

It is thus quite likely that painful sensations exert a pressor rather than a depressor influence on the circulation. The general cardiovascular reaction to heating the body (vasodilatation) has been shown by the schools of Carmichael and Lewis to result from the action of warmed blood on the vasomotor centres. Nervous impulses passing up the thermal pathways in the cord have little if any influence in producing this effect. It seems unlikely, therefore, that thermal nerve impulses as such play any part in producing shock or in modifying the clinical picture.

Reverting to the first clause of the question, pain is well recognized as a factor precipitating a fainting reaction. Barcroft and his colleagues have now shown that fainting results from a nervous mechanism which induces vasodilatation in voluntary muscles (*Lancet*, 1944, 1, 489). This so-called vaso-vagal type of shock is easily recognized by its association with bradycardia and other features. It might well be expected to occur in burn shock, but specific data on this point are lacking.

INCOME TAX

New Practice: Cash Basis

L. G. took over a practice on a death vacancy as from March 26, 1943. His predecessor (and he himself in a former practice) had previously been assessed on the basis of cash receipts. The inspector of taxes refuses to accept this basis for the first three years of the new practice.

** The inspector's action is legally correct and is in accordance with the usual custom. It is undeniable that the cash receipts of a first year do not give a true reflection of the earnings or profits of that year, and the tax is chargeable on profits, not merely on profits which have come to hand in cash. So L. G. will have to add to the amount of his cash receipts for the year to March 26, 1944, the value of the debts outstanding at that date, say £x less £7 (the estimated amount to be lost by non-payment). At the end of his second year he will deduct that amount from his cash receipts for that year and add the value of the debts outstanding at March 26, 1945, and so on. On that basis there need be no fear that the receipts will pay tax twice.

Board and Lodging

R. B. S. assisted a doctor as a locum tenent for a fortnight and arranged that the usual expenses of himself and his wife should be paid during their stay in lieu of salary. The income tax authorities are claiming tax on the amount of these expenses, less an allowance for railway fares to and from the place of employment.

** Assuming that the board and lodging were the responsibility of the principal—e.g., that R. B. S. did not incur the liability for payment to the landlady and the principal meet the liability for him—then we do not understand the action of the authorities. It is settled law that the receipt of benefits in kind which are not capable of being turned into money by sale, etc., does not create liability to tax. If, however, A owes his landlady £25 and B by arrangement pays it for him, that is equivalent to a payment of £25 by B to A.

LETTERS, NOTES, ETC.

Tetanus Immunization for Farm Workers

Dr. J. A. EDDY (Norwich) writes: I feel that the reply in "Any Questions?" (Sept. 16, p. 391) errs seriously on the side of complacency. You state that "among agricultural workers the risk is small," and give instances of two severe types of wound for which antitoxin would be required. I have had two cases of tetanus in this district as a result of apparently quite trivial wounds. One was a cut less than 1/2 in. long in the finger made while sharpening a hedging tool. I am pleased to add that I was not responsible for the original dressing of this wound. The other case was in a man who had been lifting sugar beet with his hands. There were several very superficial scratches, one of which had become infected, but so slightly that the patient did not seek any advice until he was actually suffering from clinical tetanus. Both cases recovered in hospital. The only safe answer to this question is that unless the farm worker is protected by means of tetanus toxoid a dose of antitoxin must be given after every wound, however trivial. The hands of these men are always likely to be contaminated with soil.

Telegony

Dr. K. B. PINSON (Manchester) writes: In the *Journal* of Aug. 26 (p. 296) the answer which you give to a question regarding telegony is, I think, quite wrong about Darwin. The impression I gathered from reading *The Origin of Species* was certainly not that he had any belief in it. In fact I do not think he mentions it anywhere. I have carefully read again all that he said in *The Origin* concerning Lord Morton's mare. The whole argument, which passes from the markings and blue colour apt to appear when distinct breeds of pigeons are crossed to the zebra-like striping on the legs

