why a more liberal provision for medical treatment should be made, but I will content myself with one illustration.

In Scotland there are, roughly speaking, 6000 insane paupers in asylums; in Middlesex there are 5700 in the three asylums of Colney Hatch, Hanwell, and Banstead; the latter have fourteen medical attendants; the former, treated in six parochial and eighteen district asylums, have, on the most moderate computation, twenty-four. The comparison might be carried into every detail of asylum accommodation, and in regard to the relative amounts of land provided for asylum use, the inequality would be found still more striking; the one point of medical attendants is sufficient to enforce my argument. What is true of Middlesex is true to a greater or less extent of the whole of England, that, while the buildings for the detention of the insane have been provided on a liberal scale, the means for treatment, as gauged by the numbers of medical officers, have been niggardly supplied; so that in this respect England compares most unfavourably with France, Germany, America, Russia, in fact with almost every civilised country. This result has been brought about by the building funds being derived from a practically uncontrolled source; the current expenditure, on the other hand, being sharply checked by the parish authorities.

I fervently hope that, in supplying the additional accommodation now required, Middlesex will, by providing a liberally organised hospital, set an example that will tend more than anything else to check the increase in this country of lunatics needing asylum detention.

I am, Sir, your obedient servant,

Hanwell, October, 1882.

H. RAYNER.

STRYCHNIA POISONING DELAYED EIGHT HOURS BY OPIUM.

To the Editor of THE LANCET.

SIR,—I think the following case may prove of interest to some of your readers from the long interval between the taking of the strychnia and the onset of the symptoms.

On June 24th last, at 1.50 P.M., I was called to a case of poisoning at the police station, and found in the guard-room a stout, healthy-looking, well-developed young woman of twenty-three, six months advanced in pregnancy, suffering from well-marked symptoms of opium poisoning. She was unable to stand without assistance; could with difficulty be made to answer questions; and her face was becoming pale and ghastly. A quarter of an hour previously she had been discovered in a semi-conscious state near the river, and in her pockets were found a two-ounce bottle containing a few drops of tincture of opium, a packet of Battle's vermin killer torn in two, and with five grains of the powder remaining, and a pill-box which afterwards proved to contain ordinary aperient pills; also a letter to her mother and father stating she intended to commit suicide. I could only elicit from her that she had poisoned herself, but I could obtain no further particulars. I gave a large dose of sulphate of zinc, which produced vomiting in a few minutes, the vomit being composed principally of fruit, and only smelling slightly of opium. After that she had draughts of hot water, coffee, and mustard and water, till her stomach was completely washed out. I left her much better at 2.45 P.M., with directions that she was to be kept walking up and down, and that I should be sent for immediately if any change occurred. I returned at five o'clock, and found her still improving, without the slightest symptoms of strychnia poisoning; so that I began to think it almost impossible she could have taken the vermin killer. In fact, the only difference the case presented from an ordinary one of opium poisoning was that the pupils were little, if at all, contracted; at any rate, not nearly so in proportion to the severity of the other symptoms. I returned about 7 P.M., and found that slight clonic convulsive movements of the hands, and in a less degree of the legs, had set in, and was informed they had commenced a little after 6 P.M. As she was very drowsy, and dropping off between the spasms, and as I thought it possible they might be in great part hysterical, I hesitated about giving chloral; but finding after an hour the convulsions increasing, both in extent and degree, I gave forty grains of hydrate of chloral, and had her removed to the union infirmary. An hour afterwards (9 P.M.) I saw the patient in company with Dr. Paterson. The spasms were now well

marked, extending over her arms, hands, and shoulders, and in a less degree over her legs and feet. There was slight opisthotonos and considerable pain at the pit of the stomach, but no trismus, and but little twitching of the muscles of the face. The pulse and temperature were only slightly above normal. The opium symptoms had almost entirely disappeared. She was ordered two drachms of chloral, but a drachm to be taken every hour. For a couple of hours the symptoms increased in violence, but after that they gradually subsided, and by 4 A.M. (Tuesday) had almost disappeared. Next morning she only complained of general soreness and of feeling very hungry.

