We have now described the parts essential to reproduction, the testiculi and its dependencies, and the accessory parts, viz., the prostate gland, &c.; we have also noticed the urethra or excretory canal, and given you a brief description of the penis or copulative organ. This division of the genital organs appears to us consistent with philosophical views; for we see how a portion of the genito-urinary apparatus, the prostate gland for example, may disappear (in the greater part of the rodentia) without injuring in the least the faculty of reproduction. The copulative apparatus is also merely accessory, for it does not exist in the mollusca or cartilaginous fishes: but the testicles, the secretory organ of the semen, must exist in the whole animal series; it is in fact found in all animals, and hence we have named it the essential organ; but you are not to imagine that it is always found in so complicated a degree as in the mammalia. The secretion of the semen; without which fluid reproduction is evidently impossible, has a most marked influence upon the constitution at large. Look at those unfortunate creatures who have been deprived of these organs, in compliance with a disgusting and barbarous custom; look at their effeminate form, their small puny voice, resembling that of a child; the absence of hair which distinguishes the adult. In a word, the development of various organs and even functions has been arrested by the cruel act which removes them from the ranks of men.

We see analogous effects produced in animals; thus for example, if we remove the left testicle from a stag, an animal whose horns are not permanent, the horn on that side does not fall the next year, and if the operation have been performed before the horns have shot up, they do not grow at all. Again, if both testicles be removed at the time when the horns should be reproduced, this does not take place, and the animal assumes an aspect exactly similar to that of the female. We have thus terminated what remained to be said concerning the reproductive apparatus in *man*.

DISCOVERY OF ARTERIES IN THE PENIS.—We have before us a translation of a paper published in the *Archives of Anatomy and Physiology* (Berlin), No. 2, 1835, entitled "Discovery of some arteries supposed to perform an important part in the phenomena of the erection of the penis in man and the lower mammalia," by Professor Muller, the editor of the journal. The paper forms a very interesting article, and has been translated for re-publication by Mr. John Wilson, of Bohn, and as soon as copies of the minute engravings are completed, we shall insert it.

CLINICAL LECTURE

ON

WOUNDS OF ARTERIES,

INCLUDING A CASE IN WHICH THE
COMMON CAROTID WAS TIED.

BY ANDREW ELLIS, Esq.,

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and Lecturer on Surgery in the School of Anat.,
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GENTLEMEN,—An opportunity has lately occurred to us of witnessing the symptoms and treatment of two very interesting and important cases of hemorrhage,—those of Johnson and Byrne, and to these cases I shall now call your attention, prefacing the discussion of them with a few general remarks on the structure and properties of arteries, and some observations on the established doctrine of *arterial* hemorrhage. On these subjects I will not detain you long, feeling, as I do, that it is not the province of a clinical lecturer to enter at any length into controversial arguments on anatomical or physiological subjects.

By careful dissection the parietes of an artery may be separated into three layers, which are perfectly distinct from each other, not only in their relative situations, but likewise in their physical and vital properties; and, consequently, in the morbid phenomena to which they are liable. These layers, or coats, being placed one over the other, are usually designated by the words *internal*, *middle*, and *external*. The internal, or lining coat, is delicate, smooth, and polished, exhibiting many of the characters of serous membrane, to which it bears a close analogy, both as regards its natural appearance and the pathological changes to which it is liable. However, as it differs from them in some particulars, which on the present occasion I do not feel it my duty to specify, it is usually referred to the "unclassifiable membranes" of BICHAT. The middle coat is comparatively strong, and is obviously composed of yellowish fibres, which run chiefly in a circular direction. These fibres have been considered by some physiologists to possess mixed properties, being partly muscular and partly elastic, whilst others maintain that they are not endowed with any of the attributes of muscularity. It would be foreign to our present purpose to canvass the conflicting opinions which have been advanced on this subject; let us, therefore, content ourselves

