

this result is so constant that he has repeatedly demonstrated it before his class. It has been the custom to destroy dogs in the laboratory by chloroform, and Professor Wood has "often noticed that death has been produced by primary cardiac arrest." Although possessed of these facts as the result of several years' work in the laboratory, it was determined, upon the publication of the Hyderabad Commission's report, to reinvestigate the matter. This was done with the result that Professor Wood became more than ever impressed by the fact that chloroform can and does kill directly through primary arrest of the heart. One series of experiments went to show that the heart is *directly affected* and not reflexly, the view now commonly held by experts. A second series proved that although when large doses are given respiration and the heart's action may cease synchronously, yet frequently the cardiac action ceases a perceptible period before the respiration comes to a standstill. The conclusions founded upon these experiments are well worthy of very careful consideration. The authors say "chloroform acts as a powerful depressant poison upon both respiration and circulation: sometimes the influence is most felt at the heart, and death results from cardiac arrest; in other cases the drug paralyzes primarily the respiratory centres, while in other instances it seems to act with equal force upon both medulla and heart." And, further, they are led to formulate "that cardiac arrest is specially prone to occur when chloroform is administered rapidly and in concentrated form in the human subject in which the heart ceased some while before arrest of respiration took place. They suggest that if the report of the Hyderabad Commission is not materially modified in its main contention—viz., that chloroform does not cause primary cardiac arrest—the explanation may be found in some peculiarity of Indian pariah dogs, since European and American dogs unquestionably succumb to primary heart failure when allowed to inhale an unduly strong chloroform vapour.

In the *Lancet* of Sept. 21st, 1889, we made the same suggestion as Professor Wood does now, and pointed out the possibility of the animals experimented on in Hyderabad being peculiarly resistant to the action of chloroform, and also indicated that differences in resisting power might also exist between the inhabitants of different cities. We further indicated variations in temperature as another possible cause of difference in the results of chloroform administration. There may be other factors still unknown, and which may be ascertained by further experiment. We have no doubt that the experiments of the Hyderabad Chloroform Commission and those of Drs. Wood and Hare were made with equal care, and the apparent discrepancies between the results will in the end only lead to a fuller and more perfect

knowledge of the truth. But we have foreseen that it is quite impossible to come to a final conclusion regarding the action of chloroform on man from experiments, however numerous and however careful, on the lower animals. Such experiments are of great value, but the question must also be worked out from the clinical side, and it is for this reason that we have sent out a request for information regarding the results of the administration of anæsthetics. We trust that the difficulty of arriving at exact conclusions without a very large basis of facts will induce all those who can give us information to do so as fully as possible, and also to remember the proverb, "*Bis dat, qui cito dat.*" When we have received these returns we purpose to them collated and to devote careful consideration to the whole question of the action of anæsthetics, from its clinical as well as its experimental side.—*Lancet*.

## MEDICAL NOTES.

For *œdema of the vulva* during pregnancy, Prof. Parvin directs that numerous punctures be made.

*Pharmaceut Era*, Feb., 1890, suggests the following *Dandruff Pomade*:

R.—Acd. salicylic., . . . . gr. xxx  
Sodii borat., . . . . gr. xv  
Balsam Peru., . . . . ℥xxv  
Olei anisi . . . . . gtt. vj  
Olei bergamot., . . . . gtt. xx  
Vaselin., . . . . 3 vj—M

The following is suggested as an injection in *Gonorrhœa in the Female* (*Jour. de Med. de Paris*, Dec. 1st, 1889):

R.—Creolin, . . . . . ℥xxx  
Extract. hydrast. canad., . f3 iiss  
Aque, . . . . . f3 viij.—M

Sig.—Add a dessertspoonful to a pint of water, and use as an injection.

In the treatment of *Chronic Gonorrhœa*, Dr. Breima (*Riforma Med. in Med. News*, Feb. 15th, 1890) recommends the following injection:

R.—Creasot . . . . . ℥x  
Extract. hamamelis fluid.,  
Extract. hydrast. canad., āā ℥xv  
Aque rosæ, . . . . . f3 iv. M.

This should be slightly diluted with warm water before using.

Dr. S. Cohen gave the following as a pleasant form of *diet* in cases where milk was being used:

Completely peptonized milk, 4 oz.  
Juice of one lemon,  
Sugar, . . . . . ½ oz.

To be placed on ice until cold; is then ready for use.