

In addition to topical applications, anodynes will be required, but these must be left in medical hands, for more harm than good comes of reckless medication whether by Nurses or patients. These last, as many of us know, take narcotics hypodermically, or otherwise, upon their own responsibility, and often put strong pressure upon a Nurse to administer them, but I strenuously advise her to resist it, for in *serious* cases medicinal remedies must not be tampered with, and in ordinary cases they are not required.

This matter was brought forcibly to my mind some years ago. An Obstetric Nurse whom I knew had a handsome hypodermic syringe given to her, and at first only used it under Medical orders. About a twelvemonth after it came into her possession she came to stay with me, and surprised me one morning by saying, "I shall give you my hypodermic syringe, as I shall not take it with me to cases any more." I asked her why? "Because when my ladies find out that I can inject morphia, they 'get it on the brain,' and tease me to give it to them on the slightest pretext." If a patient lies awake for a couple of hours at night, or has a pain in her little toe, it's "Nurse, you must give me some morphia." And not only the lady, but other women in the household—the governess, the lady's-maid, the head nurse—would come to Mrs. H. to give an hypodermic injection of morphia upon occasions when it was perfectly unnecessary. Acting upon the advice of the poet—

"To quit a world where strong temptations try;
And since 'twas hard to wink at, learn to fly"—

I consented to be the custodian, not the owner, of the popular favourite, and keep it out of mischief!

We must now return to our duty. What is the next point we have to notice? We have had rigor and pain; we now notice a rise in the temperature and the pulse. I have intimated to you more than once, that in child-bed Nursing we keep our clinical thermometer in our pockets as long as we can, but in this instance we shall have to bring it *en evidence*, and you will see as we go on that pulse, respiration, and temperature have all to be carefully noted; and a rise in temperature is always a cause of anxiety in our portion of work, because we know, under normal conditions, the pulse remains for some time slightly below par. Any Nurse can take the temperature of a patient, just as any child can tell us the letters of a weather vane, that mark the cardinal points of the compass; it is another thing to have a knowledge of the varied meteorological conditions involved in the *direction of the arrow*, and its thirty-two deviations; and by analogy this is what I wish you to do, in order to

understand the true significance of the readings of your clinical (arrow) thermometer, and I will just say a word or two on the subject. If you refer to your text-books, you will find that the heat of the human body is maintained at an average temperature of 98 degs. under all conditions of climate, whether man inhabits the frigid, the torrid, or the temperate zones. This remarkable equilibrium is maintained by a compensatory action between the lungs and the skin. The heat of the body is generated by the interchange of gases that takes place in the air cells of the lungs; the carbon of the venous blood is decomposed with carbonic acid gas, by the oxygen of the air, and the oxygenated blood borne in the arterial current is the life of every tissue of the body. Nature generates more heat than she wants, and passes it off through the pores of the skin, in the form of cutaneous transpiration, and it is this conversion of heat into water that keeps the temperature of our bodies at its natural level. The skin is to our lungs what a safety-valve is to a boiler; when nature has more heat than she wants, she lets off the "steam," and when she wants heat she keeps it in; and to pursue my metaphor, when the overheated boiler cannot be relieved by an escape of heat in the form of steam (condensed vapour or heat), it explodes. I fear this digression will appear tedious, but I wish to give you a homely illustration of the source of animal heat, and then we can the better understand what our thermometer tells us about it.

Next to temperature comes the pulse and respiration, and these we will touch upon in our next paper. (*To be continued.*)

PRACTICAL LESSONS IN ELECTRO-THERAPEUTICS.

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(Continued from page 29.)

ANOTHER very valuable form of general application is that known as the electric bath. This requires especial care, more particularly in the electrical arrangements, in order that leakage of the current may be avoided. The bath should be preferably of some non-conducting material, such as porcelain or hard wood, and must not be in metallic contact with the earth. That is to say the supply pipe or pipes must not touch the bath, nor the water in the bath, and the waste-pipe must be insulated by having a short piece of india-rubber tubing let

[previous page](#)

[next page](#)