with the recollection of the important fact, that all parties agree in assigning to those fibres a power of self-contraction, with which they are certainly endowed. The external coat is often called "cellular;" however, you are not to infer from this circumstance that it is lax in its texture, the very reverse being the fact. Indeed it is only by protracted maceration that it can be reduced to anything resembling "cellular tissue." The general description which I have now given you of the structure of arteries, will not apply either to those of the brain or the nutritious arteries of the bones, which are divisible into two coats only. Taking an artery as a whole, we say it is well organized, inasmuch as it receives a tolerably good supply of those "systems" which are considered essential to organization, such as bloodvessels, nerves, exhalents, and absorbents. This being the case it follows, as a natural consequence, that arteries, in common with all the other parts endowed with vitality, are susceptible of disease, yet capable, in many instances, by the power of self-preservation, of arresting the baleful effects both of injury and morbid action. In addition to the coats which I have already described, there are certain arteries, of a high order, which possess a fourth, common to themselves and the accompanying veins and nerves; such, for instance, is the case with the principal arteries of the neck and thigh. This common investment, or sheath, is composed of dense cellular tissue, and is connected to the parts included within it by an exceedingly lax reticular membrane.

Having thus reminded you, in a general way, of the structure and properties of arteries, I now beg your attention while I submit for your consideration some important facts relative to wounds of those vessels, as established by the experiments and observations of PETIT, JONES, BECLARD, and others. When a large artery has received a small punctured wound, the following circumstances succeed the infliction of the injury. On the withdrawal of the wounding instrument, the blood escapes from the vessel, and in all probability some of it will make its way through the wound in the sheath into the neighbouring cellular membrane; or even a portion may follow the instrument out through the wound in the integuments. Now if the wound should be of trifling extent, the breach may be repaired by some of the blood, at the moment it issues from the aperture in the artery, becoming entangled in the loose reticular membrane which connects it to the sheath; by this means, the correspondence which previously existed between the aperture in

the artery and that in the sheath is completely done away with; the blood coagulates, and presents a sort of temporary compress or barrier against further extravasation. In the course of a few hours, inflammation is established in the lips of the wound, the arteriæ arteriarum pour out lymph, this quickly becomes organized, and the adhesive process finally seals up the wound; and there being no further use for the clot of blood, the absorbents effect its removal.

Such are the salutary changes accomplished by nature, provided the wound of the artery do not engage more than one-fourth of its caliber. Let us now suppose a case in which the vessel has been completely divided, and inquire what steps nature will take in that instance, with a view to accomplish a cure independently of the interposition act. In a case of this description, the cut extremities of the artery contract as to their diameter, and retract within the sheath at the moment the division takes place; the gush of blood, which must be considerable, is quickly followed by the fainting of the patient: a languid state of the circulation is the immediate consequence. Accordingly a coagulum forms between the retracted extremities of the wounded artery, so that all that portion of the sheath which was left empty by their retraction, is now completely filled up by coagulated blood. Coagula also form within the extremities of the divided artery, extending from the mouth or mouths to the next anastomosing branches. In a short time inflammation will set in, as in the former case, and lymph will be shed by the small vessels of the wounded artery, which will constitute a sort of boundary or line of demarcation between the internal and external coagula. The next stage consists in the organization of this lymph, and the establishment of the adhesive inflammation, by which the artery is rendered impervious for ever. Under these circumstances, the future circulation of the limb must necessarily be carried on by means of the collateral branches, which gradually become enlarged for the purpose. When an artery is divided to all but one-fourth of its diameter, and then left to nature, according to the experiments and observations of the authors already alluded to, it is quite possible that the individual may survive the consequent hemorrhage without the aid of surgery. The steps taken by nature do not materially differ from those already mentioned in the case where the division has been complete, inasmuch as the remaining fourth is quickly removed by absorption, and the future circulation carried on by means of auxiliary

branches. When a large artery is cut through one-half of its diameter, and then left entirely to nature, the animal perishes; or should the vessel have been previously deprived of its sheath, as in some of the experiments of Beclard, a smaller wound may be attended with a fatal hemorrhage.