On instituting inquiries we discovered that early on Monday morning she had purchased at one shop a packet of vermin killer, and at another an ounce of laudanum, a box of pills, and a drachm of white precipitate. The latter, I may here remark, was never traced. She said herself she had taken the powder a little after 10 A.M., and immediately after two ounces of laudanum. A packet of Battle's contains two grains of strychnia, so that she must have taken almost a grain and a half, and as I did not see her till nearly four hours after, the emetics could hardly have removed it. Though the poisonous dose of strychnia, as in the case of most other drugs, varies greatly from half a grain, which quantity killed Dr. Wain in fourteen minutes, still, I think the above might under ordinary circumstances be considered a fatal dose, particularly when a person is unused to the drug. Taylor mentions four hours as the longest interval before the appearance of the symptoms, while here we have nearly a grain and half producing not the slightest effect for eight hours, during which time the patient had every symptom of opium poisoning with the exception of contracted pupils. Strychnia is said, in poisonous doses, to produce dilatation of the pupils, so that it would seem as if the strychnia must have neutralised the effect of the opium on the pupils; the opium, on the other hand, neutralising, at least for a time, the effect of the strychnia on the cord. I think this might have a practical bearing in strychnia poisoning when chloral or the other usual antidotes, Calabar bean, &c., were not at hand, for though opium is mentioned in books as an antidote, still I think it is seldom or never used.—I am, Sir, yours, &c.,

ROBERT D. W. MECREDY, M.B., C.M.

Grantham, Lincolnshire, Sept. 1882.

SUDDEN DEATH AFTER DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—The following details and observations may help to explain the subject of "Sudden Death following Diphtheria," to which attention has lately been drawn in your journal.

Hitherto it has been considered by many that the action of the diphtheritic virus upon the nerve-centres was sufficient to account for sudden lethal terminations (when not obviously due to other causes), but recent observations may tend to modify that assumption.

During the Practical Pathology class at the Middlesex Hospital, in Nov. 1881, attention was particularly drawn to certain changes present in the heart of a case of diphtheria. The muscular tissue was somewhat pale and flabby, and presented microscopically the following conditions:—Muscle fibres cloudy and undergoing fatty changes; neighbourhood of bloodvessels, interstitial connective tissue and spaces, were infiltrated by an abundant proliferation of nucleated and granular cells about $\frac{1}{300}$ in. in diameter. Scattered here and there were also seen a few granular, yellow bodies, in size about three times that of nucleated cells, but possessing no distinct nuclei. This condition was not peculiar to any particular portion of the heart's wall, but occurred in several large unequally distributed areas. Both fatty and interstitial changes were seen together.

The following case is also in point:—

Sarah B—, aged fifteen, a domestic servant, was admitted into the Middlesex Hospital, under Dr. Coupland's care, on March 14th, 1882, with marked symptoms of diphtheria—pain on swallowing, dyspnoea, swollen parotid, submaxillary, and cervical glands, and abundant false membrane on tonsils and pharynx; tongue coated thickly; heart and lungs normal. Temperature 98.4°; pulse 64. She was ordered steam inhalations, and a draught containing perchloride of iron. The pharynx was painted with a saturated solution of bicarbonate

of soda. Diet, milk and beef-tea. The urine contained one-quarter albumen. The false membranes soon disappeared, the symptoms rapidly abated, and she seemed very much better. On March 21st she appeared greatly depressed, extremities were cold, and pulse became extremely weak. The urine contained one-quarter albumen. She was ordered a draught of ether and ammonia and brandy. Took her food fairly well. On 23rd, at 2 P.M., owing to the ward being emptied for the annual cleaning, she was removed to another ward, and at 10.45 P.M., same day, died suddenly. At the post-mortem examination both sides of the heart were found filled with coloured fleshy clots; walls pale and soft; valves healthy. The lungs were partly collapsed. The liver was of a nutmeg colour; the spleen soft, not enlarged; whilst the kidneys were swollen and bloodstained. Microscopically the heart presented similar characteristics to those previously described.

With the exception of some observations made by continental authorities—e.g., Leyden and others (*vide* THE LANCET, May 6th, 1882), comparatively slight attention has been paid in Great Britain to this condition of interstitial myocarditis (diphtheritic). Bouchut has stated that endocarditis is a common event in diphtheria; it, however, has not been present in any of the fatal cases which have occurred at the Middlesex Hospital of late years. In conclusion, allow me to note two important details of treatment, which I trust will not be considered irrelevant—viz., the application of solutions of alkalies to false membranes, and avoidance of chlorate of potash. Alkalies acting as solvents of greater portions of inflammatory exudations, are preferable to acids and astringents, since the latter produce coagulation, and therefore cause accumulation of the membrane. Chlorate of potash is contra-indicated by reason of its irritative influence upon the kidneys, and should therefore not be administered internally.

Yours faithfully,

V. A. WYATT WINGRAVE.

Torrington-square, W., Oct. 3rd, 1882.

"A SIMPLE OPERATION FOR VARICOCELE."

To the Editor of THE LANCET.

