It has been stated that the urethra in the female and the cervix uteri are heated to 114° F. or a fraction of a degree higher, and are kept at this temperature for ten minutes. As the prostate cannot be heated to this value the length of exposure is increased to twenty minutes.

If the patient is the subject of gonococcal infection of the epididymis and testis, one electrode is applied to the scrotum and the other is placed in the rectum as described above. The scrotum is enveloped in layers of lint soaked in salt solution and the lint is covered with sheet lead. This electrode and that in the rectum are connected to the diathermy machine and the current is slowly increased. The patient feels heat in the rectum and scrotum. When the heat is as strong as the patient can bear without pain the current is no further increased and is allowed to flow for twenty minutes. It is rarely necessary to give more than three applications to the scrotum.

The vas deferens is sometimes inflamed in the inguinal canal. When this is the case the scrotum is first treated, and then an electrode is placed over the inguinal canal. The circuit is completed by the rectal electrode.

The application of diathermy to the male urethra and the elevation of all parts of the channel to the same temperature is a task of no little difficulty. Attempts have already been made in Germany and Spain to treat gonococcal urethritis in the male by diathermy by introducing a bougie electrode into the urethra, and completing the circuit by means of plate electrodes applied to the perinæum, sacrum and hypogastrium. It is hard to say whether the frequency of gonorrhœa in these countries has diminished since this treatment has been tried. Probably it has not. The method of application just mentioned would not lead to a diminution of frequency, because it is obvious that it cannot heat all parts of the urethra to the same degree. There is considerable difference in the distance between the bougie and the directing electrodes in different parts, and if a correct temperature is produced in the shorter paths there will be insufficient heat in the longer paths. Many methods of applying diathermy to the whole urethra have been tried in the Electrical Department. That which is now under trial and seems to be giving most promise of success is the following: The electrode used for applying diathermy to the prostate and vesicles is placed in position. The penis is now turned downwards and backwards so as to lie between the testicles against the perinæum. A padded metal electrode is placed in contact with the dorsal aspect of the deflected penis, so as to extend from a point just below the lower border of the symphysis pubis to a point 2½ in. from the anus. When in position the electrodes are approximately parallel and the whole of the urethra is included between them.

The most striking proof of the therapeutic value of diathermy in gonococcal infection in the male is furnished by the results obtained in arthritis, orchitis and epididymitis. Arthritis has invariably been cured or arrested. Patients who had been confined to bed were able to resume their occupation, and no cases of recurrence have been reported. The results were no less satisfactory than those already described in cases of gonococcal arthritis in the female. With regard to the results obtained in the treatment of orchitis and epididymitis, it can be said that there are few maladies in which treatment is followed by results so consistently good and rapid. Pain is relieved during the first application. After the third application and the expiration of ten days tenderness and swelling are reduced to zero, and the sole remaining sign is some thickening of the globus minor. This thickening does not remain in all cases. As already stated, it is seldom necessary to give more than three applications. At the end of 1923 the number of cases of gonococcal orchitis and epididymitis treated had reached 34.

With regard to the infection of the prostate and vesicles, there is at present insufficient evidence to permit a final statement. The results obtained in arthritis, orchitis and epididymitis when diathermy is applied only to the prostate and vesicles and the permanence of the effects, constitute strong presumptive evidence in favour of the conclusion that infection of the prostate and vesicles can be rendered extinct by diathermy. This conclusion is strengthened by the fact that gonococci were not found in the fluid obtained by massage of the prostate after diathermy, whereas they were present before the treatment.

Few cases of anterior urethritis alone have been treated by diathermy so far in the Electrical Department. In those which were treated by the method above described the symptoms disappeared, but it is questionable if this result was obtained more quickly than would have been the case if other methods of treatment had been adopted.

Full details of the methods which have been devised in the Electrical Department for the treatment of gonococcal infection of various regions by diathermy and the particulars of 106 cases will be found in a monograph which will shortly be published by William Heinemann.

NOTES ON GENERAL PRACTICE.

THE general practitioner is, no less than other men, under obligation to face his responsibilities *honourably*,* to support himself (possibly others too), and to make reasonable provision for adverse times. Neglect to do so is really dishonourable.

Appeals are constantly being made on behalf of doctors or their relatives for financial assistance, appeals which, in the majority of cases, would have been unnecessary but for the culpable neglect of the doctor in question.

Professional protection.—Anyone who reads the current medical and lay papers must know that charges are frequently brought against honourable and competent practitioners; that skilful counsel succeed in convincing juries that white is black; and that appeals are made on behalf of the wrongfully-convicted practitioners for money to aid in their appeals from conviction.

For the very moderate sum of £1 a year every doctor can, *and should*, join a medical defence union on the very day he qualifies, if possible, and in return he will receive the best legal protection available, together with complete indemnity against costs and damages.

What sympathy does that man deserve who is too mean or too negligent to avail himself of this opportunity to be independent of assistance from his medical brethren?

