

CANADA MEDICAL JOURNAL

AND

MONTHLY RECORD

OF

MEDICAL AND SURGICAL SCIENCE.

EDITED BY

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CANADA

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ORIGINAL COMMUNICATIONS.

ART. XIX.—*Successful Operation for the cure of Occlusion of the Vagina, and a partially successful one for Vesico-Vaginal Fistula in the same patient.* By ROBERT L. MACDONNELL, M. D., Surgeon to St. Patrick's Hospital; Lecturer on Surgery, St. Lawrence School of Medicine, Montreal, &c., &c.

As cases similar to the following are not of common occurrence, I have thought that an account of it would not be uninteresting to the profession:—

A lady, aged 22, was delivered, after a tedious labour of five days duration, of a dead child, two years previous to her consulting me. She recovered slowly, and much inflammation and suppuration of the genitals ensued. She was confined to her bed for nearly a year, and when she had partially regained her strength, she discovered that the orifice of the vagina was closed, and that through a small aperture, about the size of a crow quill, situated about half an inch under the arch of the pubis, the urine flowed whenever she attempted to move, and could be passed through this opening by a spontaneous effort. It was also noticed that the menstrual fluid trickled through this opening at each monthly period. I was consulted by her medical attendant as to the nature of the affection, and the treatment to be pursued, and I advised a gradual dilatation of the orifice by means of waxed bougies, as it appeared to me, that the small orifice was the opening into the obliterated vagina. This practice was persevered in for about a year, when the lady decided on consulting me personally. When she arrived in Montreal, I was absent, and Dr. Hall, who was then visiting my patients, saw her. He found that the orifice had been somewhat dilated, and that the finger could be introduced, for a certain distance, when it came in con-

tact with a resisting substance that prevented further entry. He advised a continuance of the dilatation. I was again consulted, and now recommended an operation, to which the lady readily consented, as her life had become miserable in the extreme ;—pus, urine, and the *debris* of the menstrual discharge were almost constantly flowing, and she was obliged to withdraw herself from society in consequence of the offensive odour that always surrounded her. The integuments of the inside of thighs, and round the anus, were always in a state of excoriation, and although ablution was practised several times a day, this condition could not be prevented, and added much to her sufferings. It is not unworthy of remark that, of all the remedies employed to relieve her, consisting of lotions of a cooling and anodyne nature, ointments, liniments, &c., that she derived most benefit from a 20 grain solution of nitrate of silver, applied immediately after the excoriated parts had been thoroughly cleansed with soap and water. This not only kept the diseased action in check, but acted as a local antiphlogistic, relieving the painful sensation of burning and scalding that used to afflict the patient. Her strength was exhausted, she had become much emaciated, and her spirits were greatly depressed. In the latter part of October, 1851, I proceeded to the part of the country in which she resided, accompanied by Dr. Hall. We there met the surgeon under whose care she had latterly been placed, and from him, and from the patient, herself, learned the following particulars :—She had, it appeared, been advised to consult a surgeon from the United States, who told her that the orifice before alluded to, was the *meatus urinarius*, that any attempt to dilate it would be injurious, and proposed that an aperture should be made in the structure intervening between this and the anus. This view of the case appeared to be confirmed by the fact that, *whenever the surgeon attempted to dilate the opening by means of a very small speculum procured for the purpose, the urine used to flow freely, and no other passage was discoverable, leading to the bladder.* The real meatus, nymphæ and clitoris were removed, and an inflamed mucous membrane closely applied to the under surface of the arch of the pubis, and the cutaneous surface of the labia majora, were the only external marks of genital organs remaining ; a hard, gristly cicatrix occupied the entrance of the vagina, and firmly resisted the finger, barely allowing a very small, three bladed speculum to pass within the orifice. Having examined the condition and locality of the rectum, as well as I could, and being satisfied that the orifice was not the meatus, nor a dilated urethra, I determined, with the consent of my colleagues, to remedy the defect by the following operation :—The patient was placed on a table, before a large window, and the parts

exposed as in the operation for lithotomy, and chloroform administered. The speculum being introduced, the blades were opened as much as possible, and two deep incisions made downwards towards the rectum, including a large triangular, wedge-shaped portion of the cicatrix, the apex of which was posterior, next the rectum. The sides of the wound separated widely, the wedge-like portion was taken away, and the dissection extended upwards for about two inches unto the vagina. We now examined for the cervix uteri and could not find it, but easily recognized a movable body, formed, as we believed, by the uterus itself lying in its natural position, although none of us could detect the os tincæ.

