Fevers and Fever Mursing.*

By FREDK. F. CAIGER, M.D.,

Medical Superintendent of the South-Western Fever Hospital.

TN response to the courteous invitation with which I have been honoured by your Executive Committee, I have undertaken to address you, on two evenings, on the subject of Fevers

and their Nursing. The subject of the infectious fevers is one well worthy of the attention of any body of Nurses; for apart from the interest which attaches to them, I know of no form of medical illness which makes greater calls on the trained ability, the tact and the judgment of the individual Nurse, than a bad case of such a disease as enteric fever or diphtheria. And just as a wise general will endeavour to gain the most accurate information possible concerning the movements and tactics of the enemy, so, I take it, should a wise Nurse do her best to become posted in the tendencies and progress of the disease against which she may be called upon at any time to take the field.

I, therefore, propose to devote this evening to laying before you certain points bearing on the development and appearances characteristic of some of these affections.

Before proceeding to anything like a detailed discussion of the different infectious diseases, it will be well to devote a few minutes to the consideration of the nature of fever and the symptoms of the febrile state, generally, without reference to any particular disease. In doing so, I shall endeavour to avoid as much as possible the use of technical terms, although the subject is somewhat difficult to treat in this manner.

There are two symptoms which are constantly present in all febrile conditions, viz. :---

Elevation of the temperature, and

Wasting of the body.

And, there is no doubt, that in their nature, these two processes are very nearly related to each other.

We know that the production and maintenance of normal animal heat is mainly dependent on the chemical process of oxidation which is constantly going on in the blood and tissues, mainly the muscular tissues. The direct result of this is the production of heat and a normal amount of tissue

* Being a Lecture delivered at a Meeting of the Royal British Nurses' Association, on Thursday, March 23rd, 1893. waste, which, in health, are compensated, as regards the temperature, by the loss of heat which is continually taking place from the surface of the body and from the air breathed out from the lungs; and, as regards the wasting, by the conversion of nutriment derived from the food into tissue by which this waste is restored.

On the strength of these facts, an attempt has been made to explain the elevation of temperature and wasting of the body which are characteristic of fever by the following theory.

It is contended that the contraction of the vessels in the skin results not only in a *diminished loss of heat* from the surface, but that it also serves to drive more blood into the internal parts of the body, and thus, by increasing the amount of blood circulating through the deeper parts, mainly the muscles, an increased amount of oxidation occurs in their substance, resulting also in an *excess of heat production* and body waste.

The theory is a very fascinating one; it is so very simple, and is, no doubt, to a great extent true. But for reasons which I have not time to dwell upon here, it is not sufficient in itself, and in certain conditions is not even in harmony with the facts.

Now you will notice that we have not yet got any nearer to the fundamental question—What is it in fever which determines this change in the circulation, this perverted action on the part of the blood and tissues? And as all bodily functions, even the processes of digestive, of secretive and excretive, even the variations in size of the blood vessels are under the direct control of the nervous system, it is to changes in the nervous system mainly that we must look for the proximate explanation of the febrile state.

Now it must not be supposed that the infectious diseases are the only ones which are attended with the appearance of fever; far from it. Many other affections, as you well know-of which I may quote gout, rheumatism, bronchitis, peritonitis, and nearly all other acute inflammatory diseases which have the generic termination "itis"-are characterised by the presence of febrile signs : and it has been proved experimentally that the introduction into the circulation of inflammatory products, or any putrescible matter, is followed by the rapid appearance of febrile symptoms in the individual experimented on, whether human or otherwisemostly, I confess, otherwise. Well, some of these substances exert a very direct effect on the nervous system, which, as I have already stated, has an

172

WORTH KNOWING.—That Tolphite is the only dusting powder exclusively manufactured for the Nursery. Dr. Andrew Wilson, F.R.S., says: "All the conditions which Hygiene recognises as important and essential in such a powder are represented in Tolphite; it is invaluable for infants in preventing excoriation and chafing." Mrs. Hilton says her Nurses are charmed with it. Post free, for eight or fifteen stamps.— Dodd Brothers, Stamford Hill, London.

[&]quot;HEALTH" COCOA.—Is the finest cocoa procurable, and most invaluable for invalids. A Quarter-pound tin costing Sd. will Make 30 cups of delicious cocoa. The "Lancet" says:-"Very soluble, excellent in flavour, perfectly pure, and deserves frank praise." Free sample sent on application to H. THORNE & Co., Ltd., Lady Lane Leeds.



