

BRITISH MEDICAL ASSOCIATION.  
SUBSCRIPTIONS FOR 1898.

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**British Medical Journal.**

SATURDAY, SEPTEMBER 17TH, 1898.

PUERPERAL MORTALITY: REAL, SUPPOSED,  
AND IDEAL.

WE publish elsewhere a letter from Mrs. Garrett Anderson which revives an old question oft discussed; but its importance, and the ability with which Mrs. Garrett Anderson has restated that which seems to her the true state of the case, will be recognised.

Mr. T. A. Coghlan read before the Royal Statistical Society on June 21st last a most elaborate and able paper on deaths in childbirth, based on an analysis of 115,669 confinements occurring in New South Wales with among them 813 deaths. This is a mortality of about 1 in 142. The late Dr. McClintock, of Dublin, writing in 1869, estimated the true rate of puerperal mortality to be about 1 in 126. Matthews Duncan in 1871 printed in capital letters the following statement: "Not fewer than 1 in every 120 women delivered at or near the full time die within the four weeks of childbed."<sup>1</sup> Dr. Boxall, writing in 1893,<sup>2</sup> showed that the mean death-rate of childbirth deducible from the Registrar-General's returns from 1847 to 1891 inclusive was 4.85 per mille, or nearly 1 in 200; and that during this period it had not appreciably diminished: for example, in 1892 it was 5.22 per mille, or more than 1 in 200. Now the returns of the Registrar-General (from sources of error which we need not go into here, but which will be found detailed in the writings of R. Barnes,<sup>3</sup> McClintock, and Duncan) do not represent the true mortality; they understate it. But taking all these figures as they stand, they represent the mortality of childbirth as something more than 1 in 200.

Mrs. Anderson thinks that this is incorrect. She has collected figures from various outdoor and indoor maternities, amounting to 71,122 deliveries, with 151 deaths, 25 of which she thinks ought to be deducted, giving a gross death-rate of 1 in 471; or, when deductions are made, of 1 in 563.6. These results lead her to judge that from Mr. Coghlan's figures no statistical deductions of any value can be drawn. She thinks that the mortality in London has been reduced far below that of New South Wales, and that just as the risk of a voyage is properly measured not by the average loss of life at sea, but by the equipment of the ship and the competence of the captain, so the risk to a lying-in woman depends not upon the average puerperal

death-rate, but upon "the skill and antiseptic zeal of those who surround her."

The latter proposition is true, but it does not prove Mr. Coghlan's conclusions to be incorrect. Coghlan, McClintock, Matthews Duncan, and Boxall deal with the *real* mortality of childbirth—that which up till now has actually occurred. The *ideal* mortality of childbirth—that which would occur in women attended and nursed in the best possible way, and in the best possible surroundings—is, as Mrs. Garrett Anderson rightly points out, much lower than Mr. Coghlan's estimate. But we have no knowledge from experience what this ideal mortality is; for there is no institution from the management of which human error is absent. The figures which Mrs. Garrett Anderson quotes in support of her view are mainly from outdoor maternities, and represent only the *supposed* mortality. If a case in an outdoor maternity goes wrong, the friends often lose confidence, and call in someone else. McClintock in 1869 said: "A reliable estimate of the mortality among lying-in women confined at their own homes is a very great desideratum. I must honestly declare my conviction that . . . there is no reliable return of such deaths." Matthews Duncan, speaking of "the home practice of dispensaries or hospitals," said, "there is no security whatever that the deaths are recorded." Even the in-patients of lying-in hospitals do not beyond doubt show the real mortality of childbirth, for it is impossible to trace the after-history of every case. But the mortality of patients delivered in well-managed lying-in hospitals probably approaches more nearly to the ideal puerperal mortality than that of any class of patients elsewhere.

Three different estimates of puerperal mortality have been often put before the profession, and reappear in Mrs. Garrett Anderson's letter: (1) The *real*, that which has actually occurred, which is difficult to find out, and the best estimates of which up till now are those of Matthews Duncan and Coghlan; (2) the *supposed*, exemplified by the experience of individual medical practitioners, and by the reports of outdoor maternities. These are statements made in perfect good faith by those who promulgate them, but they cannot be accepted without reservations, or what statisticians would term corrections, the exact value of which it is impossible to estimate, as here we have to deal with the statements of many different observers, into each of which the personal equation must enter. (3) The *ideal*, which is what ought to be attained everywhere and at all times, but which has been as yet attained only in a few places and intermittently.

We publish in this number of the JOURNAL another contribution to the estimation of puerperal mortality—the paper on Pregnancy: its Relation to Life Assurance, by Dr. John Playfair and Mr. T. Wallace, the latter gentleman being actuary to a large insurance company. Their object is to discuss the extra risk to an insurance company in the case of a female who at the date of the insurance is pregnant. They point out, as R. Barnes, McClintock, and Duncan have done, that the returns of the Registrar-General underrate the death-rate of childbed. They have studied the records of the Edinburgh Royal Maternity and Simpson Memorial Hospital for ten years and a half—

<sup>1</sup> *Fecundity, Fertility, and Sterility* p. 302.

<sup>2</sup> *Lancet*, July 1st, 1893.  
*Dublin Journal of Medical Science*, 1859.

from January, 1887, to July, 1897. In this institution—one which has been supervised by some of the first obstetricians in the world—if anywhere, the ideal puerperal mortality ought to be reached. What are the facts? Out of 10,038 cases, attended in and out of the hospital, 87 deaths occurred, or 1 in 115: a figure very close to Duncan's estimate. In the hospital 1 out of 62 died; at the patients' own homes 1 in 194. The larger mortality within the hospital is due to the fact that all extern cases presenting features of difficulty or of danger were at once removed to the hospital. These figures prevent us from readily accepting Mrs. Anderson's optimistic views. They show that the real puerperal mortality is very much what it was thirty years ago; a figure very different from the supposed and the ideal mortality.

#### PHYSICIAN AND ACTUARY IN LIFE ASSURANCE.

THE experiment of instituting, for the first time in the history of the Association, a special Section at the Edinburgh meeting for the consideration of questions respecting medicine in relation to life assurance was fully justified by the result. We publish elsewhere a report of the papers read at the three meetings of the Section and of the discussions which they elicited. The subjects considered were of high importance both to the public and the insurance companies, and could scarcely have been adequately debated in any other Section. The invitation from the President of the Section to attend the meetings was accepted by the President of the Faculty and by many prominent Fellows both of the Faculty and Institute of Actuaries, some being managers of the best-known Life Insurance Societies, who contributed valuable papers and took their part in the discussions.

This conjunction of medical men and actuaries in debate accentuated the well-recognised fact that although many of the scientific problems involved in the intricate business of life insurance fall naturally and exclusively to the members of the one or the other profession to solve, there are, besides, many abstruse questions connected with the subject which require for their elucidation the special knowledge both of the physician and the actuary. The former has to consider details of this description chiefly as they affect the case of the individual whom he is examining; whilst the latter, putting all cases of one kind together, deduces thence his averages of expectation of life and death.