After a careful examination, I was enabled to get my finger behind a thick membranous structure that divided, like a diaphragm, the anterior from the posterior part of the vagina, and through the medium of which the uterus had been felt. I soon reached the os and cervix uteri, and having divided the membrane by an incision carried upwards, we were enabled to introduce the speculum and examine occularly the mouth and neck of the womb. *The Vagina was now restored.* A few ridge-like bands passing along the posterior wall, were in succession divided, and grated audibly under the touch of the knife. Not much hæmorrhage ensued, and no vessel had to be tied. The patient having recovered from the state of insensibility, requested to have all further interference delayed until the next day. She was placed in bed, a plug of lint passed into the vagina, and an anodyne draught administered. Every thing went on well until about 12 o'clock the same night, when smart hæmorrhage ensued, and after some trouble we discovered, by means of the speculum, the bleeding vessel about two inches up the vagina, on its posterior surface. A ligature was passed round it, and the bleeding immediately ceased. She slept well afterwards. The next morning, we made a careful examination of all the parts, and found that the original sloughing process had destroyed not only the nymphæ, clitoris, under surface of urethra, but that a large transverse vesico-vaginal fistula also existed; the entrance to the bladder being, in fact, through this transverse slit, *no vestige of the urethra remaining.* This was an unexpected complication, for though we were fully satisfied that a great portion of the urethra was removed, yet we thought that sufficient of its vesical extremity remained to answer the purpose of a conduit, and to prevent escape of urine. The discovery of this opening now explained what before was obscure, viz: that the patient could not retain the urine, whenever the speculum was introduced, for the orifice in the cicatrix

being on a level above the vesical opening, its edges served as a barrier in preventing the escape of the fluid.

Being obliged to return to Montreal the day after the operation, I gave directions to the patient to remain quiet in bed, and to introduce daily a plug of waxed lint in the shape of a rectum bougie, so as to prevent the future contraction of the passage. A good deal of suppuration ensued, but the patient recovered quickly from the effects of the operation. The wound healed completely, and the organ was restored to all its functions. The catamenia appeared regularly, the patient gained health and strength, and was soon enabled to go about, and attend to her household affairs. The urine, however, escaped through the fistula, except when she lay in a position with the hips elevated, and in consequence of this inconvenience, I advised her to come to Montreal to have a second operation performed; informing her, that if no benefit ensued, no bad consequences were likely to follow an attempt at *contracting the fistula*: for as the reader must at once perceive, the ordinary conditions of vesico-vaginal fistula being absent, the common operation of closing the fistula could not have been performed in this case, as supposing it feasible, the only orifice for the escape of the urine would thus have been obstructed. It was thought that surgery might be employed to advantage, in so altering the shape and size of the opening, that instead of a transverse slit, about one inch and a third long, situated immediately behind where the normal neck of the bladder should be placed, that a *circular* orifice might be substituted, which, if it did not answer completely all the purposes of a sphincter, would at least, check the flow of urine, and might diminish the inconvenience arising from its escape. Moreover, I was not without hope, that if the fistula could, by any means, be made to assume a circular shape, some mechanical apparatus, retained in situ, like Simpson's uterine supporters, might be contrived, with a truss-like pad to press against the orifice, and thus help in preventing the escape of the bladder's contents.

