tion. (3) A boy, aged 3½; renal symptoms began to develop about fourteen hours after a second injection. The urine was loaded with albumen, but it had not been examined before the injections were made.

GENERAL CONCLUSIONS.

Of the 615 physicians from whom returns were received, more than 600 pronounced in favour of the serum treatment, the great majority being enthusiastic. As the cases were drawn from localities widely separated, local conditions influencing the results could be excluded. "The number of cases injected reasonably early in which the serum appeared not to influence the progress of the disease was but 19, these being made up of 9 cases of somewhat doubtful diagnosis, 4 cases of diphtheria complicating measles, and 3 malignant cases in which the progress was so rapid that the cases had passed beyond any reasonable prospect of recovery before the serum was used. In 2 of these the serum was of uncertain strength and of doubtful value." As to complications, the proportion of cases of broncho-pneumonia (5.9 per cent.) was very small, and in striking contrast to results from hospital sources. In 2 or 3 instances the serum was believed to have acted unfavourably upon the heart, but in a large number there was distinct improvement in the heart's action. There was little if any evidence to show that nephritis was caused in any case; the number of cases of genuine nephritis was remarkably small, and of fatal cases there were only 15. The effect of the serum on the nervous system was less marked than upon any other part, the reports going to show that the protection was not great unless injections were made very early. The report is signed by Drs. L. Emmet Holt, M.D.; W. P. Northrup, M.D.; Joseph O'Dwyer, M.D.; Samuel S. Adams, M.D.

RECOMMENDATIONS.

The report was adopted, and the Committee reappointed for a further year. After discussion, it was resolved to recommend that for a child over 2 years old the dose should be in all laryngeal cases with stenosis and in all severe cases 1,500 to 2,000 units for the first injection, to be repeated in from eighteen to twenty-four hours if there be no improvement, a third dose being given if necessary after a similar interval. For severe cases in children under two years, and for mild cases over that age, the first dose should be 1,000 units, repeated if necessary.

ELECTION OF DIRECT REPRESENTATIVES.

The following communication has been forwarded to Sir Walter Foster and Mr. Wheelhouse:—

DEAR SIRS,—We, the undersigned, beg to tender you our sincere thanks for the faithful services you have rendered us for the past ten years as our representatives in the General Medical Council, and hereby beg you to reconsider your decision as to withdrawing from your present position, and allow us to nominate you for another term of office:

WILLIAM STEWART, Southport.	NATHAN HANNAH, Ashton-in-Maker-
J. M. CHISHOLM, Liverpool.	field.
J. W. O'HAGAN, Garston.	CHARLES PINKERTON, Southport.
B. MARSHALL, Atherton.	ROBERT HARRIS, Southport.
CHARLES TORBITT, Pendleton.	G. WALKER STEEVES, Southport.
WILLIAM FRASER, Salford.	W. J. ROBERTSON DUNN, Liverpool.
G. H. BROADBENT, Manchester.	ARTHUR WOOD, Southport.
W. H. WOLSTENHOLME, Salford.	GEO. S. WILD, Bootle.
COLIN CAMPBELL, Saddleworth.	J. LAMBERT, Birkenhead.
LAWSON TAIT, Birmingham.	G. HAMILTON, Liverpool.
GEO. C. KINGSBURY, Blackpool.	HENRY HALTON, Leigh.
JAMES ROBINSON, Bolton.	C. A. HILL, Liverpool.
HORACE JEFFERIES, Bolton.	JOHN W. WATKINS, Newton-le-
THOMAS EVANS FLITCROFT, Bolton.	Willows.
CHARLES MACFIE, Bolton.	T. E. HAYWARD, Newton-le-Willows.
ARTHUR JONES, Southport.	CHARLES STREET, Newton-le-Will-
E. H. BEAMAN, Southport.	lows.
D. A. O'SULLIVAN, Southport.	WALTER WHITEHEAD, Manchester.
G. B. BARRON, Southport.	D. J. LEECH, Manchester.

Victoria Hotel, Southport, June 24th.

The Central Council of the Incorporated Medical Practitioners' Association having decided to take a preliminary poll as to the probable chance of election of the various candidates, will feel obliged if all the gentlemen who intend to present themselves at the forthcoming election of direct representatives on the General Council will send in their names, on or before July 11th, to the Secretary, Frank Greaves, 11, Adam Street, Strand, W.C.

SIR,—In connection with the selection of candidates for the above, I should like to urge the claims of Dr. T. M. Dolan, of Halifax. At the last election he came forward as an independent candidate, and without the help of any existing organisation polled a large number of votes. As editor, formerly of the *Provincial Medical Journal* and now of *The Scalpel*, he has done good service to the cause of the profession. Being a general practitioner himself, he has a full knowledge of the grievances of his fellows, and he has shown on many occasions that he possesses the resource, the determination, and the ability so necessary in leading a movement for their redress.—I am, etc.,

Buxton, June 29th.

WM. ARMSTRONG.

We publish also a letter from Dr. Dolan on page 45.