Such statistical tables, which form the very foundation of all trustworthy insurance business, have for years past been worked out for "first class lives" and for many diseased conditions; but in regard to the effect of a number of abnormalities upon expectation of life the actuary has evidently not yet had his final say. The requisite information upon which to frame tables of the kind for all except the rarest pathological states is contained in the insurance offices in their proposal papers and death records, and through them alone can the necessary statistics be obtained. This point was emphasised by Mr. G. M. Low (Manager of the Edinburgh Life Assurance Society), who said that one matter which had greatly struck him in one of the discussions was "the value which was being attached to statistics. In his opinion they had in the records of the insurance

companies the most reliable guide available on many questions." Apparently these records are being so utilised in the United States far more than in the United Kingdom, for Dr. Glover Lyon stated that in America the life assurance companies were wont to expend much larger sums in preparing statistics than British companies ever spent for such a purpose.

Sir William Gairdner in the course of his valuable paper alluded three or four times to the need of further statistics which he experienced in his life assurance work. He remarked, in respect of the principle on which tachycardia or bradycardia (without symptoms) discovered in a candidate for insurance should be dealt with, "We have not the data as yet, but they might, no doubt, be procured by a concerted combining effort of several offices." He said also that there were no data to tell us exactly the point at which a slow pulse becomes abnormal, and what is the influence of that single fact on life; and he expressed the opinion that it was a point capable of exact, almost mathematical, statement, which could be solved by sufficiently extended statistics. In regard to another question, Mr. Low said that in such inquiries the medical man and the actuary should work together, each contributing the skill and experience which belong to his own department of knowledge. He further advocated co-operation among the companies to investigate the subject of extra risk by means of the incomparably rich material they possess in proposal papers and death records; and said that the help of medical knowledge would be indispensable to the realisation of that object. Dr. Sprague (manager of the Scottish Equitable Life Assurance Society) fully agreed with Mr. Low as to the value of the statistical method, especially in regard to the exact classification of lives; and Dr. Ritchie (Vice-President of the Section) was gratified to know that medical officers, in investigating some of the difficult questions which meet them in their insurance work, might hope to draw upon the wealth of material lying in the depositories of insurance companies, "if all managers were of the same opinion as Mr. Low and Dr. Sprague."

There has undoubtedly been achieved by these methods within recent years a great advance of accurate actuarial knowledge upon many subjects, several of which were discussed at the Edinburgh meeting. Both medical men and actuaries, however, have yet much to learn from further investigations conducted upon similar scientific lines and with the same painstaking spirit.

#### APHASIA AND TESTAMENTARY CAPACITY.

THE subject of aphasia in relation to testamentary capacity, raised by the paper of Sir William Gairdner and Dr. Elder, read at a joint meeting of the Sections of State Medicine and Psychology during the annual meeting at Edinburgh, and published in the BRITISH MEDICAL JOURNAL of September 3rd, is one of considerable interest. As it chanced that both the papers were written necessarily from the point of view of persons interested in the decisions of Scottish Courts, some readers may share the hesitation expressed as to whether English law may not be somewhat different. This, however, does not appear to be the case. The recent charge of Lord Robertson, a Scottish judge, was quoted by Sir William Gairdner as laying down correctly

the general principles of Scottish law with regard to testamentary capacity. He said that "the jury had not to decide whether the testatrix in question was sane or insane; but merely whether she had mind enough to understand, and did in fact understand, the will she purported to have made. The mere fact that she was alleged to have been eccentric did not render her incapable of making a will, if she had enough sense to understand it. The jury must say whether the will really was her will. They must not decide against it unless they were satisfied either that she was unfit to make it—that is, that she had not sufficient mind to make it—or that she was weak, and was led into making it by other people."

This statement of the Scottish law does not appear to have been quoted from a law report, but it states fairly enough in popular language the principles of English law which are to be applied in all such cases. When a will is produced which has been made in proper form and has been signed by the testator (either in writing or by a mark) in the presence of witnesses, the law assumes it to be a valid will until the contrary is shown. The grounds on which a will is attacked are usually either (1) testamentary incapacity, or (2) undue influence. Incapacity need not be absolute insanity, but has been defined as a "want of mind to understand" the will in question. If the court which has to try the case is satisfied that the testator was altogether insane, it generally follows that his testamentary incapacity will be assumed, though there have been instances in recent years where wills made by persons already certified to be lunatics have been held good. But where the testator is eccentric, and still more where he has been debilitated through illness or bodily or mental failure, the evidence as affecting the question of his power to understand and make a will has carefully to be considered.

It is difficult to lay down general rules which will meet the circumstances of all supposable cases. An aphasic patient, who was originally able to speak and had learned to read and write, but who had lost the power of speech through accident or illness, would probably be considered capable of making a valid will, unless it could be shown that his mental powers had been affected as well as the power of articulate utterance. Some persons, again, who have never been able to speak, are apparently quite able to understand what goes on around them, and are able to communicate with other people by signs or in writing. In their case, the power to make a valid will would hardly be disputed. The proper answer to the question becomes more difficult where the patient, though apparently in possession of his mental faculties, lacks the means of expressing his ideas in such a way as to be intelligible to others. Probably he may possess sufficient understanding to be able to make a will; but still it may be doubtful whether a document, prepared in accordance with what are assumed to be his wishes, and signed by him with his mark in the presence of witnesses, does give such effect to his wishes as to be treated as his will. In such a case much would depend on the credibility attached to the witnesses called on to speak as to the circumstances under which the will was executed, and much on the nature of the will itself; on whether it duly provided for those to whom the testator would presumably

be attached, and on similar considerations. Finally, if the symptoms attending the aphasia were such as to lead to the inference that he was suffering from imbecility or mental debility, as well as from loss of speech, there is very little doubt that a will made by such a patient would be held invalid. No general rule can be laid down with regard to aphasics. The circumstances of their affliction vary greatly, and so does their testamentary capacity. Those who are called on to testify in such cases should carefully observe all the circumstances attending the case, and can seldom predict what the decision of the tribunal will be. Each case must be and will be judged on its own merits, and on the opinion which the court may form as to the capacity of the testator. Medical evidence in such cases is most important, but not conclusive, and it must always be remembered that the point to be determined is not the general sanity or insanity of the testator, but his capacity to understand and to make the will in question at the time when it was executed.

#### THE EAST-END WATER FAMINE.

Now that there seems to be some ground for hope that we are within measurable distance of a termination of the distress due to the abnormal dryness of the season it may be well to review the causes of the so-called "water famine" in the East London Water Company's district, the effects, and the possible remedy.

The cause may be summarised in one sentence—want of storage. For years past the construction of impounding reservoirs in the Lee watershed has been under consideration, and as long ago as 1851 a scheme was proposed by the New River Company for the construction of reservoirs in the several minor watersheds of the Lee Basin. The East London directors, it is known, have given effect to the storage idea by the large works recently carried out and by others now in contemplation, but it will be a long time ere the want of forethought, which, while encouraging an extension of district to be supplied, often involving, as in the Ilford case alone, a population equal to a large town, did not make sure of a supply equal to the demand. Few water companies have been more "up to date" than the East London, and the want of forethought to which we allude is all the more surprising to an outsider. As to Ilford, why is not an impounding reservoir in the valley of the Roding—a considerable watershed—constructed? This would conserve a vast volume of flood water which now goes to waste. Again, the floods in the Lee Valley above the intakes, which have been a fruitful cause of loss to farmers and others on the low-lying districts, might have been impounded, roughly filtered, and stored for subsidence and consequent purification before passing on to final filtration and distribution.