With this view, on the 26th of April, 1851, the following operation was performed:—

The patient was placed on her hands and knees on the edge of a bed, a bi-valved speculum was introduced, and the fissure fully exposed. Assisted by Dr. Hall, I performed the operation as follows:—The edge of the fissure, which was much thickened, hard and gristly, was pared with a scalpel until a raw bleeding surface was procured, then curved needles armed with ligatures, were introduced by means of Jobert's *porte aiguille*. The first entered at a point a little to the right of the centre of this transverse lip, and came out at a distance of a quarter of

an inch ; the second was introduced at a little distance to the external to the first, and emerged at an equal distance from the point of exit of the first suture, and the third one was entered and brought out in a similar manner, the same distance between the points of entrance and exit being preserved as in the instances of the other two sutures. The ligatures were now fastened, and what was before but *one transverse* lip, now was converted by the tying of the ligatures into *two*, uniting in the median line and *taking a direction backwards*. If this description be not sufficiently plain, let the reader take a dried bladder, cut away all the inferior part of it near the urethra, together with the under surface of the urethra, in such a manner as to have a transverse lip at about one inch from the neck of the bladder, then let him introduce three ligatures at regular distances and tie them, and he will find that he not only contracts or puckers up the opening, but that from one lip he has made two, and that the line of their junction is backwards and forwards. This was the only modification of the operation for vesico-vaginal fistula that I considered suited to the case. The tying of ligatures in deep cavities has always been found a difficult and tedious part of an operation, but the following method first recommended by Sir P. Crampton in staphyloraphy, will be found to answer remarkably well. One end of the ligature is passed through a *brass* bead, (steel will break,) such as are used in ornamenting purses, the other end being passed through both edges of the wound, is made to pass through the bead, and both ends of the ligature being now in the bead, the latter is pushed up against the incised edges, and then pinched firmly on the ligature, by means of a jeweller's pincers, so as to tighten it in such a way that it cannot move in one direction or the other. When it is necessary to remove the ligature, the bead and all can be taken away at the same time. This form of suture I have been in the habit of describing in my lectures as *Crampton's suture*, and I can strongly recommend it to the attention of surgeons.

Circumstances to which it is unnecessary to allude, obliged her to go home sooner than I wished, (May 6th) but not before she derived very great, although not complete, relief from the operation. She is now enjoying excellent health and able to go about as she pleases. She can retain water for nearly two hours, and in certain positions for even a much longer period. Having derived a greater amount of relief from surgery than she ever expected to procure, and being restored to society, she is unwilling to undergo the risk or pain of any further interference, for I need not mention, that it is not easy, or indeed safe, to put a patient under the influence of chloroform, who has to be retained in the position already described, for the length of time that these operations usually take to perform.

It is, perhaps, unnecessary to state, that for obvious reasons, the name of the accoucheur who attended her, and the excellent surgeon who afterwards had her under his care, as well as the locality where the patient resides, are intentionally omitted.

It will at once be apparent to all practical surgeons, that the reason I removed a wedge-shaped portion of the cicatrix, was to prevent the possibility of reunion by granulation taking place, which would inevitably have restored the occlusion. I may mention in conclusion, that the pelvis was of the ordinary dimensions, and that should she become pregnant, there is little difficulty to be anticipated in the act of parturition.

ART. XX.—*Trinidad de Cuba, as a climate for invalids.* By
HORATIO YATES, M. D., Kingston, C. W.

[THE following interesting communication was forwarded to the Editor of the late *British American Journal of Medicine*, who has kindly sent it to this Journal for insertion:]

Knowing that there is a good deal of doubt and uncertainty felt by the profession, as to what climate is best adapted as a *winter residence* for their phthisical patients, I send you a few words with reference to *Trinidad de Cuba*, for I believe it to be the most desirable for such cases of any locality that I have ever seen or heard of.

Situated on the south side of the Island it is protected by a range of mountains, which stretch from one end of the country to the other, from the harsh winds that sweep over the northern continent, in the winter. Whereas these winds form almost the same objection to the *north* side of *Cuba*, that you find in the southern-most of the United States.

Trinidad is built upon a delightful acclivity, four miles from the sea coast, and at an average elevation of 240 feet. It lies at the outlet of a beautiful and luxuriant valley, twenty miles in extent, and which presents throughout a waving sea of Sugar Cane. On either side of the valley, and of the town, rise fertile mountains. On these are very extensive *portreros*, or pasture lands, of the planters. Besides, there are Coffee estates, and the mountain seats of the Gentry. Here the invalid may repair during the hot months, if he remains the whole year, for the proprietors are unbounded in their hospitality, and he will not want perpetual invitations to stay with them. They are always delightfully cool. The mountains abound in game, and afford plenty of sport.