Medical charities.—If you neglect to help your distressed brethren, what right have you, when yourself distressed, to look to them for help? Every year, when the voting papers come from Epsom College, the first thing I look for is the presence or absence of the little note, "the late Dr. Blank was a subscriber for many years," and there go my votes and sympathies to the candidate whose relative was a subscriber.

Life insurance.—Few are the medical students whose health is such as to disqualify them for life insurance; few who are unable to pay the small premium asked for a healthy man of 18 to 20 years of age; yet we still see, too frequently, that "subscriptions are being asked for on behalf of the widow and children of the late Dr. Blank, who died at the early age of 34, leaving them wholly unprovided for."

If Dr. Blank was uninsurable, then he was unfortunate, and it is up to us to help; but, was he?

A word of caution here: Life insurance is an important business, worth taking trouble about. Don't take the advice of an "agent"; he will naturally press the claims of his own company. Consult a specialist in insurance, a qualified and reputable insurance "broker," who acts for no one company in particular. Make sure of his qualification first. His advice will cost you nothing, and your trouble will be well repaid. Whatever his advice, cross-examine him on it: How does the company he advises compare with others as regards—

Stability: Capital, type of investments, directors, bonus for past 15 years?

Liberality: Percentage of premiums asked?

And make him show you the latest printed Board of Trade return to prove his facts.

Accident and sickness insurance.—If your finances allow of it, you should consider this too. And here, again, a word of advice. Read through the sicknesses covered carefully. Beware the list which mentions typhus, yet omits pneumonia; mentions enteric fever *and* typhoid, but omits appendicitis. In short, insist on an "all-in" policy, with the exception of venereal diseases, which no company includes, so far as I know. If you can find one that does, so much the better, if only in view of digital chancre. Your broker can help you in another respect; some companies are very loth to admit a claim; you don't know the troublesome ones, but your broker does, and can steer you clear of them. In addition, a broker does a lot of business with a company, and is not a person to offend, whereas you are only one policy-holder, and of small consequence when you put in a claim.

You may say, Why not insure through one of the societies that give their profits to some charity? Well, it is a bad principle to mix sentiment with business. If there are profits available for charities, then you are paying more than you should for such benefits as are promised, obviously. It is better policy to go to a company that has one object only in view, viz. insurance. The money you save you can yourself send to any charity that seems deserving.

THIRD CHIP.

* The word "honourably" is emphasized in the hope that Bart.'s men will never allow their relatives, or themselves, through want of thought, to become objects for charity.

OBITUARIES.

DR. KLEIN.

MY earliest recollection of Dr. Klein is a sunny Sunday morning, probably in July, 1869, at 37A, Great Cumberland Place, when my father said, as was his custom just as a meal was being served, "Oh, Ann, I have just asked so and so to come in." My mother had become used to the formula, and as there were eight or ten of us all growing and hungry,

there was fortunately plenty to eat, and an additional mouth or two made but little difference. On this occasion it was, "Oh, Ann, I have asked a young German to lunch." At this time my father was on the Council of the New Sydenham Society, and having just finished editing an edition of Carpenter's *Physiology* on his own account, he had been deputed to translate Stricker's *Histology*, and the young German had been sent to England to arrange about the translation rights as I now suppose. Punctually to time the German arrived. He was an Austrian, in reality a Slav, and was certainly the handsomest man we had ever seen. Not a word of English could he speak, and my father's colloquial German was of the slenderest, whilst except for a sister who knew a little, the rest of the family were wholly ignorant of any language but their own. Everyone was friendly, the young Klein was talkative and merry, so by the time the dinner was over the table was covered with lexicons, dictionaries and wörter-buchs, and there had been a discussion as to whether what we called Debŏrah was not in reality Debōrah, by which we learnt that our guest had some knowledge of Hebrew. We also gathered that he was poor, when with some difficulty we had discovered the meaning of "arm," and that prices in Vienna had risen greatly in consequence of the war. I believe that he came to our house several times afterwards and that satisfactory terms were arranged about the translation on behalf of Stricker. We learnt afterwards that he was one of the most talented *privat dozents* working under Prof. Stricker, that he was born in 1844, and was the son of an Hungarian merchant of Eszek, near Vienna. He brought with him introductions to Huxley, Simon, Burdon Sanderson, William Turner and Thudicum, upon all of whom he made an equally favourable impression. He returned to Vienna as soon as his business was concluded, where he continued to teach histology and embryology, but he was not forgotten by his English friends. The smallpox epidemic and a fear of Asiatic cholera led Parliament, during Mr. Lowe's Chancellorship of the Exchequer, to devote a sum of £2000 to enable the Local Government Board to undertake laboratory investigations on disease. In April, 1871, Klein was invited by Sir John Simon, Medical Officer of the Privy Council, to return to England and undertake some histological and pathological researches, to be paid for out of the grant. He accepted the invitation and was allotted rooms in the Brown Institute, on the Surrey side of the river, just opposite the entrance to the Nine Elms Goods Yard of what is now the Southern Railway. He was given the title of Assistant Professor, and placed under the direction of Burdon Sanderson, then the superintendent of the institution. Here he worked with great energy, and issued a series of reports upon acute and chronic infective processes, diarrhœa, scarlatina, smallpox, typhoid fever and cholera—reports which were judged to be so valuable and original that he was elected F.R.S. in 1875. In 1872 he was appointed Lecturer on Histology

