wear and tear.

The air-tube B is controlled by a tap D, and the tube C is controlled by a tap E, both taps being on the right hand side of the instrument for convenience sake. At the end of the tube C is a screw arrangement, by means of which various accessory parts may be attached to the aspirator as one may wish. For the purpose of ordinary aspiration the part F is screwed on to the tube C. Into the orifice, at the end of the part F, a tubular needle may be fastened directly or indirectly by means of the usual india-rubber tube connection. In using the instrument one has simply to press the cork K into the mouth of any bottle, and to keep one hand pressing slightly on the body of the syringe while the handle of the latter is pulled out. The instrument is so well-balanced that it supports itself in the mouth of the bottle. The bottle may thus be partially or completely exhausted by a few pulls on the handle of the syringe.



The great advantage which the instrument possesses is that, at all times, the operator has perfect control over the flow of fluid into the bottle. He has the power of aspirating the fluid just as

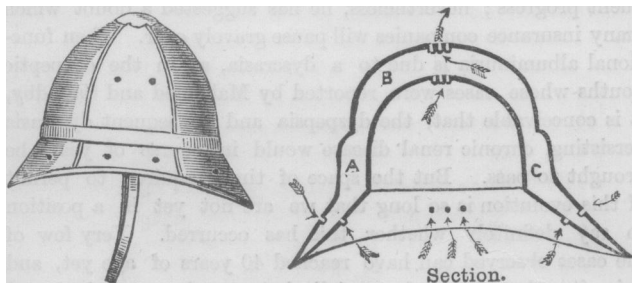
quickly or as slowly as he pleases, and thus the danger of injuring delicate tissues, such as the liver, may be entirely avoided. The instrument also has the great advantage that, owing to the peculiar structure of the valves in the syringe, it may be used as a siphon, the operator having the power of accelerating or slowing the flow of fluid as he pleases.

The instrument can in a moment be converted into a powerful stomach pump by unscrewing the part F, and attaching in its place a T-shaped tubular piece, on to which a stomach tube is attached. By means of this arrangement a stomach may be quickly filled with a fluid as an antidote to poison, and just as quickly emptied of its contents by a few pulls on the handle of the syringe. In the same way the instrument may be used for washing out the bladder or any cavity. It possesses other advantages which need not be here described. A full description of the instrument will appear shortly in the *Edinburgh Medical Journal*. In the meantime, the instrument may be had from Mr. Gardner, instrument maker, Forest Road, Edinburgh.

THE TUSON HELMET.

SCARCELY less important to the soldier, in a tropical climate, than his rifle and ammunition, is the helmet which he has to wear, by order, as a sun-protector. In the past, thousands of lives have been lost, on the line of march, and in action, from the soldier having to wear a head-dress very objectionable, alike on the score of material and design. Many of the varieties of head-gear which have, at different times, been worn by the British soldier have, not without reason, been termed "ray-traps." If they had been designed to facilitate and to ensure an attack of sunstroke, instead of to avert it, they could scarcely have served the purpose better than they have done. It is allowed by many, who are very well qualified to offer an opinion on such a subject, that even the present regulation army helmet (whether for the officer or the private soldier) is faulty in many respects.

With the view of rectifying this essentially important part of the soldier's dress, Surgeon-General John E. Tuson, of the Indian Medical Service, has designed a helmet which seems to be well worthy of general adoption. The essential advantage of this



The Helmet.