Having thus briefly adverted to the means adopted by nature in suppressing hemorrhages consequent upon wounds of arteries, I now beg your attention to a few observations as to the different methods employed by art for the accomplishment of the same object. The surgical means of restraining hemorrhage may be fairly included under five heads, viz., styptics, caustics, the actual cautery, pressure, and the ligature. Any substance capable of arresting hemorrhage without injuring the structure of the bleeding vessel or vessels, is, in surgical language, denominated a "styptic." All styptics do not act in the same manner; for instance, some accomplish the desired object by exciting the contraction and retraction of the vessels; whilst others prove efficacious by promoting the formation of a coagulum on the surface of the wound. To the first class I would refer cold air or water, spirits of turpentine, diluted acids, solutions of certain astringent salts, such as super-sulphate of alum, acetate of lead, the sulphates of zinc, iron, and copper. To the second belong certain dry absorbing substances, such as agaric, the pith of rushes, the fur of a hat, and cobwebs. I consider that these substances prove useful by absorbing the thinner parts of the blood with which they combine, and in this way assist the fibrine, or coagulating portion, in forming a common clot; by which further effusion is resisted. I need scarcely tell you, that styptics can only prove useful when the bleeding is from small vessels.

The caustics most frequently employed as anti-hemorrhagic remedies are the nitrate of silver and sulphate of copper. The latter was much prized some centuries back by the surgeons of that time, who being unacquainted with the superiority of the ligature, employed it, even in cases of amputation, under the name of "the blue button of vitriol." The instances in which caustics of any kind are had recourse to in the present day are exceedingly rare; in fact it is only in those cases where styptics and pressure have proved ineffectual, and where the ligature cannot be conveniently applied, that I have myself found the nitrate of silver very useful in suppressing hemorrhages from wounds of the tongue, and in cases of obstinate bleeding from leech-bites. I may here mention, that the practitioner is often annoyed by perplexing hemorrhages of

this description, when leeches have been applied to children. I recollect having heard, on one occasion, a distinguished lecturer in the city call the attention of his class in a very forcible manner to this "astonishing phenomenon," which he "would not pretend to explain." The fact in question, however, does not appear to me to be so opposed to the well-known laws of the animal economy as to draw forth the humiliating declaration of the learned professor. When we call to mind the high degree of vascularity the skin of the child possesses, the rapidity of its circulation, the small quantity of fibrine which exists in the blood at this period of life, and the utility of a clot in stopping hemorrhages, the "astonishing phenomenon" is deprived of the alleged obscurity, and rendered intelligible to all medical men of moderate attainments and ordinary understanding. The caustic differs in its mode of action from the styptic, inasmuch as it not only stimulates the vessel to contraction, but likewise produces a slough or eschar, which acts as a temporary plug to the open extremity of the wounded artery. However, should it unfortunately so happen that this temporary barrier becomes displaced before the adhesive inflammation has permanently closed the wound, the bleeding must inevitably occur. Under these circumstances you must at once perceive that caustic is a very uncertain means of suppressing hemorrhage.

The actual cautery was formerly a favourite with surgeons as an anti-hemorrhagic remedy, but it is now employed only in those cases where styptics and caustic have proved ineffectual, and neither pressure nor ligature can be applied with advantage; such, for instance, as after the removal of fungous growths from the antrum, vascular tumours from diseased bones, &c. &c. The *modus operandi* of the actual cautery is not materially different from that of the ordinary caustic: the superior degree of activity of the former seems to constitute the difference between them.

