

so it can remove peripheral inhibition too. I think much of the effect which has been noted in disease has been, as you suggest, due to that. If we can make our patients more comfortable and enable them to go through their temporary disablement in that way, it is a distinct gain.

The fourth point is this: I have a general impression that Dr. Willcox is right as to the benefit which can sometimes be secured to patients by the administration of oxygen over brandy: I have done it in a number of cases, and I have considered it helped. But there again our impressions are apt to be but vague: one never knows what would have happened if a particular drug had not been given. One does not know what are the absolutely fatal signs, and it is seldom that one sees signs which are regarded as fatal, and which can be removed by the administration of any drug. After all, the great difficulty in all clinical work is the absence of controls.

#### The PRESIDENT.

There has been no mention in this discussion, so far, of the effects of alcohol on children. Perhaps Dr. Esther Harding will say a few words on that aspect of its use.

#### Dr. M. ESTHER HARDING.

(1) Children are valuable for estimating the effects of alcohol because the æsthetic effects may be entirely discounted. The uses of the drug fall under the same heads as in adults:—

(a) In respiratory embarrassment, especially in the rapid, shallow, inefficient breathing of broncho-pneumonia, alcohol quiets the respiration, and so makes it more efficient. It is true that the indication for the use of alcohol is commencing failure of the right heart, but the effect of the drug is not to flog the already overburdened heart, but to relieve it of some of its intolerable burden, by slowing the respiration, and improving the oxygenation of the blood.

(b) As a sedative. Alcohol is, I suppose, the most valuable sedative and hypnotic drug we possess for infants and young children. Hot toddy as a sleeping draught is good for infants and for the aged.

(c) As a food in cases where no ordinary diet can be taken: (i) In milk intolerance of marasmic infants, alcohol will sometimes tide a patient over a few days till milk or whey tolerance can be re-established. (ii) In the persistent late vomiting which kills so many patients after severe diphtheria I have kept a child alive on more than one occasion under such circumstances on saline, brandy and sugar by the stomach for three weeks.

A word of warning on the danger of the persistent use of alcohol in young children is hardly needed, but it is wise to remember that small doses of spirit given to an infant over a period of weeks, a large proportion perhaps of its whole life, may easily result in damage to its liver.

The PRESIDENT (in reply).

I think nothing remains for me except to thank those who have taken part in what I believe has been an interesting, and will probably prove to have been a fruitful discussion.

Obviously, there are certain points outstanding on which agreement is not yet possible. Perhaps the most remarkable thing about the debate is the extent to which agreement has been in evidence; but on the question as to whether alcohol is, or is not, a direct stimulant of the heart, for example, it is clear that we are not yet at one. The conviction I expressed in my opening remarks is not, I confess, at all shaken by Dr. Willcox's evidence, or by that which Dr. Dixon mentioned. It is true that Dr. Collingwood, also Sir Edward Sharpey Schäfer and Dr. Scharlieb, demonstrated some inhibiting effect of alcohol on the production of heart failure by chloroform; but I think it would be very rash pharmacology to deduce from that the general conclusion that alcohol is likely to have a stimulating effect on a heart weakened by any cause. My own feeling still is that which I ventured to put before you.

With regard to Dr. Harford's emphasis of the fact that alcohol is purely a narcotic, I think there is some danger of our losing sight of the fact that, from the point of view of therapeutics—we are not talking of use in ordinary, healthy life—there is no inherent desirability in a stimulant action, and no inherent drawback in narcotic action. The latter may be what we want. It appears that the clinician has found, by practical experience, certain conditions in which alcohol definitely