

cerning matters which it clearly does not understand. It actually acknowledges that "a Nurse, after one year's training, is not as competent as she is after two"—an admission which at once proves our contention, and conclusively condemns the proceedings of the Infirmary. Why should Macclesfield sanction a system which turns out incompetent Nurses? What possible justification has any Infirmary for palming off incompetent persons upon the public as certificated trained Nurses?

The Committee of the Macclesfield Infirmary have comforted themselves and the public with the statement made by the Matron that the system she recommended is adopted in thirteen other Hospitals. It was hardly ingenuous that she should not also have stated that the only Institutions which maintain the antiquated one-year's training are very small general Hospitals, or even smaller special Hospitals. We do not know, and have never previously heard of, the Matron of the Macclesfield Infirmary, and we doubt not that she is actuated by the best possible motives. But, as our readers know, we have always strenuously insisted upon the necessity of Hospital Committees trusting their Matrons, and expecting from them the best possible Nursing advice. Too often, Committees do not act thus, and to our minds the gravest feature of the matter in question is that it would appear that at Macclesfield the Committee gave the Matron the opportunity of advising them as to the organisation of the Nursing Department. Then, instead of recommending the best possible system of modern training, she apparently proposed the adoption of the low standard of one year, which has been recognised for many years as insufficient, which nearly every important Hospital in the kingdom has long ago discarded, and which cannot produce efficiently educated Nurses for the richer classes, nor sufficiently trained attendants to afford the best possible care to the sick poor. We therefore regret the doubtless well-intentioned, but very mistaken, scheme suggested by the Matron, and trust that wiser counsels may prevail, and that the Committee of the Macclesfield Infirmary will not permit their valuable Institution to fall so far behind similar Hospitals in modern methods and progress. We are obliged to our contemporary for calling our attention directly to this matter, and for its kindness in confirming—as we have just shown—the statements previously made in these columns upon the subject. We venture to hope that it will further inquire into this matter, and that for the credit of its local Hospital and the welfare of its patients it will then use its influence to raise, and not lower, the standard of Nursing at the Macclesfield Infirmary.

Lectures on Elementary Physiology in relation to Medical Nursing.

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LECTURE I.

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THE systemic arteries are continuations of the aorta and consist of hollow tubes, varying greatly in calibre, but the walls of which are always composed of at least three coats. The inside coating is called the ENDOTHELIUM, and consists of a very fine membrane which lines the arteries, capillaries, and veins throughout their course. Indeed, this inner coat really represents the whole thickness of the wall of the capillaries. It consists of a layer of flat, very thin cells, so that you will understand that in the capillaries there is only this very fine membrane between the blood and the surrounding tissues; from which you will realise that every opportunity is given for the blood to give up to these tissues the nourishment which it conveys to them, and to receive back from them the materials which they have finished with and which have to be removed from the body or purified. The smallest arteries have, around the endothelium, a layer of muscular fibre, and over this a coating of what is called "connective tissue." The rather larger arteries have a stronger layer of muscle, and a thicker layer of the connective tissue. Then, in the still larger arteries, the muscular coat consists, perhaps, of several layers between which are layers of elastic fibres. So the thickness of the elastic and muscular layers is directly proportional to the size of the artery, but all arteries possess these three coats—the *endothelial*, the *muscular*, and the *connective tissue*. Now, just as a piece of elastic, when stretched, becomes longer, and, when the pressure is removed, again contracts, so the rush of blood from the heart into the arteries distends the tubes; then the muscular and elastic wall contracting, the distension of the tube is removed and the blood is pumped forward along its course. It is important to remember this because it explains the facility with which the circulation of the blood is carried on, and the mystery—as it appeared before the constitution of the blood vessels was understood, and when it was rightly thought to be impossible—that one contraction of the heart should pump the blood through the arteries, through the capillaries, and through the veins into the heart again. The elasticity and contraction of the arteries themselves, the alternate distension and contraction of the tubes in every part of their course, provides, then, adequate assistance to the action of the heart in propelling the blood through the arteries.

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