helmet consists in the fact of its presenting a double chamber throughout, both as to the crown and the brim, and this without addition to its weight: indeed, it is lighter than the present regulation head-dress of the army. It is also an improvement as regards shape, inasmuch as it is less cut away at the sides than the regulation helmet, and consequently it comes down lower, and affords more complete protection to the temples and the sides of the head. The back of the head of the wearer and the upper part of the spine are also better protected, from the fact of this helmet being less vertical, and more extended horizontally behind. Internally, there is an absence of all constriction round the head. The material, consisting as it does of felt and cork, covered with white "drill," ensures durability; while the white covering adds much to its power of protection from the sun's rays. The helmet is waterproof, and from its peculiar construction, to a great degree, swordproof. But, as noted above, its greatest value lies in its being a double-chambered helmet throughout, and yet wonderfully light. The direct action of the sun is upon the chamber, and not upon the head of the wearer. Should the "pugree" be removed or lost, the hat, from its peculiar formation, is capable of affording more protection than any other. Considering all these points of importance, in which the helmet certainly excels, it is not surprising that it has been highly approved by those who are most capable of passing judgment on it. We learn that H. E. Sir Frederick Roberts, Commander-in-Chief

in India, thinks very favourably of the helmet, and the late General Sir Herbert Macpherson, Commander-in-Chief of the Madras Army, regarded it as a perfect ventilating helmet and sun-protector. Sir Donald Stewart has, we are informed, worn this helmet for some years, and pronounces it the best sun-protector he has seen. We understand that the Director-General of the Army Medical Department has strongly recommended its adoption to the War Office. Sir Joseph Fayrer, after careful examination of the helmet, thinks most highly of it, and considers that (on account of its strength and lightness combined) it is more efficacious than any head-dress he has yet seen in the



The Fishing and Shooting Cap.

British army. He regards it as admirably suited for India, and well worthy of being issued to our troops in all hot climates. This helmet has also been adopted by the French Government for the use of their naval officers. With such high testimony in its favour, the "Tuson helmet" is evidently worthy of immediate adoption for British troops in all parts of the world. It may reasonably be expected that, by its use, the percentage of attacks and deaths from sunstroke will be materially reduced, and that thus a great saving, both in life and money, may be secured. The subject is one worthy of the consideration of the authorities at Whitehall, on the grounds alike of State expediency and public economy.

Dr. Tuson has also designed a double-chambered "fishing and shooting hat," which "looks well," is wonderfully light, and at the same time protective on the same principle as the helmet. Annexed are accurate illustrations of the above described "Tuson helmet," and "fishing and shooting hat."

MUSTARD OIL AND SINAPISMS.

Messrs. J. AND J. COLMAN, of Cannon Street, have sent for our inspection specimens of the above preparations. The mustard oil is of a yellowish olive-green colour, and consists of the fixed oil of mustard with a certain proportion of the more pungent and rubefacient principles. It is recommended for the alleviation of rheumatic pains. The oil is to be gently rubbed into the part, which should previously have been fomented with a moist hot sponge or flannel. The sinapism may be regarded as an improved form of mustard leaf. It is more cleanly than the ordinary mustard leaf or than the charta sinapis of the *Pharmacopœia*, since it has no powder attached to its surface. It consists of stout fabric impregnated with those principles of mustard which by decomposition in presence of water yield the substances having rubefacient properties. The "sinapisms" soil neither linen nor the skin.

HYPODERMIC SOLUTION OF COCAINE.

It is well known that solutions of cocaine and many of its salts are very prone to change, and that a solution in ordinary distilled water of the official salt, namely, the hydrochlorate, is very liable to a fungoid growth being developed in it. In the *JOURNAL* for May 12th, 1888, we referred generally to the hypodermic solutions made by Messrs. Green and Co., of Tower Chambers, E.C. We have from that time had in our possession a hypodermic solution of hydrochlorate of cocaine of their manufacture. We have recently examined it and find it to be perfectly clear and bright, and not showing any signs of decomposition. When injected hypodermically it produced local anaesthesia and caused no irritation at the seat of puncture.

EUCALYPTIA.

UNDER this title, Messrs. Burroughs, Wellcome, and Co., of Snow Hill Buildings, offer a liquid consisting of the volatile active principles distilled from the leaves only of *Eucalyptus globulus*. It is needless to enter into the many therapeutic uses to which oil of eucalyptus can be put; but we are able to state that this especial oil is remarkably limpid and fragrant, and that it is a pure and well-made preparation.