

bloated, alcoholic, and flabby men, of thick build, with an already somewhat restricted throat capacity. Certain of the patients in whom I have witnessed the phenomenon have been great smokers and have had "irritable throats" and some degree of nasal obstruction. The procedure most likely to induce tongue retraction is either dilatation of the sphincter ani or some rectal manipulation or operation. I have, however, known it occur as the immediate result of a simple cutaneous incision. I have met with it under ether and under chloroform. It is certainly more common *before* the cornea has become insensitive than after, although owing to the lateness of the rectal reflexes to disappear it may take place even when full anæsthesia has been produced. That tongue retraction actually occurs may be proved by observing the organ to be drawn back and thus to arrest breathing at the moment the particular stimulus is applied. The patients most liable to the intense form of laryngeal spasm which culminates in complete arrest of breathing are healthy, florid, young women. The operations most likely to induce this spasm are abdominal operations in general and especially those in which the peritoneum is dragged upon. Thus, it is common in oöphorectomy, abdominal hysterectomy, &c. It is, curiously enough, far more common under chloroform than under ether and is liable to arise during moderate anæsthesia when the cornea is just sensitive to touch. Rectal operations will also induce laryngeal spasm but the "crowing" is of a different pitch from that produced by peritoneal traction. In moderately intense spasm—i.e., when some air still passes through the larynx—the patient's colour may be but slightly altered, but in the most intense forms with high-pitched stridor the organ may completely close and the only remedy short of laryngotomy is the forcible tongue traction described by Lord Lister which, as he very properly insists, operates reflexly in relaxing the spasm.

I have not entered into the above details with the object of insisting upon the frequency of reflex tongue retraction and reflex laryngeal spasm as factors in chloroform accidents. As a matter of fact, each of these two conditions is often present in a minor degree during surgical operations, the former giving evidence of its presence by stertor, the latter by stridor. It is only when partial or complete occlusion of the air tract has taken place that the symptoms become urgent; and unless the administrator has been watching the case carefully he may readily attribute the symptoms to an overdose of chloroform, or, worse than this, he may overlook the asphyxial factor, and, putting his finger upon an indifferent pulse, he may quote the case as one of "cardiac syncope" or "chloroform collapse."

I am, Sirs, yours faithfully,

FREDERIC W. HEWITT.

Queen Anne-street, W., Dec. 20th, 1904.

#### To the Editors of THE LANCET.

SIRS,—At a recent meeting of the Royal Medical and Chirurgical Society I expressed my belief that the "importance of administering known proportions of chloroform was over-estimated," but as the exigencies of time did not allow of my giving my reasons for coming to this conclusion and as some very emphatic opinions in favour of "dosage" were expressed, I should like to be permitted to say a few more words upon the subject. In its ordinary medical sense the term "dose" is used to indicate the quantity of a drug which the patient actually gets, but this does not seem to be the way in which the term is understood by all the advocates of the new inhalers. For instance, it has been suggested that not to use a percentage-regulating machine was like giving a man a "dose" of liquor strychninæ without measuring it. This view is surely based upon a misconception of the possibilities of the new machines. These instruments, in their present forms at any rate, cannot, as far as I understand them, do more than attempt to standardise and to regulate the strength of the vapour which it is possible to supply; the exact volume of this standardised vapour—i.e., the dose—which the patient actually gets must surely depend upon his lung capacity, vigour of respiration, and other variable factors.

I am under the impression that the advocates of the exhaust or vacuum form of apparatus (Vernon Harcourt and Levy) maintain that by making the vigour of the respirations a controlling element in the working of their machines they have come within measurable distance of being able to regulate these variable factors, but this view seems to be

repudiated by those who are in favour of the plenum or propulsion system (Dubois, Waller, and others). Assuming, however, that one or other, or both, of these methods give correct results, it appears to me that if the knowledge of the percentage strength of the vapour inhaled is to be of any real practical value we must also assume that the effect of the drug is in all people in exact proportion to the strength presented for inhalation, that there is no such thing as personal idiosyncrasy, and that there are no extraneous influences which can modify this simple reaction. The arguments brought forward in favour of these assumptions seem to me to be inadequate. They are for the most part based upon laboratory experience under conditions which do not tally with the peculiar clinical conditions which the anæsthetist is called upon to face. I do not think that the available clinical evidence with the new instruments touches the question of "dosage"; the results obtained would have been equally good if the experienced men by whom the machines have hitherto been used had merely used them as regulating inhalers, and had been quite ignorant of the exact strength of the vapour which the movements of the index represented. Whether we should use an elaborate machine merely to regulate the strength of the vapour, or whether it may not be better, as I believe, to rely upon the skill and care of the administrator are, however, points quite apart from the question of "dosage."—I am, Sirs, yours faithfully,

Dec. 19th, 1904.

J. FREDK. W. SILK.

#### THE MEDICINE OF ASSAM.

To the Editors of THE LANCET.

SIRS,—The medical men in this district have recently been asked to record on forms provided by the Government authorities any cases of cancer that may come under notice. This has reminded me that during an experience of several years in Assam I have never once diagnosed a case of cancer of any description, neither have I ever heard of such a case. My practice has comprised the supervision of the health of many thousands of coolies from different parts of India and natives of Assam and adjoining countries. This complete absence of a disease so common in other parts of the world I think is worthy of note, though, of course, this fact must be well known to any medical man who has practised in Assam.

Another affection which I think one would certainly expect to be common in a tropical country is also extremely rare in Assam. I allude to hepatic abscess. The absence of this is the more curious since a very large percentage of the sickness and deaths occurring in the coolie population is the result of dysentery. This disease out here does certainly not run such a definite course as happens in other countries, neither is the temperature typical, but the stools are quite characteristic and have all the appearance of those of true dysentery. A medical man who has practised in Assam for 30 thirty years told me that he has seen only four or five cases of hepatic abscess. Enteric fever, too, is no doubt extremely rare. Apart from the absence or rarity of the diseases I have briefly mentioned we are afflicted with all the usual complaints of other countries with the addition of a few special diseases peculiar to this part of the world. Among them I may mention "sore-foot" and kala-azar. Malaria and ankylostomiasis are the two main causes of sickness.

I am, Sirs, yours faithfully,

D. J. DRAKE, M.R.C.S. Eng., &c..

Medical Officer, Teypur Medical Association.

Thakurbarrie P.O., Assam, Nov. 19th, 1904.

#### "FUNCTIONAL" DISEASES AND THE PATHOLOGY OF CHOREA.

To the Editors of THE LANCET.

SIRS,—Dr. W. Howship Dickinson's article in THE LANCET of Dec. 10th, p. 1629, on certain diseases of the nervous system sometimes regarded as functional, admirably fulfils the purpose indicated by the author in his short *postscriptum* in that it compels us to take stock of our pathological and physiological knowledge in regard to those diseases with which it is mainly concerned. Besides this, if it is not an impertinence to say so, it is a communication marked by a certain charm of style which is not always to be found in scientific literature.

If I may be allowed to offer a few comments on the paper