in the *Sunday Times*, Mr. J. P. Mitchelhill touches the right note. For once a member of the public realises that material gain is not the only path to a nurse's requirements, and we are at one with him in his demand that the human mind craves for nourishment and should be satisfied.

"It has been my privilege," he writes, "to read some of the letters written by nurses serving in the Far East during the Japanese invasion. They are simply told stories of the most wonderful heroism and devotion to duty. The spirit of Florence Nightingale and Nurse Cavell lives on through these girls. Into the care of such women pass our sons, husbands, brothers and sweethearts at the time when we most long to be by their side and when parting reaches the peak of its agony.

"There can be no doubt that the public would welcome the opportunity of showing practical appreciation if given a lead, therefore may I point out at least two ways, both of which I have adopted myself. One of them is to make donations to hospitals stipulating that they be especially applied to the purchase of a professional library for the use of student nurses. According to statistics I have seen teaching hospitals are deplorably deficient in this respect, and such a gift has the quality of a lasting benefit and the status of permanent identity.

"The other way is the provision of scholarships to enable nurses to reach higher ranks in their profession. The existing scholarships are all too few and are greatly coveted. I have closely followed those for which I have been responsible, and regard them as the perfect gift.

"The courses last from six months to one year, during which time the students are obliged to give up their hospital employment. So keen are the nurses to take the examinations that some of them, after studying all day, work in air-raid shelters at night in order to pay the fees and keep themselves.

"Here, then, are at least two opportunities for a grateful public to pay a graceful tribute."

When the nurses' prize-giving ceremony took place recently at Glasgow Royal Infirmary, two new awards were made for the first time. These are the Macewen Medal for Surgical Nursing and the Mrs. Strong Medal for Medical Nursing.

The medals were given in each case for the best practical surgical and medical nursing, and the accent is on the "practical" which includes aspects of the profession possibly not found in the text-books, such as cheerfulness—and so on.

Mr. J. A. C. Macewen, honorary consulting surgeon to the Royal Infirmary, and son of the late Sir William Macewen, is presenting both medals, which are to be awarded annually.

The medal for medical nursing has been designed by Miss Ivy Gardner, a Glasgow sculptor, and a drawing of the design is in the Fine Art Institute. On the one side is a head of Mrs. Rebecca Strong, O.B.E., a former distinguished Matron of the Royal Infirmary, now enjoying well-earned retirement, and on the other an inscription indicating the purpose of the award.

Mrs. Strong is now in her hundredth year, and we wish her all the good health possible.

THE WIDAL REACTION.

PRINCIPLES OF THIS IMPORTANT AGGLUTINATION TEST.

By JOHN HATCHER.

In the diagnosis of enteric infections the doctor depends to a much greater extent upon laboratory investigation than is the case with many diseases. Though there are other laboratory investigations such as isolation of the infecting organism, either in the blood or fæces, the Widal Reaction is rightly regarded as the most important of the laboratory methods of the diagnosis of enteric. There are two different methods of carrying out the Widal Reaction, these are known as the microscopical or slide technique and the macroscopical or naked eye method. In modern laboratories the macroscopical method is, on account of its much greater accuracy, now universally used.

Principles of the Widal Reaction.

Blood serum may acquire a particular property towards certain organisms and this property is called agglutination. This property is acquired under certain conditions, such as suffering from the particular disease or after recovering from an attack, or when protection has been obtained by artificial means, such as a course of inoculations, which, in the case of enteric, means T.A.B. Perhaps the simplest way of describing the Widal Reaction is to consider it in its very simplest form; in other words, a modified microscopical test, which was the manner in which it was first made. Blood is obtained from the individual suspected to be suffering from enteric, the serum allowed to separate and a loopful is placed on a microscope slide. To this is added a loopful of living and active B. typhosus organisms. If the organisms remain quite free and able to move around the test is negative, and the patient is not therefore suffering from typhoid fever, but if the organisms agglutinate—that is to say, clump together—the test is positive, and the patient is suffering from typhoid fever. Now this description only applies to the Widal in its very simplest form, and, as already mentioned, the microscopical technique has been largely discarded in favour of more accurate methods. In the macroscopical method tubes are used in place of slides and agglutination is shown by an opacity or flocculation at the bottom of the tube, also the serum is not only tested against B. typhosus, but against all organisms of the enteric group, and put up in a series of dilutions. When agglutination occurs against a particular organism, the determination of the so-called end-point or greatest dilution in which agglutination occurs is from an interpretation point of view of great importance. It is, therefore, the practice when carrying out a Widal to put up the serum of the patient in a series of standard dilutions so that this end-point may be accurately determined.

Collection of Specimen.

Though, if necessary, a Widal Reaction may be made on quite a small amount of blood, for practical purposes 5 to 10 cc. is desirable. Clotted blood is always required and the specimen will most conveniently be obtained by vein puncture.

Incidentally, it should be remembered that in the early days of the disease bacteriological examination of

previous page next page