Pressure may be applied in two ways, with a view to suppress hemorrhage from a wounded artery, viz., either on the trunk of the vessel leading to the wound, or immediately in or at the wound itself. For example, let us suppose a person to have received a wound of the popliteal or tibial arteries, and that a smart hemorrhage is the consequence. In a case of this kind the surgeon should in the first instance either make, or cause to be made, pressure on the femoral artery, until the necessary steps for securing the vessel at the wound can be taken. Thus, then, you are to recollect that when pressure is applied at

a distance from the wound the advantage gained is only of a temporary nature. Let us now suppose a case in which there is an extensive lacerated wound in the palm of the hand, by which the palmar arch and its branches have suffered severely, and the consequent bleeding is considerable. The best means of treating a case of this description is by a combination of *styptics* and *pressure*, made at the wound, in the following manner:—A small portion of lint or sponge should be dipped in a solution of alum, spirits of turpentine, or some other styptic of this class, and then applied to the mouths of the bleeding vessels; a second compress should then be placed over the first; and so on until by a succession of them a cone is formed, the apex being in the bottom of the wound, whilst its base should project above the level of the skin. The compresses having been thus adjusted, they should be kept firmly in their place, by a roller applied around the hand. The dressings may, with advantage, be wetted from time to time with cold water; but they should not be removed for three or four days, provided the patient do not suffer from pain and tension in the parts engaged in the injury. By this time the adhesive inflammation will have closed up the mouths of the wounded vessels, and suppuration will be established, so that the compresses may now be removed both with ease and safety. When arteries of a moderate size have been divided by a sharp-cutting instrument, the bleeding may be restrained in many instances, by simply bringing the lips of the wound in contact with each other, and retaining them in this position by suture and bandage. This is the practice usually adopted after operations performed on the lips, either for the purpose of removing morbid structure, or curing congenital malformations.

Of all the methods supplied by art for restraining *arterial* hemorrhage, the *ligature* justly claims the first place. I wish therefore to call your attention to some of the effects produced by its application. At the moment a ligature is firmly tied round an artery, the cavity of the vessel is not only rendered impervious, but its internal and middle coats are cut completely through; the blood must necessarily be determined to the collateral branches, which become enlarged for its accommodation. All that portion of the artery which may extend from the ligature to the next collateral branch, becomes filled with a coagulum, but should it so happen that the ligature was tied close to the origin of an anastomosing branch, then there will be no coagulum formed, for this obvious reason, that there was no

resting place left in which the blood could coagulate. The phenomena which I have just mentioned are of immediate, and almost simultaneous occurrence; but in the course of a few hours other important changes ensue. Inflammation takes place in the divided coats of the artery; this necessarily gives rise to the effusion of lymph, which quickly becomes organized, so that the vessel is now obliterated by the process of adhesion. The ligature by its pressure on the external coat excites ulcerative absorption in this tunic, which continues until the artery becomes completely divided, and the ligature itself detached. In the course of time, the coagulum will be absorbed, and the artery will degenerate into a sort of ligamentous substance, up to the next collateral branch.

Having made these preliminary observations, I think we may now advantageously proceed with the discussion of the cases before us. They will be read for you as noted down by our intelligent friend Mr. CULLEN.

Case.—January 19th, 8 p.m. Samuel Johnson, aged 28 years, and of respectable appearance, was brought to the hospital at 5 o'clock this evening with a wound about an inch and a half in length and extremely deep, extending from the angle of the jaw towards the chin. The submaxillary gland was completely cut through, and there was profuse hemorrhage both from the upper and lower parts of the wound, supposed to come from the cut extremities of the facial artery. The bleeding could be restrained tolerably well by pressure made in the wound when directed towards the ramus of the jaw. He was extremely cold, pulseless, and quite exhausted. He was accompanied to the hospital by a medical gentleman, Mr. BARKER, who stated that he had been suddenly called in to visit the patient, whom he found at the house of a respectable family at Summer Hill, in an almost lifeless state; that "he had been informed, that the unfortunate man had been in a state of despondency for some time past, and that he had himself inflicted the wound with a razor a few minutes before his visit." Soon after the patient's arrival at the hospital, the wound was enlarged and the bleeding vessel sought for, with a view to secure it in a ligature; however, the great depth of the wound, the constant supply of blood poured into it, and the retracted state of the artery, rendered the attempt fruitless. The wound was then plugged up with lint dipped in spirits of turpentine; graduated compresses were next applied, and kept firmly on with a roller. Immediately after the wound was dressed an effort was made to take off the