SIR,—As a member of the Council of the Medical Defence Union I have read with surprise a statement in the *BRITISH MEDICAL JOURNAL* of Saturday, June 27th, that the Council of the above organisation has nominated certain candidates for election as direct representatives on the General Medical Council. As far as I am aware no meeting of the Council of the Medical Defence Union to consider the claims of the various candidates has been held. I have made inquiries of some of my colleagues on the Council, and find that if such a meeting has been held they also had no notice thereof.—I am, etc.,

GEORGE BROWN,
Vice-President Medical Defence Union.

Charing Cross Road, W.C., July 1st.

SIR,—This election will not take place for some months yet. Members of the profession will do well, therefore, to abstain from promising their votes before it is known who are the candidates, otherwise they may have cause to regret their promises.

We know well Dr. Glover's great services, and the large majority of us probably desire him to continue them; but, in regard to the two vacancies let us wait, at any rate until after the Carlisle meeting, where the subject will doubtless be well ventilated to see "where we are." We want the best men possible to represent us.—I am, etc.,

London, July 1st.

F.R.C.S.

MEETING IN LONDON.

WE are asked to state that a meeting will be held on July 16th at the Royal Medical and Chirurgical Society's Rooms, 20, Hanover Square, W., at 5 p.m., to hear addresses from Dr. J. G. Glover, one of the present representatives, who offers himself again for re-election; and Dr. Woodcock, J.P., of Manchester, and Dr. Lovell Drage, of Hatfield, who are candidates, nominated by large and influential committees, for the seats resigned by Sir W. Foster, M.P., and Mr. Wheelhouse. Dr. Wallace, President-elect of the Metropolitan Counties Branch, British Medical Association, will take the chair.

A REPORT ON CYCLING IN HEALTH AND DISEASE.

[SPECIALLY PREPARED FOR THE BRITISH MEDICAL JOURNAL.]

By E. B. TURNER, F.R.C.S.

VII.—FUNCTIONAL DERANGEMENTS.

LIVER.

As a means of cure the scope of the cycle is much larger in functional than in organic derangements. In whatever way functional derangement of the liver may show itself, bicycle exercise, as a remedy, surpasses even calomel. Most of the ailments which are commonly called "bilious" are caused by too much food of a rich nature, and too much drink of a sweet or alcoholic character, combined with far too little exercise in the open air. The liver attempts to get rid of the superfluous materials thrown into the circulation, and, being overworked, rebels, and gout, rheumatism, gravel, dyspepsia, headache, and constipation are the outward and visible signs of its inaction in those who live, too well, a sedentary life. The prescription of a bicycle, and the recommendation to use it wisely and well, works like a charm in such cases, and in all the symptomatic ailments which arise from too much "acid" in the system. It is interesting to note that cycling sometimes has the effect of thinning the obese and fattening

the thin, and this may partly be explained by Murchison's observations that excessive leanness, as well as excessive corpulence, is often caused by inaction of the liver, and the stimulus of regular exercise, setting the functions of that organ right, causes the disappearance of what was only a symptom.

NERVOUS SYSTEM.

In cases of breakdown of the nervous system from overwork and anxiety, cycling will be found a most valuable adjunct to the rest which is necessary for recovery, and numerous brain workers now consider a daily ride indispensable if their work is to remain at concert pitch. In the anæmia of young girls, whether associated with constipation or not, steel in the form of the wheel is even more effectual than as "drops," and the action of the flat muscles of the abdominal walls on the subjacent organs being much increased by the movements necessary to retain the balance and drive the machine, has a marked effect as an adjunct to other treatment in cases of obstinate constipation.

Within the experience of the writer many sufferers from sick headache, neuralgia, and hysteria, both male and female, have reaped much benefit from regulated cycle riding, and many cases of so-called palpitation have been cured.

Lastly, insomnia has frequently been found to yield to the proper use of the bicycle when every other soporific had been defied, and many cases of persistent nocturnal cramp have been relieved.

It is necessary, however, again to warn everyone who is not an experienced rider against the abuse of this fascinating exercise. Though much good may be done in very many cases of inorganic ailment, it is possible also to do much harm. The young and growing especially have need of caution.

The writer has seen several healthy young girls quite broken down for a time by riding too far and too fast while still unfit, from lack of practice, for any really hard exertion. It behoves every physician who may have to recommend the cycle as a means of cure, or allow its use as an exercise and recreation, to put this matter clearly before those who may ask his advice, and make them thoroughly understand that though great good may be derived from the use, great harm may come from the abuse of what is, after all, only a new form of exercise. The importance of this warning must excuse its repetition.

DIET.