Some years ago, power was taken by the East London to draw water from the Thames at Sunbury—10 million gallons daily—it might have been possible then to have secured the right to take double the volume. The want of foresight of the directors was severely criticised at the time, and much objection was taken to the course adopted. In later years the sinking of wells has been much resorted to with considerable success, and at last the principle of drawing from other companies as an auxiliary supply is

being followed out. It is difficult to understand why the East London did not join the Staines reservoir scheme, as the New River and other companies did. Apparently the directors were too confident in the adequacy of their own sources of supply, a confidence which, as has been proved by recent events, was misplaced.

So much for source of supply; now let us consider distribution. It appears to us, from reports, that a false conception of the constant service system has largely contributed to the distress; it was a matter of instruction that when constant service was adopted the use of cisterns should be abolished, and it is a fact that in those cases where cisterns had been left, and the regulation to abolish them and to draw from the main direct had been ignored, there the scarcity of water has been less felt. Indeed, the company has issued jars or receptacles in which to store the water. Thus the argument that want of storage is a fruitful source of distress is intensified by recent experience.

Now comes the question of waste—a very serious cause of the scarcity of water in the district. By recent reports we find that a volume equal to a minimum of 25 gallons per head per diem has been supplied by the company. Surely this is not a "water famine." The householders protest against its being said that they wilfully waste the water. The fact of the heavy frost from which we suffered two winters since having caused fracture in some of the mains of the East London may be one of the causes of waste. This is, however, doubtful, and has been repudiated by the company, while the London County Council insists on the fact. The East London have a large staff of waste inspectors, whose duty it is to prevent loss of water.

Of course the London County Council lays stress on the scarcity as an argument for going farther afield for a new source of water supply, and we are bound to admit that present conditions tend to support this contention; but it has been over and over again noted that ten to fifteen years must elapse before we could be independent of the present sources; and what are we to depend upon to prevent a recurrence of that which has now well nigh become an annual complaint?

One remedy which has been suggested is to insist upon the erection of cisterns in all cases. Those who know the conditions of life in many districts of the East End of London know that this reversal of the policy hitherto pursued would be fraught with dangers to the public health, even if special regulations for periodical cleaning were enforced. A more satisfactory remedy, which, however, could not be relied upon as a permanent solution of the difficulty, would be legislation directed to encourage combinations of water companies and mutual support in emergencies; it might be advantageous in all senses of the word to bring about a combination of companies under control of a Water Trust, as has been suggested—indeed, if we recollect rightly, it was recommended by the City's Water Inquiry in 1891.

As to source of supply a great deal of nonsense and inaccuracy have found expression in the public papers. The Thames has not yet ceased to flow, nor has the Lee dried up; indeed, it is wonderful that in the circumstances the latter river has shown such signs of vitality, due to the numberless springs in its bed. True it is that the

river is very low in volume, and that Chadwell Spring—the source of the New River—has given out during the latter days of the dry weather, but the New River Company has been able notwithstanding to allow from 5 to 6 million gallons of its statutory supply from the Lee to pass on to the relief of the East London, and there has not been any material lowering of the head levels in the navigation.

The remedy for all this scarcity of water is in one word "storage" of water at seasons of the year when it is plentiful, and we submit this for the consideration of all who are interested in the purity and the conservation of "the first necessary of life."

#### THE MALARIA COMMISSION.

THE Scientific Commission, appointed jointly by the Colonial Office and the Royal Society to investigate the mode of dissemination of malaria with a view to devising means for preventing the terrible mortality which now takes place among Europeans resident in tropical and sub-tropical climates has now been nominated. It will consist of Dr. C. W. Daniels, of the Colonial Medical Service, British Guiana, who is well known for the many valuable contributions which he has made to tropical medicine; Dr. J. W. W. Stephens, formerly Lawrence Student in Pathology and Bacteriology at St. Bartholomew's Hospital, and the author of the essay on the Bacteriology of Asiatic Cholera in Allbutt's *System of Medicine*; and Dr. R. S. Christophers, of University College, Liverpool. Dr. Daniels will proceed at first to Calcutta, where he will acquaint himself practically with the remarkable work which Surgeon-Major Ross, of the Indian Medical Service, is carrying on into the relation of mosquitos to the dissemination of malaria. Drs. Stephens and Christophers will at first proceed to Rome, where they will spend some time in studying malaria. Subsequently the Commissioners will meet together at Blantyre, British Central Africa.

#### PATENT MEDICINES AND MEDICAL SHARE-HOLDERS.

WE are often asked whether a medical man should take a share or shares in a patent medicine, or be the owner of a proprietary medicine. The answer is simple. It is for obvious reasons contrary to medical ethics for any medical man to associate himself in any way with a patent medicine. Nevertheless it is the fact that some medical men do hold shares in proprietary and patent medicines without publicly associating their names with the articles. "Conscience doth make cowards of us all!" With regard to another question, namely, whether a fellow practitioner should expose the offender, the answer is not so easy. The motive of punishment in our English law is reformation, and the motive in the mind of a medical practitioner towards his erring brother should also be a high one. The gratification of individual hostility should not be the motive for exposure. Before taking any active steps in bringing the *laches* of our brothers before any public tribunal, a personal appeal should always first be made. This might be done through the Ethical Committees of the Branches of the British Medical Association, or the Medico-Ethical Societies which now exist in many towns. Medical men may hold shares in companies interested in the sale of certain articles of food, but clearly it is contrary, not only to medical ethics but to general morality, for medical men to exploit the articles in which they are pecuniarily interested at the expense of their patients. For instance, if we assume that A. is interested in a certain dietetic preparation as a shareholder, it would be reprehensible only to order for his patients the special brand in which he is interested. He might legitimately say, "I am a shareholder in this company, and I think

its preparation a good one." Then the patient would be dealt with frankly. We should never accept commissions, though in many ways we are tempted to do so. Jones offers to paint a portrait free on condition that the portrait is shown to our patients and friends. Smith sends some dozens of excellent wine as a present, with a similar intention. It is deplorable and humiliating that we should have to insist upon such elementary truths, but from our correspondence it is painfully evident that there is a very grave amount of misapprehension, not exactly on medical ethics, but as to what constitutes absolute fair dealing. Obliquity of dealing is but too well known in certain circles outside the profession, but we must at all costs keep our hands clean.

#### THE ROYAL ARMY MEDICAL CORPS AND THE ARMY LIST.

WE called attention in the BRITISH MEDICAL JOURNAL of September 10th to the fact that the Royal Army Medical Corps was not in its proper position in the August *Army List*. We are happy to state that the error has been corrected in the September list, and that the corps is now placed immediately after the Army Service Corps. It is headed "Army Medical Service," but the Director-General himself is the only officer on the active list under that head; then follow the Surgeon-Generals under the designation "Army Medical Staff"; and, lastly, comes the "Royal Army Medical Corps." The military titles having been extended to retired medical officers serving in appointments, these officers are shown under the head of "Army Medical Service" among the Departments; and the military titles of the substantive rank in which they retired are shown after their names, as well as, in italics and brackets, the honorary steps in rank which were granted on retirement; thus, A. B., Lieutenant-Colonel (Honorary Brigade Surgeon, or Deputy Surgeon-General). These officers, we understand, now sign official documents with their military rank; but whether it is strictly correct to put "Royal Army Medical Corps," or only "Army Medical Service," after their rank does not seem to have had as yet an authoritative ruling. We presume they may still use their old honorary rank on their cards if they think fit.