SIR,—The diagram of Mr. Dunnett Spanton, in your last impression, represents a "granny's knot," and not a "reef knot," which is on all hands acknowledged to be the superior one for subcutaneous ligature of veins. Both free ends of the wire or cord should be under or above the surface of the loop, conversely, to form the reef knot. In several cases on which I have operated for varicocele, I have done so by placing a doubled strong silver wire, one before and the other behind the veins, with the loop conversely, and passing the free ends inversely through each loop. A reef knot is thus formed which does not give way, and which can be tightened as frequently as deemed necessary by tension of the free ends, which are conveniently held *in situ* by being rolled round small corks. In performing this operation Professor G. H. B. Macleod used to include the veins by making the necessary puncture by means of a trocar and cannula, and passing the wires through the latter. I understand that now he ligatures the veins, and completely excises the intervening portion. In your impression of the 7th inst. Mr. Jalland states that he cuts the ligatures short, drops them into the wound, and closes it over. A piece of Chinese silk is used, previously "boiled for half an hour in a 10 per cent. solution, and afterwards left to soak for some hours in a 20 per cent. solution of carbolic acid." I presume this procedure is intended to kill the Chinese spores in the "Chinese silk." Not so many years ago, a man who confessed to the performance of such a fetish would run the risk of having his personal liberty somewhat circumscribed.

I am, Sir, your obedient servant,

Glasgow, Oct. 21st, 1882.

D. CAMPBELL BLACK.

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-ON-TYNE. — Sixty-one new students have entered at this College for the present year—viz., thirty-one for the full curriculum, and thirty for part of it. The latter, with one or two exceptions, are candidates for the medical degrees of the Durham University, and have entered in accordance with the regulations requiring them to fulfil a year of residence there.

EDINBURGH.

(From our own Correspondent.)

OPENING OF THE WINTER SESSION.—PROFESSOR CHIENE'S INTRODUCTION TO THE CHAIR OF SURGERY. — THE PHYSIOLOGICAL DEPARTMENT. — THE OLD AND THE NEW LECTURE-ROOMS. — CHANGES IN THE EXTRA-ACADEMICAL SCHOOL. — DR. MILLER'S INTRODUCTORY LECTURE.

THE winter session commenced on Tuesday the 24th. As yet it is impossible to give any accurate idea of the number of students, but so far as can be judged the large entries of recent years will, at least, be maintained. The dissecting rooms of the University, Minto House, and College of Surgeons, are well filled, and the active work of the session has already commenced.

Prof. Chiene, the newly appointed Professor of Surgery, delivered his inaugural address on Tuesday at two o'clock. The lecture was delivered, as is customary on these occasions, in the large chemical lecture-room of the old buildings. The Principal, the President of the Royal College of Surgeons, the professors of the University, a large proportion of the extra-academical lecturers, and many practitioners of medicine were present—indeed, I have never seen the room so completely filled as it was on this occasion. Professor Chiene, who is extremely popular, was well received, and the lecture¹ is acknowledged on all hands to have been a great success. Dr. Chiene thoroughly impressed his audience with his own earnestness of purpose, and with his determination to do all in his power to help each individual student in his work.

Professor Rutherford formally opened the Physiological Department of the new university on Wednesday, the 25th, and delivered an introductory address. The Principal of the University, the President of the Royal College of Surgeons, several of the professors, and a considerable number of practitioners were present, and the large lecture-room, which is calculated to seat 500 students, was completely filled. He reviewed the work done by his predecessors in the chair of physiology, and gave every credit to Hughes Bennett for the foresight and energy he had displayed in organising the first physiological laboratory in Edinburgh, and in having been the first in this country to organise the teaching of practical histology and other branches of practical physiology. He then described the objects to be fulfilled by the numerous departments of the new physiological laboratories, and eloquently pleaded for the endowment of research. He suggested the foundation of Fellowships for young graduates who have given proof of earnestness, of exceptional ability, and of a desire to prosecute original inquiry. By the establishment of such Fellowships, skilled and earnest workers could support themselves and at the same time devote their time and energy to the prosecution of original research, the objects of which are unselfish, and which confer unmistakable blessings on the whole of the human race. He hoped such endowments would fall, not only to the physiological laboratories of Edinburgh, but to all other laboratories in other universities and similar institutions. He announced that the first step towards the realisation of this wide scheme had already been taken, for a liberal gentleman, who desires to withhold his name, had, as a preliminary experiment, generously given five hundred a year to the University of Edinburgh for three years. By this means five working Fellowships of a hundred a year for three years had been established. The appointments to these Fellowships have just been made, and the university authorities are sanguine that the results will fulfil the expectations. He then showed how all the elaborate machinery provided for them in the new buildings was to enable the student to become a reasoning practitioner of medicine, and explained the order of study necessary for that object, illustrating the point by a quaint extract from the introduction to the first lectures on Clinical Medicine given in the Edinburgh Royal Infirmary by Professor John Rutherford a century and a half ago, in which it was pointed out how the reasoning physician differs from the empiric, and what are the studies needed to emancipate medicine from empiricism. The importance of physiological study to the psychologist and metaphysician

¹ The first part of this appears in our present issue.—ED. L.