and shoulders and even the face, as well as on the hindquarters and spine of some breeds of horses, and particularly in the offspring of crossed species of the horse genus, is to support the contention that there is a tendency to revert for some reason in such cases to an ancestral type, which, in the pigeon, is known and in the horse presumed. The markings are associated with colour—blue in the pigeon and dun in the horse. Lord Morton's mare was crossed with a quagga (a species now rare or perhaps extinct), and the hybrid was much more striped on the legs than a pure quagga. So also, however, was the offspring of a subsequent mating of the mare with a black Arabian stallion. Darwin accounts for this not by telegony but by the above observed tendency to stripes, especially when a dun colour appears. This is not the first time I have come across an important misrepresentation or misapprehension, as I think, of Darwin's thesis. For one thing the book needs attentive reading, and when he sets out to answer a question it is not by a short cut-and-dried answer but by illustrations and inferences not always easy to follow.

Byssinosis

Dr. H. S. RUSSELL (Shipley) writes: Your reply (May 27, p. 737) concerning byssinosis suggested that it occurred in woollen mills and was connected with "mill fever." May I point out that only cotton mills are affected by the Byssinosis Order, and that mill fever is considered to be due to a mould contaminating the cotton, while byssinosis is due to the cotton fibre itself. Incidentally, the condition of chronic bronchitis and emphysema almost universally found in woolcombers is not legally an industrial disease. Why any discrimination should be made between cotton and wool operatives is very difficult to understand.

The Metric System

Dr. IAN CAMPBELL (Mexborough, Yorks) writes: The correspondence on the advantages of the metric system in prescribing prompts me to write that in the last six months three wholesale medical firms have been unable to supply a 10-c.cm. conical measure!

Pyretotherapy for Gonorrhoea

Dr. A. H. BARTLEY (London, S.W.16) writes: A colleague asks for a description of the T.A.B. vaccine shock treatment for gonorrhoea (*Journal*, Oct. 7, p. 457). May I be permitted to describe my method which I wrote about in the *Lancet* in September, 1935. On admission the patient is put to bed on a milk diet and given an intravenous injection of 0.25 c.cm. T.A.B. vaccine (Army brew) in 5 c.cm. sterile normal saline solution. In about an hour he develops a typical malarial attack, the temperature rising to 103°-105° F. The next day the patient as a rule is quite normal, but some complaint of a slight headache may be made. The injections are repeated every third day, the dose of T.A.B. vaccine being increased by 0.25 c.cm. each time. By the third injection the patient is "dry." Three injections usually suffice. I gave four in one case only. In conjunction with this treatment local irrigations of a weak solution of potassium permanganate, 1 in 10,000, is given night and morning in between the injection days, and an alkaline mixture is given internally thrice daily. I used this method for fresh and chronic infections and got excellent results in both, especially with the crippling type of arthritis that sometimes complicates gonorrhoea. Gonococci disappear from the smears after the second injection, and no after-effects whatever were noted. I emptied a ward of 20 cases in a month. Some of these cases had been trailing on for six months or more. I had no relapses.

Concurrent Herpes Zoster and Varicella

Dr. EMILY SIMON (London, W.5) writes: It may be of interest to record the following case, which is strikingly similar to Dr. Manning's case (July 22, p. 115). A man aged 63, previously in good health, complained in the evening of March 21, 1943, of stiffness of the left side of the neck. The following morning there was a crop of vesicles over the back of the left shoulder and the left side of the neck. The vesicles enlarged and crusted and were typical of herpes zoster. On March 23 a few pink macules and papules appeared on the trunk, and by March 26 the patient had a well-developed varicella rash involving trunk and limbs. The zoster lesions were still present but subsiding. There was no previous history of chicken-pox or of herpes zoster, and no history of contact with either disease. I am indebted to Dr. Warden, the family physician, for asking me to see this case. I have also seen a case of well-marked varicella in a middle-aged woman preceded by herpes zoster of the right frontal region. Both rashes were present at the same time, but the herpetic eruption was a day or so in advance of the chicken-pox.

Correction

In Lieut.-Col. R. W. Fairbrother's article "The Control of Bacillary Dysentery," there was an error in the last line but one of the first column on p. 490, Oct. 14. Group (a)—as the first paragraph in the next column makes plain—should read "routine without sulphonamides."