#### THE THERAPEUTIC VIRTUES OF GOLF.

To many persons, on this side of the Tweed at any rate, golf is what, according to Dr. Johnson, smoking is to the devotee of "My Lady Nicotine"—a means of doing nothing with the feeling that one is doing something. But to the serious golfer the game is not only a physical, but an intellectual and moral, exercise. In a paper read at a meeting of the American Neurological Association not long ago, Dr. Irving C. Rosse sang its praises with a vigour that should delight the heart of golfers on both sides of the Atlantic. He said that, "while doubtless from the sportsman's point of view and that of the hygienist the value of the game is quite apparent, its therapeutic value, not so well established, is practically an untrodden field, and in need of an exponent." This need has now been supplied. Golf as a therapeutic agent has found a *vates sacer* in the person of Dr. Rosse, who affirms that "to the neurologist who trusts to psychic, mechanical, and hygienic influences rather than to drugs for treatment, the theme is replete with magnificent possibilities of prophylaxis and even of therapeutics." The game, he goes on to say, combines exercise, pleasure, and fresh air without that risk of injury to heart, lungs, or nervous system which attends certain other exercises in which there is high blood pressure and arterial tension. It is not contraindicated in "heart lesions, arterial calcification, albuminuria, old age, childhood, or certain hysterical conditions which would be aggravated by such exercise as bicycling, swimming, horseback riding, or by mountain climbing; while in all affections marked by slowing of oxidation, or in those consequent upon intoxication by

the products of organic disassimilation, the game of golf is to be recommended as the best method of bringing about a cure." Nor does this list exhaust the magnificent therapeutic possibilities of golf. "The obesity and degeneration of middle age, when the biceps has diminished and one's energy is failing, may be helped by devotion to golf. The further tendency of the exercise is to eliminate the so-called diatheses, and thus do away with gout, lithæmia, headache, and dyspepsia; while its hygienic and therapeutic consequences are admissible in cardiac and pulmonary affections." Dr. Rosse concedes that "moderation is advisable under such circumstances," but he states that "there can be no doubt of the benefit derived in some cases of cough, nervous asthma, and in affections of the bladder and prostate." It is pre-eminently in functional nervous diseases, however, that, according to him, it is to be recommended both as prophylactic and curative. "No exercise or recreation is better fitted for the mentally overworked, the hysterical, the melancholic; none helps more to preserve the concerted action of the eye, brain, and muscle known as the psychological moment; none perhaps, with the exception of swimming, gives one so good an appetite; there is not a more sovereign remedy for dyspepsia, and as to insomnia, such a thing scarcely exists among the devotees of golf." We are not prepared to deny that golf preserves the "psychological moment," though we venture to think that Dr. Rosse uses that expression in a somewhat esoteric sense; but does not his enthusiasm carry him a little too far when it leads him to say that the game "eliminates diatheses"? If golf does this, it is the *Catholicon*, or universal remedy, so long sought in vain, and indeed may be accepted as a passable substitute for the elixir of life. But alas, there are "diatheses" that resist even the eliminative power of golf.

#### THE PRINCE OF WALES'S HOSPITAL FUND.

LAST year two stamps, intended as a convenient form of receipt for small subscriptions, were issued on behalf of the Prince of Wales's Hospital Fund. They produced a sum of about £35,000, and it is estimated that about 600,000 persons subscribed to the Fund by purchasing these stamps. We are asked to state that new stamps for 1898 will be on sale on September 20th. The new issue consists of four stamps, each of distinct design, with a face value of 1s., 2s. 6d., 5s., and 10s. respectively. The designs for the stamps and the colours in which they are printed were selected by H.R.H. the Prince of Wales. Each stamp contains a vignette of the figure of Charity with the words "Prince of Wales's Hospital Fund," and the date 1898 in the top right-hand corner. A facsimile of the Prince's signature appears at the bottom of each stamp. Messrs. De La Rue and Co. have generously presented the dies to the Prince's Fund free of cost. It has been decided to reduce the number of stamps printed this year to one-third of the number produced in 1897; the plates will be destroyed, and no further stamps will be printed beyond the strictly limited number referred to. It is hoped that the whole of the 340,000 stamps which constitute the entire issue will be taken up between the present time and the end of the year, so that the proceeds may be made available for distribution amongst the hospitals in December next.

#### SCENTED WOMEN.

THE American papers are amusing themselves by discussing whether it is justifiable for a woman to scent herself by means of hypodermic injections. It seems to us that there is nothing to discuss. Women who have money and no occupation will always do foolish things. They are at the mercy of every quack and charlatan, and nothing that we can say is likely to have much effect on their folly. People who consult palmists and fortune tellers are likely enough to take up any new craze. As a matter of fact, the

custom of scenting the breath and the body by the use of drugs injected under the skin is by no means new, and there are many establishments in Paris and elsewhere which exist solely for this purpose. The massage shops would have adopted the idea long ago, but their customers are exclusively men, and man's folly does not run in this particular direction. We have seen a neat little outfit consisting of a hypodermic syringe and a number of cannulæ obtained from one of the Paris houses, and we have been made acquainted with the formulæ of the solutions employed, but it would serve no useful purpose to make them public. We can only express a hope that the apparatus is aseptic, or at all events that it is occasionally washed, for if this precaution is neglected there is likely to be a pretty general dissemination of disease, and some of the ladies who now find time hang heavily on their hands will be less pleasantly occupied than they had anticipated.

#### WOUNDS OF THE HEART.

ACCORDING to popular ideas a person who is wounded in the heart drops down dead on the spot. This notion is erroneous; the victim usually lives for several minutes till sufficient blood has been forced out of the wounded chamber into the pericardium to cause fatal compression of the heart from without. In the more suddenly fatal cases blood escapes freely into the mediastinum through a wound in the pericardium, or death is instantaneous from shock due to damage to the sympathetic or pneumogastric nerve. It has, however, long been known to surgeons that immediate death does not always follow a wound of the heart. Paré, in 1552, reported the case of a duellist who, after receiving a sword-thrust in the heart large enough to admit the finger, pursued his opponent, thrusting at him several times, for two hundred paces, and then fell dead. Billy in 1680 described the case of a patient who lived five days after a sword wound of the right auricle. Dr. Billings found the original report in the *Zodiacus Medico-Gallicus* for April, 1680, which he believes to be the first medical journal ever published. The reports in the *Medical and Surgical History of the War of the Rebellion*, published in Washington in 1870, have done much to afford us relatively precise knowledge about wounds of the heart. Four instances of gunshot wounds not immediately fatal appear in these records. When the force of a musket ball is remembered, these cases prove that pure "shock" does not suffice to kill. The first patient survived a wound of the right auricle by a round musket ball for fourteen days. The second lived an hour and a-quarter after a perforation of the right auricle and left ventricle by a conical pistol ball. The third suffered from perforation of the left auricle and left ventricle, in addition to gunshot wounds of the intestine, axilla, and lung, yet lived for forty-six hours. The fourth patient was wounded in the right auricle by a musket ball. He died two and a-half years later. It was found that the ball had "entered the body between the fourth and fifth ribs on the left side, passed upward and backward and emerged between the clavicle and scapula of the same side, wounding in its passage the anterior surface of the auricle of the heart (*sic*), producing the appearance of a cicatrix on said auricle, organic lesion resulting therefrom, and subsequent decay and rupture of the auricle, causing almost instantaneous death." It is noted that this report, written by two local doctors at Mattawam, in Michigan, gives very positive testimony of the existence of a cicatrix of a musket-ball wound of the right auricle, and of softening and rupture of the muscular tissue two years and a-half after the injury. At the same time we are reminded that "it is known that the milk spots (*maculæ albidæ*) of Rokitsansky have been mistaken for cicatrices." The same *History of the War* gives a very typical history of a death from stabbing, the victim surviving the wound for about eight minutes. The patient had inflicted with a