patient's clothes, but on assuming the erect posture in order that his coat might be removed, he instantly fainted, and was consequently again placed in the recumbent posture. About three hours afterwards, having recovered his strength a little, he quietly got out of bed, stole down stairs, and ran out of the hospital. He was immediately pursued, and overtaken within a few doors of the hospital, leaning against the railing of an area, having become much exhausted in consequence of the previous loss of blood. He was brought back to the hospital, and put to bed; an anodyne draught was given him, which he tasted and then flung out of his hand.

20th. He spent a restless night, talked much of going home, is irritable, and seems unwilling to answer questions. Pulse quick and feeble; the temperature of the skin natural.

22nd. He has been peevish and impatient since last report; is constantly fiddling with and pulling at the bandage and dressings. This morning he applied the bread and milk he got for his breakfast to the wound, which looks indolent, and quite free from suppuration. He strenuously refuses to take medicine.

25th. Nothing particular occurred from the 22nd up to six o'clock this morning, when he became alarmed by a fresh gush of blood. He immediately leaped out of bed, and ran out of the ward for assistance, crying out that he was "bleeding to death." The hemorrhage was restrained by compression and bandage, as in the first instance; and he is at present more tranquil and manageable than he has been since his admission into the hospital.

26th. At eight o'clock yesterday evening having felt the dressing wet with blood, he called for assistance as in the morning, and on removing the bandage to expose the wound a frightful gush took place, which, in an instant, reduced him almost to a state of syncope. Compression was made, and Mr. Ellis and Mr. O'Reilly were summoned. On their arrival Mr. E. enlarged the wound, but the continued hemorrhage, which was very profuse, rendered it impracticable to particularize or secure any vessel. After a short time, the patient having become exhausted, the bleeding ceased, but still the open vessel could not be found. Under these embarrassing circumstances, it was deemed expedient to tie the common carotid artery. Accordingly an incision, about three inches in length, was extended from the wound down along the inner margin of the sterno-mastoid muscle. By means of a knife and director,

the various layers of parts were successively removed from the skin down to a lymphatic gland which lay in front of the artery, and which, in consequence of the oblong shape, whitish colour, and the borrowed pulsation it presented, was for a moment mistaken for the vessel itself: however, on raising the gland a little out of its place, the descendens noni and sheath of the carotid came into view. The sheath was now cautiously opened with a blunt silver knife (a fruit-knife), and an aneurysm needle armed with a ligature passed round the artery, from without inwards. The ligature was now tied, and one end having been cut off close to the knot, the other was drawn out through the recent wound, the lips of which were brought together by adhesive plaster; the original wound was filled with lint as before. The patient was then ordered a composing draught, which had the effect of procuring some refreshing sleep through the night. He feels comparatively well to-day. Pulse 96, soft and compressible.

27th. He passed rather a restless night, got out of bed, and sat sometime at the fire; pulse more frequent than yesterday; the pulsation has returned to the temporal artery of the affected side, but is extremely feeble; the bowels have not been moved; was ordered a purging draught.

28th. He was very troublesome during the night, got no sleep, and attempted to remove the dressings from his neck. At present he is extremely irritable, and obstinately refuses to take medicine of any kind.

29th. He was exceedingly restless through the night, and got out of bed three or four times. In the course of this day he got the blanket over his head, and then commenced picking and pulling at the dressings until he removed them, and exposed the ligature. The dressings were reapplied, and on expostulation he promised to be quiet; indeed, he always promises fairly, and seems quite rational when spoken to.

