

persons or have had cases coming under their notice of those who have abstained from flesh as a food. The reply need merely mention the number of the question which is being answered.

1. What was the effect on the physical strength and endurance?
2. What was the effect on the general sense of happiness of existence?
3. What was the effect on the mental clearness and perseverance?
4. What was the effect on the passions?
5. What constitutional ailments were affected, and in what way?
6. What was the result with regard to colds, constipation, and inflammation, and power of enduring heat and cold?
7. What did the diet consist of, and what was the approximate daily amount?
8. For what length of time did the experiment last?
9. Were tea, coffee, and condiments discontinued?

#### ANSWERS.

SPASM.—The claim will be against the executors.

ERRATUM.—For "Manchester Medical Society" on page 478 of the BRITISH MEDICAL JOURNAL of February 27th, read "North of England Obstetrical and Gynaecological Society."

#### OUT-PATIENT REFORM AND THE INCOME TAX.

A. B. (Liverpool).—It would serve no useful purpose to protract this discussion. The original statement that only 6,000,000 persons paid income tax is now explained to mean that only 1,200,000 separate individuals paid it according to certain calculations and estimates, in which the critical among our readers may perhaps find as much room for doubt and dispute as in the original statement. It is hardly likely, for instance, that they would be prepared to accept without question our correspondent's estimate of the members who pay under A, C, part of D, and E—that is to say, under three and a half of the five divisions in which payment for income tax is received—as even approximately correct, and, owing to pressure on our space, it would be impossible for us to open our columns to any further discussion of what was at best only a side issue.

#### "SOFTENING OF A WATER SUPPLY."

DR. A. CODD, M.O.H. Bromley.—Details concerning the softening of water can be obtained in the Sixth Report of the Rivers Pollution Commissioners, 1874; also *Journal of the Society of Chemical Industry*, 1884, p. 51. The analyses of the London waters are annually published in the "Report of the Local Government Board."

As regards the action of the County Council in connection with the London water supply, we do not think that the proceedings of the Parliamentary Committee which sat last summer are yet published; but that Committee only dealt with the question of quantity, refusing to take any evidence with regard to quality. Doubtless, if the writer were to put himself in communication with the County Council, they would furnish him with any printed matter that is yet available.

#### MESSAGE AND THE SWEDISH TREATMENT.

DR. W. S. HEDLEY (Brighton) writes: With reference to the inquiries of "R. H. F." in the BRITISH MEDICAL JOURNAL of February 27th, I beg to submit the following remarks.

The "Swedish movement cure," in the recent acceptation of the term, includes not only that "combination of movement and resistance" which is the characteristic feature of the system of Ling, but comprises also those movements and manipulations (known to Ling, but not much practised by him) consisting of stroking, friction, kneading, rolling, percussion, etc., which constitute modern massage. France, the country of its *renaissance*, has naturally given to massage its name and terminology. The manipulations are variously described, but best I think under the names of (1) *effleurage*, (2) massage, friction, (3) *pétrissage*, and (4) *tapotement*, terms which have come to possess a definite meaning much more comprehensive of course than the simple meaning of the words. There are several reliable books descriptive of these operations, one or two well known ones which may be considered authoritative being in our own language; but both in this country and abroad a large proportion of the books and pamphlets on massage are more or less "popular" in their style, and do not rise above the level of what is sometimes described as "Bath literature."

Every medical man who performs massage, and is not a mere "rubbing doctor," in addition to those active and passive movements with which he generally concludes a *séance* of massage, supplements it also in suitable cases (and most cases are suitable) with "resistive" movements; but it is especially necessary not to confound these delicately adjusted "combined" movements with the violent rotations, circumductions, twistings, and flexions with which the ordinary bath attendant usually "finishes up" his so-called massage.

In the "compound" or "combined" movement two forces participate, the one making the movement, the other resisting it; for example, the patient may flex the forearm and the physician (or "gymnast") opposes. Ling called this a "combined centripetal movement"—"combined" because the patient and operator work together, "centripetal" because the patient's muscles have to overcome a resistance which hinders flexion against the trunk. The efficacy of these resistive movements has been fully recognised, and the procedure absorbed into every modern method of therapeutic gymnastics; but whilst availing themselves of its proved usefulness, modern systems have wisely discarded the cumbrous terminology, the subtleties and subdivisions, bad physics and worse physiology, that disfigure the system of Ling.

In certain non-acute rheumatic and post-rheumatic affections in "old chronic" forms of rheumatism and chronic joint trouble where joint-stiffness, thickening of periarticular fibrous structures, and muscular enfeeblement ("atrophy from disuse") have to be dealt with, "the Swedish cure," in the above sense, is an admirable method of treatment—indeed, second to none, and, combined with electricity, probably first, though generally resorted to last. The *modus operandi* of masso-therapeutics in the cure of diseases of the, above class becomes toler-

<sup>1</sup> Massage may be considered a branch of gymnastics.

ably clear if we look into the *rationale* and analyse the procedure of modern massage—that is, the massage of Metzger and of Mosengeil.