The late Dr. Klein.

at St. Bartholomew's Hospital, chiefly by the action of (Sir) William Savory, and this post he retained until 1884, when he became Lecturer on General Anatomy and Physiology in succession to Mr. Morant Baker. He was the sole lecturer on the subject until 1900, when Dr. Edkins was appointed to share it with him. From 1903 until 1911 he lectured on advanced bacteriology, and upon his retirement in that year he was given the title of Emeritus Lecturer.

In 1873 he wrote the section on histology in the *Handbook for the Physiological Laboratory*—a work which marks the beginning of modern physiological methods in this country—and in 1876 he gave evidence before the

Royal Commission on Vivisection. His evidence excited so much adverse criticism that the Report issued by the Commissioners contains two versions—one purporting to be what he actually said, the other a revised version of what he wished to say. During the two months of the long vacation in this year I worked in his stuffy little laboratory, where with unfailing patience and good nature he initiated me into the methods of hardening, embedding, cutting freehand with a razor, and staining tissues for the microscope. It was a constant entertainment to watch him roll cigarette after cigarette with one hand whilst he was writing or drawing with the other, for cigarette smoking at that time was a novel art in England. The staining with nitrate of silver and chloride of gold I also learnt from him, and I still have a bill for "part of a rat's tail, 1*d*." The teaching stood me in good stead, for it enabled me to win an exhibition at Exeter College, Oxford, and a demonstratorship at Magdalen College under the University Lecturer on Physiology. In 1879 he published, with Mr. Noble Smith, a beautifully illustrated *Atlas of Histology*, and ten years later a small manual of the *Elements of Histology*, which had a large sale, ran through several editions, and was translated into French and German.

Teaching, however, was only of secondary importance in his life, for he was at work constantly on the origin of disease. The results of his investigations were formulated in 1884, when he published *Micro-organisms and Disease: An Introduction to the Study of Specific Micro-organisms.*

The Hospital deserves well of Klein, for it kept us in the forefront first in the teaching of histology by modern methods, and afterwards as a leading exponent of the new science of bacteriology. D'A. P.

J. F. STEEDMAN, F.R.C.S.

FRANK STEEDMAN, of Streatham, died absolutely suddenly of heart failure while sitting in a stand at Twickenham Football Ground just before the England *v.* Ireland Rugby match on Saturday, February 14th, and he will be deeply regretted by many Bartholomew's men, for amongst them he had very many friends.

A "Shropshire lad," he was born 70 years ago at Arcall. He went to Shrewsbury School, and remained its staunch supporter all his days.

Steedman did not come straight to Bart.'s on leaving school, for at first he intended to lead a country life and to become a land agent, and it was only after more than a year that he decided to join the medical profession, so that he was a little older than most of the men of his year. But he never regretted his decision, and took the keenest interest in his profession from the beginning to the end of his career.

After passing his finals he became house-surgeon to Mr. Langton, and was universally recognized as one of the very best and most practical residents, so that it was only to be expected that he should take the Fellowship of the Royal College of Surgeons soon after his tenure of office had expired.

His career as a medical practitioner was an uninterrupted success, and the causes of this were easy to find. In the first place he was blessed with abundant common sense, and, in the next, he knew his work, and kept himself always well informed of all the latest knowledge and advances in medicine. But, besides all this, he was one of the most kind-hearted and sympathetic of men, as well as one of the most unselfish and good-tempered. No wonder that he won the affection and confidence of everyone, and that he was deservedly popular with both rich and poor, and in every class of society.

He was all his life essentially a "Bart.'s man," and took the keenest interest in its welfare. At one time he was a frequent visitor to our "Surgical Consultations," and he constantly visited in our wards patients whose admission he had secured.

Many old students will also remember him as a member of the cricket elevens which represented the "Past" in the annual matches at Winchmore Hill in former years, and others will recall his enthusiasm at every "Rugger Cup Tie," and his delight when we won the cup in 1924.

Like many members of our profession, he took to golf some thirty years ago, and played two or three times a week at Mitcham.

Himself one of a large family, he was most happily married to a Streatham lady, and had five children, but neither of his two sons followed his profession.

He was active in work and in play till the day of his death, for although he had had transient periods of heart weakness for some years, he had never been incapacitated for a single day. It is probable that he knew that his life was insecure, but the knowledge never affected him, and with true courage he met danger with a smiling face, and with a smiling face he peaceably passed away. A. A. B.