greater importance, is much more slowly excreted from the system. It has been found to be still present in the blood one year after a course of 500 cubic centimetre.

Dosage, &c.—Iodipin is, for purposes of subcutaneous injection, first warmed to body heat, when it becomes more fluid and flows better through the needle. A syringe of at least 10 cc. capacity should be used. The needle should be wide channelled, and be 6 or 7 cm. in length. The injections are best made either into the tissues between the shoulder blades or in the gluteal region. The injections cause absolutely no pain or any other inconvenience. A course of iodipin covers ten days, during which time injections are given daily of from 10 to 15 cc. This massive injection might appear on paper to look objectionable, but as before stated I can vouch for it that it gives no trouble whatsoever. The one objection to iodipin is that it is expensive, but at present I only use it in the class of cases above named. It has no depressing effect on the system.

RECRUITING, NORTHERN COMMAND. OBSERVATION ON PHYSICAL TRAINING.

By LIEUTENANT-COLONEL S. WESTCOTT, C.M.G.
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I have for some time past been studying the effect of physical training on the recruit's heart. I have seen the instructors put the various squads through the gymnastic exercises which they performed at the parade previous to my inspection. After ten minutes' work I at first examined the heart every minute and soon determined that, as a general rule, five minutes were required for the resumption of the natural restful state, and this I fixed as the normal standard. At some depôts a squad is occasionally found in which all hearts reach this normal standard, but this is exceptional, and the failures to reach it may occur in any proportion up to a maximum of 34 per cent. Of the 34 per cent. who do not recover in five minutes, the majority do so at varying periods within ten minutes. About 1-2 per cent. do not recover during the period of my inspection. The characters of the abnormal hearts vary infinitely: the nervous mechanism only may be deranged, or there may be structural changes, permanent or temporary. There may be found hypertrophy, atrophy, dilatation of cavities or orifices, or mere loss of muscular tone. Also apparently normal hearts with accelerated action, and small hearts beating rapidly for the same reason that a small man has to take two steps to a big man's one; then there is the heart acting excitedly from simple nervousness, or from some temporary cause of depression, such as a late night, or excessive smoking. These facts prove that all recruits are not of the same physique, but in accordance with the instructions they are regarded as such; they remain with the same squad during the period.
of training, which I maintain is wrong in principle. It is customary in all schools or training establishments of every description, except for army recruits, to advance a pupil according to his ability, and this system, I suggest, should be adopted at the depôts. It would be greatly to the advantage of the Service were a recruit to remain in the lowest squad, both in the gymnasium and on the square, until he is physically fit to be advanced to the next; some men are fit to be promoted a few days after joining, others may never be fit. The system of urging the weak and delaying the strong is not conducive to the efficiency of either.

It is possible that the present system may to a certain extent account for the increase of losses to the Service attributed to heart defects, and a change in the principle of training is justified on this ground. The hearts of the majority of recruits are capable of resisting considerable pressure, but a large minority have never been exercised during the lives of their possessors, and as it is undesirable to select the weakly ones for marked attention, I suggest that no recruit should attend the gymnasium during the first fortnight’s service, but that this period should be allotted to vaccination, feeding, and gentle exercise in the open air. During the second fortnight gymnastic training should be commenced, but no fixed apparatus should be used. Training commenced thus gently is more likely to result in a higher standard of physical fitness during the later periods without the risk of early breakdown.

Echoes from the Past.

ON THE MEDICAL ORGANISATION OF THE BASE OF OPERATIONS IN WAR TIME.

By Surgeon-Major G. J. H. Evatt, M.D.


[It has been suggested that this article should be printed as an "Echo from the Past," and as an historical record of what the advanced opinions which, twenty years ago, were regarded as essential to successful work in war, it is a veritable "echo"; but there is so much in it that has yet to be realised that it is not a mere interesting reflection of a dead "past," but an incentive to achievement in the perennial present, for we still fall short of Surgeon-General Evatt's ideal of 1885. Our existing organisation is not, in some respects, comparable with that set forth in these pages, for in it it is assumed that the base is the head-quarters of the line of communication, and much of the administrative duty]