large sheath knife several stabs on an assailant who seized his wrist, turned the point of the knife towards him, and suddenly drove the blade with great force into his chest, the handle still being grasped in the owner's hand. The wounded man fell at once, gasping for breath, his face deadly pale, and died in about eight minutes. The blade of the knife had gone clean through the sternum, traversed the mediastinum, and freely opened the right auricle. The cavities of the heart were empty, the sac of the pericardium and the mediastinum were filled with blood. Putting aside the wound in the bone and the precise circumstances attending the injury, this case closely resembles that of the murdered Empress. The heart was wounded so that a chamber was opened, and the blood in that chamber partly escaped into the pericardial cavity, and thus fatal compression ensued, probably before the system had suffered from sufficient reduction of blood supply to destroy life. The two cases also show that a knife used by a resolute man at close quarters is particularly deadly, and is always aimed at the heart. The assassinations of Henri Quatre, Gustavus III, the Duc de Berry, and President Carnot prove this fact, even though as in Carnot's case the heart is missed. There are several very vital parts not far from the centre of circulation, and the wound in the President's liver was as fatal as though it had lain in his heart. Besides the great American work above quoted, valuable records relating to wounds of the heart were published in Langenbeck's *Archiv* in 1868 by Fischer of Hanover. Out of 452 cases of wound of the heart as many as 72 recovered. Death was immediate in 104 and in 270 the patient lived from one hour to nine months. As for the recoveries, we may be sceptical about the diagnosis in all the reported instances, but a wound of the muscular wall of the heart not penetrating one of the chambers does not necessarily bleed so freely into the pericardial cavity as to cause fatal compression and may well heal. Many believe that the scar in such a case must necessarily undergo fatty degeneration and the fourth of the American cases above quoted seems to support this theory. The same change was supposed to be inevitable when a needle pricked the heart—another injury not invariably fatal. But Otis examined two specimens from patients who had survived for a fortnight or more shot wounds grazing the heart in which the pericardium was thickened and its visceral as well as its parietal layer coated with shaggy exudations, but the muscular substance presented no alterations discernible by the microscope. Professor Gross, as Dr. Lidell informs us, is possessed of a pericardium taken from a man aged 22 which contains an encysted needle, giving evidence of having been for long a harmless intruder. This specimen, as Lidell remarks, illustrates the indisposition of the parts to take on inflammatory action.

#### WHEAT AND CIVILISATION.

WE referred last week to the sensational views expressed by Sir William Crookes in his address to the British Association as to the possible dearth of wheat which awaits us in the future should the present waste of fixed nitrogen in sewage be allowed to go on. There was one other point which appears to call for criticism. Sir William endeavoured to trace the material and intellectual superiority of European races to the consumption of wheat as distinguished from all other grains, which he stated to possess less food value and concentrated health-sustaining power. It is difficult to find the exact grounds for this assertion. Wheat flour admittedly contains a high percentage of proteid material, with rather less carbohydrate than most other cereals, but surely this cannot be taken to account as the cause of Caucasian superiority. Wheat is a denizen of temperate lands, and has it not been found that the inhabitants of these lands have of late been the most successful in the struggle for existence? Other grains

from the same latitudes, such as rye, make an adequate if unpalatable food, and oats can be worked up into the staple of life. Did not the Scots cultivate the Muse on a little oatmeal? We fear that if the President of the British Association is serious he has stuck too closely to his last. Everyone thinks he can tell the human character by means of his own special trade, from the phrenologist through the physiognomist and graphologist down to Mr. Thomas Hardy's bootmaker, who so ably diagnosed Fancy Day's disposition while repairing her shoes. But each of these observers can see only one surface of the truth; for stereoscopic vision all their views must be combined. Nor is it less important in judging nations to endeavour to reach an opinion of solid value in a similar manner rather than to found a paradox insecurely straddling between partially harmonious facts.

#### SMOKE ABATEMENT AND PARTY CLUBS.

PUBLIC sentiment has been shocked by the announcement that the National Liberal Club has been convicted and fined for causing a nuisance by allowing large quantities of black smoke to escape from their works. The representative of the club who attended before the magistrate thanked God, like the Pharisee, that the club was not as other institutions or companies conducted on mundane principles. If all places in London, he said, were as well supplied as the National Liberal Club, the smoke nuisance would be a thing of the past. The magistrate, however, less amenable to fine phrase expressing infinite good intentions than the average voter, found that the club had been greatly aggravating the smoke nuisance of the present, and made an order for the abatement of the nuisance, with five guineas costs to the vestry. That the case was rather a bad one appears to be proved by the fact that, of two other cases before the same magistrate, in the one against an electric supply company he made no order, while in the other against a restaurant the summons was withdrawn. The incident is an illustration of the indifference with which public health questions are regarded by party organisations.

#### HEART DISEASE FROM LAUGHTER.

THE ancients were fond of insisting that laughter might kill. They always had a case in point, and in this instance Philemon, the comic poet, was the hero—or rather the patient—according to Valerius Maximus and Lucian. It is Rabelais, however, who has immortalised Philemon, whom he wrongly calls Philomenes. The poet, he says, found a jackass eating up the figs on his dinner table, so he said to his servant who came in with the wine that he might as well give the ass a drink. Then the poet laughed so violently that his breath failed him and he died. It must be added that the poet was then 95 years old. From this suspicious though amusing legend we can pass to clinical facts which it suggests. Laughter in itself cannot very well kill, but it may do harm. Hysterical girls and boys with kindred nervous affections are often given to immoderate laughter, which tends to increase nervous exhaustion. It would appear, however, that in some cases a primary organic lesion may be produced. Dr. Feilchenfeld<sup>1</sup> relates an instructive case in which a little girl suffered from very definite cardiac symptoms after immoderate laughter. The patient was 13 years old, and had previously been free from any sign of heart disease. After laughing on and off for nearly an hour with some companions she suddenly felt stabbing pains in the chest, and was seized with fits of coughing, followed by cardiac dyspnoea, very well marked. This latter symptom lasted for over three hours; then the girl went to sleep, and woke up early next morning with another attack. Several more fits of pre-ordial pain and dyspnoea occurred next day. Feilchenfeld

found the patient deeply cyanosed, with a frequent, filiform pulse. The heart sounds were feeble, but there was no murmur. Camphor and morphine did no good. Dr. Senator was called in consultation, and small doses of phenacetin were tried; this quieted the patient. In the course of a few weeks the attacks grew rarer and rarer. Whilst the heart's action was calming down, very distinct signs of dilatation were detected without difficulty. The fits of cardiac dyspnoea have ceased for the last six months, and no evidence of dilatation remains. Feilchenfeld believes that the cardiac disease directly resulted from immoderate laughing. The violent spasmodic action of the diaphragm during laughter first excited and then paralysed the pneumogastric nerve. The pain, cough, dyspnoea, and hyposystole which occurred in distinct succession in each attack represented this condition of the vagi, and the consequent dilatation of the ventricles. Any relatively violent action of the diaphragm produced the same effect for some time afterwards on the weakened vagi. *La joie fait peur*, they say in France. Let laughter-loving girlhood remember that joy may also make heart disease. Older persons do not seem subject to this form of cardiac affection, for psychological reasons only too obvious.