February 1st. He has been tolerably well since last report up to eleven o'clock yesterday, when he suddenly became cold, weak, and sick; his stomach turned and ejected its contents; the pulse fell to 60, and was scarcely perceptible. He was given some warm wine, which was immediately rejected by vomiting; he then recovered a little, but suffered a good deal from time to time during the day from sickness of stomach and hiccup. At ten o'clock p.m. he complained of numbness in the affected side, which extended from the head and face down the arm. He was ordered carbonate of ammonia, with a mixture of opium, and lemon juice to be

taken during the effervescence, but he refused taking it. At present his stomach is irritable, but less so than it has been during the night; he continues to refuse medicine, but consents to take a little chicken broth.

3rd. He took some broth, which seemed to agree with him tolerably well, but he has been very much teased with a very distressing hiccup. The ligature came away with the dressing to-day; the wound is nearly healed, but looks pale and glassy. He is ordered a cordial mixture containing peppermint water, calomel, magnesia, acetated mixture of opium, ether, and sirup.

4th. He took the mixture regularly without advantage, the hiccup having continued with little intermission during the night, and being at present very distressing. Ordered a fetid enema, and a sinapism to the epigastrium.

5th. Hiccup as before; bowels confined. To have a draught of castor oil and spirits of turpentine, and the fetid injections to be repeated every third hour until the bowels are affected.

8th. The hiccup has continued with little intermission since the last report, although the bowels have been freely acted upon; twelve leeches were directed to be applied to the epigastrium, and a draught containing thirty drops of the acetum opii to be taken at bed-time.

9th. The hiccup ceased immediately after he took the opiate draught, and he slept quietly during the night; however, the hiccup returned at ten o'clock this morning, and is at present as violent as before. He was ordered a blister to the epigastrium, cathartic pills during the day, and the opiate at bed-time.

10th. He slept for three hours last night without intermission; but the hiccup annoys him occasionally to-day; in every other respect he appears to be quite well.

14th. He took an opiate draught every night since last report; the hiccup has left him altogether, and he is in every respect perfectly well, but is unwilling to return to his friends.

Such, gentlemen, is the history of Johnson's case, and indeed the report is so ample and so explanatory, that little remains for me to say in the way of commentary. It would have been very desirable, were it practicable, to have tied the wounded artery in the first instance; but having failed in my efforts to accomplish that object, I had recourse to an irritating styptic and compression. I selected the turpentine, hoping that by its stimulating

properties it would excite a sufficient degree of inflammation to seal up the wound in the bleeding vessel by the process of adhesion; but, in this speculation I was unfortunately disappointed. I may here mention to you that wounds inflicted by suicides are usually indolent, and seldom inflame or heal like wounds produced by other causes. I attribute the difference to the morbid state of the patient's mind; which must necessarily influence the curative process in cases of this description. It is somewhat remarkable that the bleeding did not occur when the patient himself removed the compress and bandage on the third day after the infliction of the wound; and that it should take place at so remote a period as the sixth day, when no exciting cause whatever existed. You may very naturally inquire, why was not the external rather than the common carotid tied? My reply is, that under all circumstances of the case it was both an easier and a safer operation to tie the common than the external carotid. If the latter be tied, the ligature should be applied below the origin of the labial artery, otherwise the operation would be worse than useless: now, this would bring the operator down to the lower third of the external carotid, where it is crossed by the digastric and styrogoid muscles, and the ninth pair of nerves. Well then, let us now suppose that these parts have been properly disposed of; the thyroid and lingual arteries, which arise from this part of the vessel, come into view, so that the ligature must be applied either close to the origin of the external carotid itself, or close to those vessels. Under such circumstances a coagulum could not be formed; the adhesive process would be interrupted by the circulation of the fluid blood; so that the coming away of the ligature would, in all probability, be attended with a secondary fatal hemorrhage. Thus, then, you may perceive, that the operation of tying the external carotid would be both difficult and unsafe, and consequently liable to objections which cannot be fairly advanced against the propriety of tying the common carotid under the particular circumstances of the case before us. It is comparatively easy to expose the common carotid in the upper third of its course; and I am induced to think that the difficulty of passing a ligature around it, without including or otherwise injuring the internal jugular vein or par vagum, has been greatly exaggerated: I must say that neither of these important parts presented

the slightest obstacle to the passing of the aneurysm needle, nor can I confidently state that I saw them at all. However, be it remembered, that the operation was performed under rather embarrassing circumstances, and by candle-light.

