house. A similar duty is performed by a committee of magistrates, who, accompanied by their medical and legal advisers, "visit and inspect", also *without notice*, at least four times a year; in addition to which, it is compulsory that visits of inspection be made twice a year at least by single justices; and most private asylums are also inspected by the Chancery visitors. Thus all private asylums are subject to *eight compulsory inspections* each year—the metropolitan asylums excepted, which have six visits a year by the commissioners, and are not in any way under the jurisdiction of the justices of the peace.

The Lunacy Acts pronounce heavy penalties on anyone who may be concerned in the illegal incarceration of a patient, his detention after recovery, or his maltreatment whilst under care. The Act prohibits anyone having an interest in the asylum, or being a partner, etc., from signing the certificates of admission; and further, as an additional safeguard, all letters written by patients are compelled to be sent to their respective addresses, or produced to the commissioners, and some very good reason must be put forward for not having so sent them.

Beyond the safeguards provided by the Lunacy Acts, the patient or his friends have a very easy remedy against illegal detention at Common Law.

The numbers in private asylums are fewer than in public asylums, and thus admit of a greater amount of that personal attention to individual cases on the part of the medical superintendent, so necessary for the proper conduct of a case of brain-disease, and which is impossible to be obtained where lunatics are herded together in hundreds and thousands.

B. And now a very few words on the Lunacy Bill before the present Parliament. Of its seventeen clauses, I give my unqualified approval to eleven, a qualified approval to three, and the remaining three I consider unjust either to the patient, to the community, or to those members of our profession who have devoted their lives to, and sunk their capital in, this work—not the least anxious, and certainly not the most pleasant, department of the profession.

Clause 1. "To enable justices to raise money to build additional asylums, or to buy private asylums, for the accommodation of non-pauper lunatics." This ought, I think, to be done for patients unable to pay more than from ten to fifteen shillings per week; but I think the ratepayers ought not to be called upon to provide accommodation for the classes above that, any more than they should be called upon to pay for the medical attendance of patients suffering from phthisis, or their maintenance at health-resorts or sanatoria.

Clause 2 is, I think, iniquitous, as it fixes the rate of compensation for goodwill and the loss of a means of living at one year's purchase only, and that profits merely, not receipts.

Clause 3 places the metropolitan houses on the same footing as regards licensing, supervision by magistrates, etc., as the provincial—a course to which I make no special objection, and which would conduce to uniformity.

Clause 4, compelling London alone to build a private asylum at the public cost, is a violation of that principle of uniformity, and quite unnecessary, as there the accommodation exceeds the demand, and the expense of building a new and unnecessary asylum would be a great injustice to the community.

Clause 5, providing that profits made from private patients go to reduce the expense of keeping paupers, is unjust to the unfortunate private patient, who not only—from being insane himself—has extra expenses for his own treatment, but, like the willing horse, is to be saddled with the burdens rightfully appertaining to other people.

Clause 6—to provide for the government and management of the new class of asylums in the same way as in the public asylums—is satisfactory.

Clause 7—"To continue the medical visitor"—is also satisfactory.

Clause 8, "providing for superior accommodation for private patients sent to pauper asylums", is good so far as it goes; but, as I have already said, this ought to be taken in hand by the hospitals.

Clause 9 I specially approve of, as, in requiring before admission the "order" of a justice of the peace—in limiting the number of persons who may sign an order for committal in any given case—in making it compulsory for one of the medical certificates to be given by a man having special knowledge of the subject, and in making provision for the detention of a patient for two days on one medical certificate of emergency—it gives a more judicial character to the proceedings, provides further safeguards for the liberty of the subject, and allows the prompt treatment of a dangerous or actively suicidal lunatic.

Clause 10 arises out of, and is a prudent safeguard of, the emergency provision in Clause 9.

Clause 11 provides for the annual examination and recertification of all patients, and is admirable.

Clause 12, like the three preceding clauses, attempts to graft some

of the provisions of the Scotch lunacy laws on our English practice; and, having had experience of both, I think the change would be salutary. This clause provides for the admission of patients, merely on a request to be placed under treatment in their own handwriting, and ratified by the consent of the commissioners.

Clause 13 provides an easy means of inquiry into any case of alleged illegal detention; which, with some alteration of detail, in order to make it consistent with the provision as to one medical examiner being specially qualified (mentioned in Clause 9), and to prevent vexatious litigation on the part of discharged lunatics and other busybodies, would have the approval of all men in the specialty.

Clause 14 aims commendably at uniformity, in that it orders the biennial visitation by the Commissioners of Public Asylums and Hospitals, in the same manner as now obtains in regard to private asylums.

Clause 15—enabling the commissioners to order the removal of any patient from a private to a public asylum, if they see fit—is unobjectionable, as they, being in a judicial position, may be trusted to act without prejudice or bias.

Clause 16, providing for a paid chairman of the Board of Lunacy, and of additional commissioners, is very necessary, in view of the additional duties this Bill would impose on that already sufficiently occupied and highly respected board.

Clause 17, and last, is merely technical, and relates to the construing of certain words used.