#### THE PREVENTION OF CONSUMPTION IN THE COUNTY OF DURHAM.

A Society for the Prevention and Cure of Consumption in the County of Durham has been formed as the outcome of a resolution passed at the annual meeting of the North of England Branch of the British Medical Association held at Sunderland. The Society consists of lay as well as medical members. A meeting will be held in the Town Hall, Sunderland, on September 20th, under the presidency of the Mayor, to elect a committee to carry out the objects of the Society. The following is its programme:—(1) To teach the public that consumption is an infectious disease, how to prevent its spread, and that it is curable in the earlier stages in a large proportion of cases when systematically treated by the open-air method; (2) to urge upon sanitary authorities in the county the necessity of taking steps to stop its ravages, and of obtaining further powers for so doing; and (3) to provide a properly-equipped open-air sanatorium for the treatment of suitable cases, admission to which to be free to the poor, but all patients who can to contribute towards their maintenance, so that the institution may be largely self-supporting when once fully started.

#### UNBURIED INFANTS.

ONE of those scandals, which may be expected periodically so long as the present laxity continues with regard to the registration of deaths, has just occurred in Birmingham. As the law requires no registration of stillbirths, the bodies of stillborn children are often treated with an indecency revolting to our sense of humanity. The great majority of such cases occur among the poor, to whom expense is an object, and enterprising undertakers are therefore prompted to resort to every device whereby the expense of burial can be minimised. In the case that has recently excited so much public feeling at Birmingham, it appears from the report in the *Times* that the police found in an attic on the premises of an undertaker's assistant three soap boxes, each containing the body of a child. Behind a tub in the yard they found another body in a box. Two years ago in the same city as many as thirteen infant bodies were found in a cellar. Nor are they always the bodies of stillborn children, for in the same case the police found seven death certificates relating to these infants; so that it would appear that the cheapness with which the bodies of the stillborn can be disposed of serves as an inducement to treat the bodies of children born alive as though they were born dead. There can be little doubt that practices

of this kind are adopted in many parts of the country, and that it is highly necessary for all bodies, whether stillborn or born alive, to be registered alike. This was strongly recommended by the Special Committee on Death Certification appointed by the House of Commons in 1893, over which Sir Water Foster presided. It was then pointed out by the Committee that in addition to the temptation which the present state of the law offered to the poor to save funeral fees by pretending that children were stillborn, it acted as a strong incentive to crime for the following reasons:—(1) Any person practically can give a certificate that a child is stillborn, and it only rests in the discretion of the undertaker whether he chooses to accept it. (2) Many facilities exist for the disposal of the bodies of children said to be stillborn, and in this way it is probable the bodies of many children who have met with foul play are got rid of; the only penalty for giving a false certificate that a child is stillborn being a fine of £10, seldom exacted. (3) The desire for secrecy was an inducement to a certain class of midwives to see that children were stillborn in many cases of illegitimate birth, and the non-registration of such births greatly assisted such malpractices. Sir Walter Foster's Committee reported in 1893 and now it is 1898. How much longer will it be before the Legislature sees fit to take notice of the unanimous recommendation of the Committee specially appointed to investigate this serious public evil?

#### THE NEW PHOTOGRAPHY.

THE possibility of producing photographic pictures without the agency of either camera or light has just been extended to living matter by Professor Percy Frankland, F.R.S., of Mason University College, Birmingham, who has found that cultivations of bacteria exert an influence on the sensitive film of the photographer. At the Chemical Section of the British Association on Friday, September 9th, Professor Frankland gave an account of his experiments and exhibited a series of pictures which he had obtained by placing bacterial cultivations in juxtaposition with the sensitive surface of a photographic plate. Although the action can take place through a distance, it is stopped by the interposition of glass, and hence it is in all probability not due to any form of radiant energy, but to the emission of material particles which enter into reaction with the photographic film. Professor Percy Frankland announced his intention of extending the investigation to other organised structures, vegetable and animal.

#### THE PROTECTION OF WATER SUPPLIES.

In his paper on the Protection of Urban and Rural Water Supplies, read at the Dublin Congress of the Royal Institute of Public Health, Dr. Thresh dealt with a subject vital to the well-being of the community. It is doubtless unpleasant to be told that "it is the exception to find either public or private water supplies adequately protected;" it is, however, none the less true. In fact, for our part, we would take a still more serious view of the situation, and say that it is the exception to find such supplies protected at all, except in the crudest manner. Dr. Thresh's remedy is legislation and education. Both are powerful agents, and to the latter of them unqualified support may be given. There is, however, room for much valuable discussion as to the best legislative means to be adopted, as was recognised by Parliament when it refused to insert the clauses introduced by the Local Government Board in certain private water Bills, as being of the nature of limited legislation on an important subject. Dr. Thresh suggests, as a basis for future legislation: (1) That sanitary authorities should have power to close any shallow well which it can be proved is liable to pollution. (2) That no shallow wells shall in future be made until the site selected has been approved by the medical officer of health for the dis-

trict. (3) That sanitary authorities should be empowered to make by-laws having reference to the construction of such wells. That control of water supplies by an authority is necessary all will admit, and that such control should rest, to a large extent, with the sanitary authority, is doubtless desirable for many local reasons; but that it would be wise to vest in that officer the ultimate control of the water supplies in his district we venture to doubt. The water supply of a district is ultimately a physiographical question; and geological formations are not conterminous with administrative districts. A central water authority is the only solution of the control question. On it should rest the responsibility of opening wells, while the local sanitary authority might wisely be entrusted with their enforced closure. Most hygienists will agree with Dr. Thresh when he says, "I am strongly inclined to think that all public supplies, whether owned by sanitary authorities or water companies, should be under the supervision of some higher authority."