The danger of secondary hemorrhage from the common carotid, on the separation of the ligature, is not, in my opinion, very great, provided the artery was in a healthy state previous to the operation; for the fact of its not giving off any important branches from its origin to its termination, is a circumstance conducive to the formation of a long coagulum; consequently, the adhesive process which is going forward in the neighbourhood of the ligature, is not very liable to interruption, either from the "vis-a-tergo" of the heart's action, or the circulation of the fluid blood.

The next feature in the case which I deem worthy of your attention, is the very distressing hiccup which occurred on the 3rd of February; here, I beg to observe, that the causes and pathology of hiccup are but imperfectly understood; however, it is usually considered to indicate a morbid action of the diaphragm, sympathetically induced by irritation in the stomach. Taking this view of hiccup it might be fairly supposed, that in this instance it was the result of some injury done to the par vagum or phrenic nerves, in the neighbourhood of the wound; but, when it is recollected that this symptom occurred, for the first time, on the very day the ligature came away, which was the ninth after the operation, the idea of attributing it to any such cause must at once be abandoned. On the other hand we ought not to forget the fact, that the medicines which are usually administered for the purpose of correcting acidity in the stomach, and other causes of gastric irritation, were for a considerable time employed without advantage, and that it was not until the acetum opii was taken in large doses that any beneficial effect was produced.

I do not feel that further remarks on the present occasion would be productive of much advantage; I trust I have already said sufficient regarding the origin, treatment, and termination of the case under consideration, to convince you of the great benefits which the science of surgery is capable of conferring on suffering humanity. I have now trespassed so long on your time and attention, that I will leave the discussion of Byrne's case to my intelligent colleague Mr. Adams, whose acquirements and knowledge of the subject qualify him to do you ample justice.

CASE OF CATALEPSY.

By ROBERT S. HANNAY, M.D., *Lurgan.*

THE subject of this case is a robust young woman, with light blue eyes, brown hair, and fair skin. She had been married against her mother's will eight months previous to her illness, at which period she was seventeen years old, and weighed 182 pounds.

On the 13th of June, 1834, she complained of headach and pains in her back, when she sent for Mr. Hume, whom she had engaged to attend her during her approaching confinement. Mr. H. visited her several days in expectation of a miscarriage, but the symptoms becoming very serious, Dr. Miller and Mr. Bell were called into consultation. On the 17th they had her bled and put into a warm-bath at 100°. Whilst in the bath she lost the powers of speech and deglutition, the latter she has never recovered. From this time till the 29th she had frequent attacks similar to those hereafter described.

June 29th. Her husband requested me to visit her. On going to see her I found her suffering much from hunger. I advised the stomach pump to be used, and on its arrival we injected a pint of gruel into the stomach. Shortly after using the pump, she began to toss about in bed, from side to side and forwards, so that her head touched the bed while she was in the sitting posture; after tossing about for an hour and a quarter she threw herself on her back, pointed her fore-finger to the ceiling, and fixed her eyes as if looking steadfastly at the object to which her fingers were pointed, and remained in this state of catalepsy for an hour and a half she had four such attacks on the 29th; whilst in the fit her pulse was 72, full, and regular. On moving her arm or finger, the position in which it was left was retained till she awoke from the fit, which she did with a gentle moan, and continued to moan and scream as if in labour till she again commenced to toss about as before. As she had lost the power of expelling the urine the catheter had to be used, and a pint of thick urine of a dark colour and fetid odour was taken away. She had not slept for four nights, therefore sixty drops of laudanum were administered by the stomach pump. On examination per vaginam a round and solid body was felt in the uterus, the neck of the uterus projecting into the hollow of the sacrum like a nipple, a little more than an inch in length.

June 30th. Slept four hours last night,