This Bill might fitly order the compulsory licensing and inspection of houses where single patients (on account of whose maintenance money is paid) are detained, whose case it entirely overlooks, and which, being unlicensed and practically uninspected, remain open to abuse; and it might empower the Lord Chancellor to appoint deputy or assistant-commissioners to undertake that duty, as is at present done in Scotland, with the best results.

It would also be very desirable that some more efficient regulations should be placed on the finance of those hospitals, which, from their so-called charitable constitution, are exempt from many of the restrictions imposed on private asylums—restrictions which (I will conclude this already too long paper by saying) would be cheerfully borne—nay, even if doubly strict—by the members of your as well as my profession, who are proprietors or superintendents of private asylums, and who court the utmost inspection and inquiry by any properly constituted authority, did each extra inspection and inquiry only afford them some little relief from the groundless abuse launched at them.

TRANSFUSION IN PROFUSE MENORRHAGIA.

By T. WHITESIDE HIME, B.A., M.B.,

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THE following case is chiefly of interest in showing the great advantages afforded by transfusion to a patient suffering from extreme anæmia and chronic hæmorrhage. Indeed, the patient in question has, since the operation, returned as it were to life from the very valley of the shadow of death.

On November 22nd, 1878, I was asked by Dr. Robertson of Hart-hill to see a patient of his, Mrs. G. The woman was thirty-five years of age, was fifteen years married, and had never been pregnant. She had always been healthy until five years before my visit, when her husband was savagely attacked by poachers, and almost murdered. She was menstruating at the time, and suffered much in attending on her wounded husband by night and day. The catamenia, which previously had been normal, became very profuse, and the periods lasted longer and longer as time elapsed. At the end of two years, she used to continue menstruating for about two weeks, parting with a great quantity of blood, and generally also with large clots. She became so debilitated that, for three years previous to my visit, she was totally unable to take exercise, or even to do her household work; but she was not obliged to keep to bed. Towards the beginning of November 1878, she continued menstruating profusely for four weeks, none of the numerous remedies employed having the slightest effect in checking the hæmorrhage. She had been under treatment at various times for the menorrhagia, and had been under the care of an eminent specialist in Dublin, who applied a number of leeches to relieve what he described as "ovarian derangement".

At the time of my first visit, her face was perfectly blanched and pallid, her lips colourless, and her skin generally corpse-like in appearance. She was confined to bed, and too weak even to lie on her side. She was drowsy and listless, and pulsation was little more than audible over the region of the heart. In fact, the patient's condition was very critical.

Though four weeks had elapsed since menstruation commenced, there was still hæmorrhage, the blood being bright in colour, but thin and watery-looking. The uterus was larger than normal—perhaps $3\frac{1}{2}$ to 4 inches long. The portio vaginalis was conical, with a small os. I suggested enlarging the os by incision, so as to allow the immediate application of styptics to the seat of the hæmorrhage. This was done, the strong solution of perchloride of iron being applied on a bit of lint, which was thrust well up into the uterus, the cavity of which was sufficiently dilated to make this feasible. The hæmorrhage stopped completely for the time, but returned slightly in about twenty-four hours; and the patient's general condition continued unimproved. Her husband was very anxious that transfusion should be tried, as he said that everything else seemed useless. Accordingly, five days later, on November 22nd, assisted by Dr. Robertson and Dr. Inkster of Sheffield, I performed transfusion. The husband allowed himself to be bled, and about eight ounces of blood were drawn off, during which he fainted. The blood was received in a warm vessel, whipped, defibrinated, and strained into the apparatus figured below. Meanwhile, I had laid bare about one inch of the median cephalic vein of the patient, and tied it with carbolised gut. Having made an incision into the vein above the ligature, I then introduced the nozzle of the transfuser, and the blood readily gravitated into the vein; but I only allowed it to flow into it very slowly. The patient soon remarked that she felt a warm glow throughout the body; which, however, quickly changed to a sensation of fulness in her throat and choking. All at once her breathing stopped, she became livid, her jaw fell, and a loud "rattle" in her throat announced the speedy approach of death. I instantly injected subcutaneously a drachm of ether, which I had ready for an emergency, and commenced artificial respiration; and shortly I had the satisfaction of seeing the patient rally. The transfusion was soon completed without further mishap, and the wound dressed with thymol gauze, etc. For a day or two she felt poorly (previously her condition was complete apathy), and complained of being nervous and having distressing dreams; but four days later she was decidedly stronger, and in a fortnight she was up, but complained of her feet "going asleep" if she stood for long. Within a few hours after the transfusion, the uterine hæmorrhage ceased. At the end of four weeks, she menstruated during three days; and then, after ceasing for three days, there was a slight "show", which soon stopped. At the present date, Dr. Robertson writes to me, she is "greatly improved in appearance; the colour has returned to her cheeks and lips; and she has evidently gained flesh considerably". She menstruates normally in every respect, and is becoming strong, but is hysterical. Dr. Robertson considers "the transfusion proved quite a success", and he has watched the progress of the case daily.