#### DROUGHT AND DIPHTHERIA.

THOSE who have not already read "*Ia*," by "Q," should do so. It is fresh and original, and abounds in striking sketches of character of unusual type. The best of these is, perhaps, the doctor of the remote Cornish village in which the plot of the story is laid. He is evidently a study from life, and the medical part of the story is carefully and accurately drawn, correct in the most trivial details. We are interested in him at the present moment on account of the capital sketch of the local sanitary and meteorological conditions which heralded in and were associated with the epidemic of diphtheria which forms an important feature in the story. Here is one of the doctor's terse remarks: "And you say it is good weather, and you are a fool. For it is a dry February, and this is already the third case of French croup that I am going to." Later on we come across the author's sketch of the progress of events. "No rain fell in February; very little in March; nothing in April; and, again, none in May. 'A hot May makes a fat church-hay.' By the middle of the month diphtheria had settled to its work in the lower part of the town. . . . and killed, and went on killing." Then we learn that "the epidemic reached its height in the last week of June." To many medical officers of health this description will appeal on account of its truth. It is interesting as an independent observation by a layman, without any theories to advance, but who has carefully observed and chronicled the course of a real epidemic. To medical men it appeals as an illustration of the manner in which diphtheria, under the influence of the increased virulence associated with an epidemic, overleaps the boundaries of its customary autumnal incidence; and it is a striking illustration of the thesis advanced by Dr. Newsholme, in his recent work on *Epidemic Diphtheria*, that prolonged drought is one of the most important factors in the pathogenesis of epidemic diphtheria.

#### PERFORATION OF UTERUS OR SOUNDING OF TUBE?

THE dread of perforation of the uterus is very natural, and its diagnosis and significance highly important. Putting aside the question of criminal abortion, there remain cases in which the practitioner introduces the sound without undue force, yet is horrified to find that it passes 5 or 6 inches upwards. Fortunately the accident is, as a rule, remarkably free from disagreeable consequences. In some instances of the kind there is reason to believe that the uterine wall has actually been perforated. Some authorities imply that perforation is the sole explanation of this clinical phenomenon; others have for long insisted that the passage of the sound many inches onwards where there is no evidence of myoma signifies that the instrument has entered the Fallopian tube. They



even go further, and claim that they have deliberately and not accidentally catheterised the tube. This feat has been long held as impossible by other writers, mostly by those who believe that the uterine wall is perforated when a sound passes unusually far. Schultz specifically declared only two years ago that the sound cannot enter the uterine orifice of the tube either in health or in disease. A year ago, however, Ahlfeld succeeded, to his satisfaction, in sounding the tubes, declaring that he could prove his feat by bimanual palpation. Floeckinger,<sup>1</sup> however, claims to have settled the question last January at an operation where a suspicion that he had previously sounded the tube was proved to the eyes as well as to the touch. The patient was a very young married woman, under 18 years of age; the uterus had to be explored in order to remove some placental relics; its cavity measured  $3\frac{1}{2}$  inches, and a small subperitoneal myoma was detected on bimanual palpation. The sound was once more introduced; it slipped inwards, without resistance, up to the handle. On palpation it could be felt passing along and beyond the left uterine cornu. These observations were made in August last year. In January, as the patient suffered badly from hæmorrhage, Floeckinger removed the pedunculated tumour through an abdominal incision. The sound was first passed up to its handle, strict antiseptic precautions being taken. It was found to lie partly in the left tube, which was greatly stretched, as was also the uterine wall—a fact worth notice, as it shows that an instrument introduced into the tube can stretch it almost indefinitely without entering the peritoneal cavity; otherwise the end of the sound would quickly enter that cavity through the ostium of the tube, and the result would probably be serious. What was observed in this case explains the absence of any grave symptoms after catheterisation of the tube. Floeckinger succeeded in catheterising the right tube as well at the operation. His experience seems to settle the question. He has since made experiments on the cadaver, and finds that in catheterisation of the tube the instrument can be passed a second time or oftener without meeting with any resistance. On the other hand, when he succeeded in perforating the uterine wall with the sound, he noted that on introducing the instrument a second time, so as to make it enter and slip along the perforation, it always met with resistance, especially at the inner orifice of the false passage.

#### THE EXTIRPATION OF CONSUMPTION.

THE prevention of tuberculosis is decidedly the hygienic question of the day. It is hardly possible to open a medical journal, European or American, without coming across one or more articles on the subject. Everywhere is heard the cry, *Delenda est tuberculosis*. Congresses pass resolutions calling on Governments to take active steps; crusades are organised for aggressive warfare against the great enemy of civilised life; and sanatoria are springing up on every side. It is recognised that the hope of freeing the human race from the scourge lies in isolation of those who have become the prey of the disease. But so far the only means of effecting this object that has been suggested is the provision of sanatoria. A bolder scheme has been propounded in America. In the *Arena* for August, Dr. Lincoln Cothran advocates a plan which in his own words, "amounts virtually to the establishment of a national Molokai for the segregation and treatment of tuberculosis." There are, he says, vast tracts of land in Southern California and Arizona where the air is dry, free from irritating dust, and with uniformly high barometric pressure. He urges that some place in those regions be selected large enough to accommodate all, and that all cases of consumption be transported thither. "Means must, of course, be provided for their residence, subsistence, and employment. Competent medical attendants could be procured.

<sup>1</sup> *Central L. J. Gynaec.*, August 27th, 1897.

During the greater part of the year life in tents or out of doors would be most enjoyable. All forms of recreation—horseback riding, caring for stock, and tilling of the soil—would make existence bearable, if not pleasurable." Dr. Cothran waxes eloquent as to the advantages likely to flow from this drastic proposal. It means, he says, the saving of inestimable wealth wasted in worthless nostrums, doctors' bills and travelling expenses. It means further, according to his estimate, ten or fifteen years added to the average span of human life. With prophetic vision he foresees the ultimate extinction of consumption in the United States. He points to the extinction of leprosy, which has been accomplished by isolation of a kind similar to that which he proposes for consumption. Unquestionably consumption could be suppressed by isolation carried out with sufficient strictness and for a sufficient length of time, but there are far more difficulties in the way than Dr. Cothran, in his hygienic enthusiasm, seems to dream of. Apart from the financial factor in the question, he appears to have overlooked the objection of the natural man, especially of what is conveniently, if incorrectly, called Anglo-Saxon man, to being too much governed. A democratic government is, as the Duke of Wellington said, the strongest of all governments, and the United States executive has often shown that in matters affecting the public health it is not disposed to treat the sacred principle of the liberty of the subject with superstitious reverence. But the strongest government would probably find such a scheme as that suggested by Dr. Cothran beyond its strength.

#### EXACT DOSAGE OF CHLOROFORM TO THE LOWER ANIMALS.

MANY valuable lives among horses, dogs, and domestic pets have been lost through careless administration of chloroform. Mr. Hobday has for some time advocated a method whereby chloroform vapour can be given in the most dilute strength by permitting the animal to aspirate air over the surface of the anæsthetic, a hand bellows being in one apparatus placed between the face piece and the inhaler, while in another pattern air is propelled from a bellows on the distal side of the bottle holding the chloroform. In the *Journal of Comparative Pathology and Therapeutics* (June, 1898, p. 114) Mr. Hobday gives a report of 500 cases of administration of chloroform to dogs and 120 to cats. He finds that the latter are far more susceptible to overdose and he quotes three fatalities in 120 cases; in two of these the animals appear to have been killed by the students in charge, who pumped in excessive quantities of the drug, while in one the cat died after a few whiffs of apparently overconcentrated vapour. Mr. Hobday places his animals in the abdominal position, with legs widely spread so as not to interfere with the breathing. In the treatment of overdose of chloroform Mr. Hobday employs Schule's hydrocyanic acid, 2 or 3 minims being placed on the back of the tongue, inhalations of ammonia vapour, and artificial respiration. All who have worked in the physiological laboratory or in veterinary institutions know only too well how easily dogs become overpowered by chloroform, and how frequently they succumb from failure of respiration. It is interesting to note that Mr. Hobday's experience with trustworthy apparatus leads him to believe that with care dogs are really good subjects for chloroform, more so than cats.