The term "electrical massage" is, as you say, "vague." It doubtless means one or both of two things: (a) performance of the above massage manipulations by the "electric hand;" or (b) an ordinary massage preceded or followed by an electrification. The latter not infrequently takes the form of the electric bath.

It is in chronic articular inflammations that electrical treatment has scored some of its greatest successes. Erb tells us that R. Remak made his first successful experiments on the catalytic action of the galvanic current in chronic rheumatic and traumatic articular inflammations. For the class of cases above referred to, electricity and massage ought to go hand in hand.

Of course it must not be imagined that this line of treatment, "if it does no good, can do no harm." It is in the strictest sense necessary that each individual case be thoroughly scrutinised before being subjected to such a procedure.

MR. A. LLOYD (Larkhall Rise, S.W.) writes: If "R. H. F." will get K. W. Ostrom's book, *Massage, and the Original Swedish Movements* (London: H. K. Lewis), he will most probably find all he wants to know on the point.

#### NOTES, LETTERS, Etc.

##### FUNERAL CUSTOMS.

DR. A. C. GODFREY (Southampton) writes: The amount of illness originated by attending funerals is not so much caused by raising the hat as by wearing thinner clothes. The churches are generally unwarmed, cold, and damp, and, after sitting in them for some fifteen or twenty minutes, the mourners go out and stand in a bleak churchyard, which is, as it were, the culminating point.

##### NEGROES AND MALARIA.

DR. F. JENKINS (Belize, British Honduras) writes: The assurance given by Dr. George E. Piercez, of Antigua, in the BRITISH MEDICAL JOURNAL of January 18th, 1892, "that negroes suffer from malarial fevers quite as badly as any other race," could, I think, be corroborated by any practitioner who has, for any length of time, been in practice in the West Indies. My experience of nine years in this colony is similar to that of Dr. Piercez. They suffer chiefly from intermittent fevers, which are, as mentioned by Dr. Piercez, very amenable to small doses of quinine, but I have seen a bad type of remittent fever amongst them, and also fatal yellow fever, which is regarded by some writers as of malarial origin.

##### CHLORIDE OF ETHYL AS A LOCAL ANÆSTHETIC.

As a substitute for ether spray as a local anæsthetic, M. Monnet has introduced a very convenient, easy, and inexpensive method of freezing by means of chloride of ethyl. The chloride of ethyl is hermetically sealed in glass tubes containing ten grammes, one end being drawn out to a fine point. When required for use the point is broken off with a pair of forceps or by the hand at the narrowest part, which is marked by a file scratch on the glass, and the warmth of the operator's hand is sufficient to cause a very fine jet of chloride to be projected on the part to be anæsthetised. One great advantage of this method is that no apparatus is required, and it is always available for minor operations.

##### CENTRALISATION IN THE TURKISH EMPIRE.

DR. MARCUS EUSTACE (Basra, Persian Gulf) writes: Having read a notice in the BRITISH MEDICAL JOURNAL of December 26th, 1891, relating to medical schools in Turkey, I trust the following information may be of use to your readers—namely, when a duly qualified man wishes to practise among Turkish subjects in any part of the empire (excluding Egypt), it is necessary for him to appear in person at Constantinople, and, through his Ambassador present his diplomas to the Medical Faculty, together with the prescribed fee (T.£5), and then, having obtained permission, he must undergo such examination as the Faculty think fit. He will, if successful, obtain a diploma authorising him to practise his profession in any part of the Turkish Empire. Exemptions from appearing personally before the Faculty are almost impossible to obtain.

##### FOGS AND THE DEATH-RATE.

DR. G. V. POORE (Wimpole Street, W.) writes: In your annotation in the BRITISH MEDICAL JOURNAL of February 27th on my lecture on the Concentration of Population in Cities you state that from my figures "it would follow that a fog produces less effect on the death-rate in the centre than at the outskirts, which seems something of a paradox."

My figures in reality show the reverse of this, the death-rates for the fortnight ending January 2nd having been 38 for the centre, 31.8 for the middle zone, and 29 for the outskirts.

\* \* We do not think the figures given by Dr. Poore will bear the interpretation he puts upon them, though the point is no doubt open to argument. He gave the death-rates of the three metropolitan zones as 18.2, 20.7, and 25.5 respectively, proceeding from the outskirts towards the centre. These were the average death-rates for 1890-91. The death-rates for the foggy fortnight were 29, 31.8, and 38 respectively. If the increase in the number of deaths in the inner and middle zones had been proportional to that which occurred in the outer it would seem that the death-rates in these two zones would have been higher than they really were; that of the middle zone would have been 32.9, and of the inner 40.6. The effect on the death-rate was therefore greater in the outer than in the other two zones, though the number of deaths may have been larger in them.

THE SEASONAL PREVALENCE OF ENTERIC FEVER.  
BRIGADE-SURGEON F. H. WELCH, M.S., F.R.C.S., sends some observations on this subject, taken mainly from the Annual Army Medical Reports. At

<sup>2</sup> No mention need be made of roller-electrodes, etc.