The apparatus figured below is one of my own device, and is

the same I exhibited at the annual meeting of the Association some years since, when it was figured in the catalogue. I believe it offers many advantages. It is made of tin, except the inner receptacle for the blood, which is silver-plated. This inner receptacle is surrounded by warm water, to maintain the temperature of the blood; and a thermometer fixed to it enables the temperature of the water to be ascertained. It is essential that the blood be of a proper temperature for the injection. A tap in the side enables the water to be drawn off, and one in the bottom lets the blood flow through the elastic tube. A short piece of glass tube inserted into the elastic tube enables the operator to see if the blood is flowing. By raising or lowering the apparatus, the pressure and consequently the rate of flow of the blood can be increased or lessened (or stopped); and, should a block occur, the piston can be employed to clear out the tube, or even, if need be, to gently force the blood into the vein. This is rarely necessary or advisable, gravity being usually sufficient to overcome such obstacles as prevent the flow of the blood. The outer receptacle of the apparatus being filled with water at about 100° Fahr., the blood is to be

drawn, whipped, and poured into the inner receptacle, the bottom tap having previously been closed. The vein of the patient having been laid bare, a double ligature is to be passed underneath it, and cut in two. With one of the ligatures thus placed in position, the vein is tied, to prevent escape of blood when the vein is opened for the introduction of the nozzle of the transfuser. With the other ligature the nozzle is secured after its introduction into the vein, by which means all escape of blood backwards is prevented. The patient need lose little more blood throughout than what escapes when the skin is divided. The bottom tap is then to be turned, and the blood allowed to flow; the elastic tube being held between the finger and thumb near the nozzle. When the whole tube is full of blood (so as to prevent air contained in the tube escaping into the vein), the nozzle is to be inserted into the vein, and tied into it by the gut or silk ligature previously passed under the vein. While the ligature is being applied, the elastic tube is to be kept squeezed by the fingers and thumb. The transfuser is then to be raised from four to six inches, the pressure taken off the tube, and the blood allowed to run into the vein. The finger and thumb being kept on the elastic tube between the nozzle and the glass tube will enable the current to be instantly stopped, should an air-bubble or clot, etc., be observed in the glass tube. Should such an accident occur, the nozzle must then be withdrawn; the air-bubbles, etc., be allowed to escape; and the nozzle be then reintroduced. Anyone can use this apparatus; and, as there is nothing to get out of order, it is always ready for use. It can be made for a few shillings.* The metallic part measures seven inches in height and five in diameter.

This is not the place to debate the comparative merits of direct and indirect transfusion. I consider the latter the preferable method. But, however done, the operation being one of the most salutary, and essentially "conservative" in surgery, it is not evident why it is so rarely resorted to. It need not be dreaded on the ground of difficulty, for it is much easier of performance than drawing a crooked-pronged molar tooth. Like most operations of capital importance, it is one requiring careful attention to minute details; but it is one which, with a simple apparatus such as the one described, can be done by anyone. I feel satisfied, too, that were the performance of transfusion not looked on as a terrible affair, and usually put off until the patient is beyond salvation, it would be found to be attended with much less real risk than is commonly supposed. One of the greatest difficulties usually is to get a person to give the blood. People have become very selfish, and have outgrown the belief in "bleeding" even more than medical men. It is painful to hear the excuses offered when the proposal is made to try to save a life at the sacrifice of a little blood; even the closest of kin begin then to feel they "are not very strong". A man recently told me he would gladly supply the blood, only he had a bad cold! Some years ago, I had to give half a pint of my own blood to transfuse into a poor woman, whose husband, after agreeing to give his own blood, became frightened at the last moment. Though a little weakened for a few days, I have felt no subsequent ill effects.

SIX CARDIAC AND VASCULAR CASES: WITH REMARKS AND ENGRAVINGS.

By EDWIN RICKARDS, M.A., M.D.,
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CASE IV. *Aneurysm of the Aorta, projecting into the Pulmonary Artery and Right Ventricle.*—George F., aged 38, a military engineer, was admitted into the General Hospital on December 20th, 1878. His history told of intemperance and syphilis. He said, that, for ten months, he had suffered from shortness of breath, and a dull aching pain in his chest; he placed his hand over the middle of his sternum to show the locality of the pain. His dyspnoea, which, though persistent, was variable, prevented his sleeping—inspiration especially was difficult. His respirations were thirty per minute; the vesicular murmur over both lungs was the same; it was very weak, and unaccompanied by any adventitious sounds. He had an occasional dry cough. His lips, ears, hands, and feet were livid. His jugular veins were distended, and, when emptied, slowly filled from below. The cardiac dulness extended up to the second rib and to two inches to the right of the sternum. The apex-beat was diffused, and was felt one inch below the nipple, in the vertical nipple-line. The impulse was feeble; no thrill was anywhere to be felt. The first sound of the heart was of a ringing character; the second sound was subdued, almost to suppression. Synchronous

* The nozzle in use is the same as that employed by my esteemed friend and former teacher Dr. R. M'Donnell, F.R.S., of Dublin, to whom I am indebted for more than a knowledge of this useful article. Dr. M'Donnell has described his apparatus and some cases in the *Dublin Quarterly Journal of Medical Science*, November 1870.