#### PRESCRIBING CHEMISTS AND UNQUALIFIED ASSISTANTS.

AN inquest was held at Tottenham on August 30th by Mr. Hodgkinson on the body of Albert Ernest McKenna, aged 11 months which illustrated once more the dangers of unqualified practice. The mother of the child in her evidence, as reported in the *Morning Advertiser*, stated that the child was in good health up to a

few days previously, when diarrhoea and sickness came on. She took the child to Mr. Morris, chemist, of West Green Road, who after looking at him gave some medicine and ordered arrowroot as a food. This witness was asked by the coroner why she took the child to a chemist instead of to a doctor. The reply was that she "thought he would give me something to stop the diarrhoea." The coroner and jury commented upon the practice of chemists prescribing, and one jurymen stated that, in his opinion, chemists ought to be stopped from practising as doctors. It appears from the report before us that the chemist himself had not prescribed in this case, but his assistant, who was not a registered pharmacist, had done so. This is a condition of affairs which certainly calls for the consideration of the Apothecaries' Society. The medical practitioner is being deprived, and rightly so, of the services of unqualified assistants; here we have a child prescribed for by the unqualified assistant of a chemist, who himself has no right to prescribe. If the medical profession loyally obeys the ordinance of the General Medical Council with regard to the employment of only qualified assistants the Council must see that the legal rights of the profession are secured to them; otherwise obedience to the Council can only lead to a diversion of practice from the qualified to the unqualified. We have already heard of unqualified assistants who being dismissed by their employers owing to the resolution of the Council, had started in practice in the same district as their former employers, defying any efforts to "restrain" them. It is time that united action should be taken both by the General Medical Council and the Apothecaries' Society to protect the interests of the profession.

#### THE MEDICAL SOCIETIES, 1898-99.

AMONG the signs of the departure of the summer and the end of the vacations are the announcements of the dates of meeting of the Medical Societies. The Wigan Medical Society, which met on September 8th, appears to have been actually the first in the field. The Clinical Society of London has issued its card showing that its first meeting for the session will be held on October 14th, and its first clinical evening on October 28th. The Pathological Society of London will commence work on October 18th.

#### MEDICINE IN HOLLAND

MR. GEORGE PERNET sends us the following interesting note on the paragraph published under this head in the BRITISH MEDICAL JOURNAL last week: "Will you allow me to point out that Swammerdam was not only 'great on the natural history of insects,' but was also a pioneer in experimental physiology? He was the first to use the muscle-nerve preparation of the frog to demonstrate the contraction of a muscle which follows irritation of its nerve. This experiment was performed in the presence of the Duke of Tuscany in 1658. A description, with figure, will be found in the *Bybel der Nature, door Jan Swammerdam, Amsteldammer, of Historie der Insecten*. . . . Alles in de Hollandsche, des Auteurs Moedertaale, beschreven . . . Te Leyden, 1738 (vol. ii, p. 839. Tab. XLIX, Fig. V). Further, the Dutch naturalist and physician, produced contraction in a muscle by the contact of metals, a fact which later was to bring renown to Galvani (1789), but Swammerdam attributed it to pressure (Swammerdam: *Loc. cit.*, p. 849, Tab. XLIX, Fig. VIII). Swammerdam also made experiments on the frog's heart, and insisted on the value of frogs for experimental purposes. These interesting experiments appear to have been overlooked by subsequent writers. As to Leeuwenhoek, he must be looked upon as the father of bacteriology. In a letter to our Royal Society, addressed to Francis Aston, and dated Delft, in Holland, September 12th, 1683, he described the schizomycetes found in the mouth and between the teeth, with figures. He

again referred to the subject in another letter to the same Society in 1692. (*De Ontdekking der Bacterien*, door Prof. P. Hartnig, in *Album der Natuur*, 1884.) (See also Leeuwenhoek: *Opera Omnia, sive Arcana Naturæ detecta*, Leyden 1722; and *Trans. Royal Society*.)"

#### INDEX TO THE VACCINATION COMMISSION'S REPORT.

AN *Index* to the final report of the Royal Commission on Vaccination has been compiled in the Medical Department of the Local Government Board, and can now be obtained from the Government printers in London, Edinburgh, Glasgow, and Dublin, price 9d. The *Index* is limited to the general report, and does not include the appendices nor the dissentient statement of Dr. Collins and Mr. Picton. It is, in fact, an index to the majority's report, and is much fuller than that prepared and issued some time ago by General A. Phelps of Edgbaston, who, it will be remembered, prepared also an index to the dissentient statement.

#### THE WAR IN THE SOUDAN.

IT is from every point of view gratifying to read in the press that "The Royal Army Medical Corps deserves a complete despatch to itself, so admirably was its work done. There was a perfectly equipped field hospital fifty yards to the rear of the zariba, and a base hospital 400 yards in the rear. The wounded were carried back by reserve companies, and attended to without the least delay or confusion." There appears indeed to be only one opinion as to the highly efficient and successful manner in which the Medical Service has, in the face of very great difficulties, done its part in the Soudan Campaign. The organisation of the medical machinery, and the perfection with which it has worked reflect the highest credit on Surgeon-General W. Taylor and the officers under his command, and also on the Sirdar, who, instead of treating the Medical Service as an inconvenient encumbrance, if not a mere superfluity in the field, has done everything in his power to facilitate its effective action.

SIR J. ACHESON MACCULLAGH, M.D., medical officer to the Derry Dispensary, has been appointed a permanent inspector of the Local Government Board in Ireland.

WE are asked to state that Professor Virchow will deliver the Huxley Lecture on October 3rd not in the Charing Cross Hospital Medical School, but in the neighbouring St. Martin's Town Hall, which will accommodate a larger audience. Admission is by ticket, and seats may still be obtained by early application to the Dean of the Charing Cross Hospital Medical School.

THE list of British casualties in the recent disturbances in Crete includes the name of Lieutenant Clarke, R.A.M.C., who was wounded. Lieutenant T. H. M. Clarke was born in 1873, took his diploma of M.B. at Dublin in 1895, and was appointed to the Royal Army Medical Staff in 1897.

PRESENTATION.—Mr. Ward Humphreys, on the occasion of his leaving Cheltenham, was entertained at a dinner, presided over by the Mayor of Cheltenham, and presented with a silver tea and coffee service bearing the following inscription: "Presented to G. H. Ward Humphreys, Esq., in recognition of his public services during his residence in Cheltenham."

THE TEACHING OF HYGIENE IN FRENCH SCHOOLS.—At the Congress of the French Association for the Advancement of Science, recently held at Nantes, a resolution was passed, on the proposal of M. Brouardel, urging that the teaching of hygiene in *lycées* and colleges should be entrusted to medical men, and that it should be accompanied by the sanctions necessary to make it really fruitful. The same Congress at its meeting last year, passed a resolution with regard to the teaching of hygiene in primary schools.