Many persons on commencing to cycle have an idea that some special and peculiar form of diet is necessary, and in the past many controversies have been carried on as to whether it is necessary to become a vegetarian or teetotaler if it is wished to excel as a bicyclist. Of course, all that is necessary is to continue to eat and drink whatever has been the rider's custom, and make no difference whatever simply because a new exercise has been commenced. When actually engaged in riding the writer finds that a good solid breakfast is necessary, a light lunch, and a substantial dinner when the day's work is over, and a sufficient interval should always elapse between eating and making a fresh start. With regard to what a rider should drink, and when, one law should be as those of the Medes and Persians—and that is, never to touch alcohol between meals. At lunch, if intending to ride some distance after, strong beer is bad; in the parlance of cyclists, it is said "to get into the legs." Some light wine, such as hock or claret, with aerated water, is best for those who take alcohol, or else sound cider or light lager beer. Those who do not drink wine or spirits have generally some beverage to which they are accustomed, and to which they had better remain faithful. At dinner in the evening, so far as cycling goes, drink whatever you like. If it is to be avoided, do not take any fluid between meals; but if it becomes really necessary, "milk and soda," lemonade with the juice of a lemon, cold tea and lemon juice, or plain water, if it can be got good, are best. Spirits are poison then, and if they be drunk, so soon as the effects have passed off the rider is left worse and more exhausted than he was before; and, having begun, he has to finish his journey on stimulants to his infinite harm.

THE PLAGUE IN HONG KONG.—There were 21 fresh cases of bubonic plague in Hong Kong in the week ending June 23rd, and 20 deaths from the plague during the same period.

THE BATTLE OF THE CLUBS.

DUNDEE FRIENDLY SOCIETIES.

A MEETING of the various friendly societies of this district is reported in the Dundee *Advertiser* of June 20th to consider the question of working a medical dispensary in common. This was the outcome of agitation on the part of the Dundee Branch of the British Medical Association against the prevailing low rate of remuneration paid by the local friendly societies, and a conference of delegates with the local doctors was reported in our columns a few months ago. An attempt, it would seem, has been made by the societies to meet the demands of the profession, but the measure of reform proposed can hardly be considered sufficient to remedy the grievances complained of. It has been decided to institute a dispensary to supply the medicines ordered by the doctors, so that this expense will no longer fall on the latter as heretofore. The proposal, however, to pay no more than 2s. per annum for medical attendance, exclusive of medicines, is altogether inadequate, and the offer of the local profession to take 2s. 6d. per member is also open to considerable objection. To the majority of the profession of the country this must appear far too low; a minimum of 4s. per annum, exclusive of medicines, could easily be borne by the working classes at the present rate of wages. If the profession of Dundee deem it advisable to compromise matters now and accept less than their due, such a settlement can scarcely be more than temporary, for it is out of reason to suppose that 2s. 6d. per annum can properly insure against the ordinary incidence of sickness, not to speak of accident. It is satisfactory to note any amelioration in the payments of friendly societies to their doctors, but a good deal yet remains to be done, especially in many places in the north.

MEDICAL SICKNESS, ANNUITY, AND LIFE ASSURANCE SOCIETY.

THE usual monthly meeting of the executive committee of the Medical Sickness, Annuity, and Life Assurance Society was held at 429, Strand, London, W.C., on June 26th. There were present Dr. de Havilland Hall, Chairman; Mr. H. H. Clutton, Treasurer; Dr. J. B. Ball, Dr. Walter Smith, Dr. Major Greenwood, Dr. F. J. Allan, Dr. J. Pickett, Dr. A. S. Gubb, and Dr. Sibley. This being the last committee meeting of the Society in the current financial year, which ends on June 30th, the accounts presented enable an estimate to be formed of the work done by the Society during the previous twelve months. This is the twelfth year of the Society's operations, and the accounts when complete will show that the members have received in one form or another a larger amount of benefit from the funds than in any previous twelve months.

The steady growth in the number of members has been maintained, and as the average age of the members is still rising, the amount of sickness claims necessarily increases, and it will be found that in the twelve months just ended a larger amount of sickness pay has been disbursed than in any previous year since the Society commenced its operations in March, 1884. The amount of sickness experienced is still, however, well under the amount expected and provided for in the tables of premium, and this, combined with the great economy in the management, by which more than half the amount provided to defray working expenditure has been saved, has had as a result, the present very sound financial position of the Society.

Prospectuses and all particulars may be obtained on application to Mr. F. Addiscott, Secretary, Medical Assurance Society, 33, Chancery Lane, London, W.C.

NOTES ON HEALTH RESORTS.

Harrogate.—There cannot be any doubt that harm is sometimes done by the indiscriminate use of mineral waters without medical advice. Visitors at spas of Great Britain, such as Llandrindod, Harrogate, etc., are notoriously inclined to dose themselves with the waters according to their own ideas. Dr. A. Roberts has sent us a short pamphlet, entitled *The Use and Abuse of the Harrogate Mineral Waters* (Harrogate: R. Ackrill, 1896, price 6d.), the object of which is to point out the danger of this custom.

Bormio, in the Upper Valtellina, in the Italian province of Sondrio, would probably be more visited by the English if it were easily accessible. The new baths have an altitude of 4,500 feet, and the old baths are about 200 feet higher. They lie on the Stelvio road, and may be reached in about ten hours from the railway station of Sondrio, or from Meran in about seventeen and a-half hours. The springs belong to the simple thermal group, and have temperatures of 98° to 105° F. Besides the ordinary baths, there are swimming baths, mud