

whilst if it be not employed the old man is condemned to a difficult micturition throughout the whole act, a micturition, moreover, which is accomplished intermittently, the effect of which is the soiling of the clothes, whilst the incomplete emptying of the bladder gives rise to spurious desires to urinate, which, returning and disappearing unseasonably, end in being at once a source of moral torment and a very disagreeable physical infirmity.—*Bullet. de Ther. et Chir.*

OIL AND EXTRACT OF COD'S LIVER.

There is a point in the history of cod liver oil to which the attention of our readers may be profitably turned. Are the numerous analyses of this complex substance sufficient to clearly define its active elements and to give a theory of its mode of action? At first the fatty part, as respiratory aliment, was considered to be the curative principle. Different fatty substances have been substituted for cod-liver oil, and although not altogether inert, they have always proved inferior to it. Then part of the good effects was attributed to the chlorine, bromine, iodine, and phosphorus, but their presence in the oil is in homœopathic quantities, and attempts to substitute iodized, phosphorized, bromiodized oils or iodine butter for cod-liver oil have not been followed by satisfactory therapeutical results. A Russian professor twenty years ago originated the idea that the pre-eminent active principle of cod-liver oil was the volatile principle (isolated later in 1850 by Wertheim, and called by him propylamin), to which this oil owes its odour and taste *sui generis*, characteristic of this product. According to the opinion of Dr. Kalenickzenko, an opinion shared by a goodly number of physicians, cod-liver oil, brown and not purified, is of all kinds the most active. It is three times more active than others, and consequently can be given in one-third of the dose. He holds that its superiority is due to the elements of bile and the aromatic volatile principle contained in it. Propylamin diminishes intra-organic combustion, lowers the quantity of urea, exercises a sedative action on the nervous system, and manifestly alleviates neuralgic and rheumatic pains. M. Meynet of Paris, after careful ex-

periments, concludes that the extract obtained by concentrating the water from cod's livers by special processes is like in composition to non-purified brown oil; that it is even superior to it, in view of the proportion of its active elements, and consequently that it ought to produce the same therapeutical effects as cod-liver oil. This extract of cod's liver of M. Meynet contains more than half its weight of gaduine, (the fatty portions, intimately united with the glycogenic matter), the soluble principles of bile, a proportion relatively enormous of the metalloids—chlorine, bromine, iodine—phosphoric acid, lime, soda, azotized and ammoniacal substances, and finally propylamin. The odour and taste of this extract are still more detestable than those of cod-liver oil, and renders its administration as such impossible. But given in the form of coated pills (*pilules dragéifiées*), that is, sufficiently covered with gum and sugar, it is readily taken and very easily digested.

In France several physicians have tested this new product, and have obtained satisfactory therapeutic results from its use. These pills of Meynet should not be confounded with capsules, or pills saponified or not, containing but an insignificant and inert quantity of cod-liver oil. — *Revue de Therap. Medico-Chirurg.* — *L'Union Médicale du Canada.*

From *Lyon Medical.*

ON ARSENIC IN THE TREATMENT OF MALIGNANT LYMPHOMA.

BY DR. WINIWARTER.

In 1871 Prof. Bilroth published a case of multiple lymphoma rapidly cured by Fowler's solution internally. Since that time similar cases have multiplied, and in fact it is easy to demonstrate the happy effects of arsenic in these cases of lymphomata which have grown serious either on account of the size or the number of the tumours, and when we are no longer permitted to think of ablation of the diseased glands. Even when operation is possible there is an indication to have recourse to the arsenic in order to prevent extension of the disease to the neighbouring glands.

The arsenic is given internally, and it is at the same time administered outwardly by parenchymatous injections. Internally, they