The soil about the town is sandy. Beneath this lie masses of conglomerate limestone rock, with the interstices between the masses filled with sand.

The *temperature* throughout the whole year is very equable, indeed the thermometer in Montreal is frequently higher in Summer than it ever is here. And then, from the great dryness of the atmosphere, the sensation of heat is very much less than it is, in the same temperature, in the north—for the same reason, that the sensation of cold, in Canada, with the thermometer at zero, is quite a different thing from the same in England, with the Mercury in the same place.

Since I arrived here, early in December, I have carefully kept a thermometrical register. I have made three observations a day—at 7 A. M., and at 2 and 7 P. M., and I find the lowest point in the temperature to have been 64.5° Fah. The highest point reached was 84°—the lowest that day being 76.5°. The greatest variation in any twenty-four hours has been, 9.5°; and that upon only one occasion. The *average* for the time that I have been here has been, for the three observations respectively, 72.8447°, 78.734°, and 75.258°, Fah.

The *dry season* extends from November to May, during which rain falls very seldom, and then in a dashing little shower, leaving the air suddenly fresh and cool. Trinidad is extremely healthy, and is exempt from any endemic disease. Pulmonary phthisis is almost entirely unknown, and longevity is remarkable.

It may be easily reached, direct from New York, or other American ports, by sailing ship, or *via* Havana. I have serious objections to any invalid coming in a *steamer* to Havana. They are crowded with California nondescripts, and are thereby rendered excessively uncomfortable. Whereas the sailing vessels are agreeable, and one has a longer voyage, which is an advantage.

There are no hotels or boarding-houses here; but one rents a suitable house, and hires a cook, or *messes* with some of his countrymen. I do so, and find it very comfortable and economical. A person coming here should bring his own plate and linen, also a supply of linen clothing and *thin shoes*. My row of boots is entirely useless. For furniture, one has little trouble about it, and very little is used. One sleeps on a cot or stretcher, with only a pair of sheets, and it is very comfortable. One should bring also a woolen plaid or scarf, it will be useful on the ship, and will serve here as a blanket, when the mornings are chilly. I am thus explicit in these trifles, as I have a *personal* knowledge of their importance.

I have great faith in the advantages of climate for phthisical invalids, and I believe that many in the first and second stages of the disease,

who would otherwise shortly die, would, by a residence here, live in comfort and usefulness for an unlimited period. As to my own case, both you and our friend, Dr. MacDonnell, have personally examined it nearly two years ago; and I assure you, that, instead of retrograding, I have not at this moment a symptom of phthisis about me, and I now weigh more than I ever did in my life before. All my improvement in health I attribute to *climate*, and to *cod liver oil*. You will remember, that I spent last winter and spring in the Mediterranean and in Italy. For those who are only slightly ill, perhaps these situations would be as useful, and more agreeable (in an historical and poetical point of view,) than any W. I. Island.

With regard to the *social* state of Cuba, I must say, that I never felt greater security in my person or property, in England, or in America, than I do here; I have not heard of the commission of any crime since I arrived. I have frequently gone to bed, in town, without fastening my doors. The system of passports is as teasing a nuisance as it is in Europe, and is as strictly maintained here as there, for the benefit of a swarm of hungry (but civil) officials.

In a month or two, I shall return to Kingston and my practice.

Ever sincerely yours,

HORATIO YATES.

Trinidad de Cuba, 9th April, 1852.

ART. XXI.—*Experiments on the Livers of Birds, in relation to the presence of Sugar.* By GEORGE D. GIBB, M. D., L. R. C. S. I., Lecturer on the Institutes of Medicine, St. Lawrence School of Medicine, Montreal, Physician to the Montreal Dispensary.

DURING my residence in France in 1848, M. Claude Bernard published a paper in the Archives Générales de Médecine, upon the source of sugar in the animal economy. I was presented with a copy of this paper through the politeness of the author.*

His experiments on the liver, demonstrating the existence of sugar as a natural constituent of that organ, were principally confined to the dog species, and I have repeatedly confirmed them in the human subject, and in many other animals of the class Mammalia.

The healthy liver of man and animals is now proved to contain sugar as a normal constituent; but in certain diseases, particularly those of a tuberculous character, as Pulmonary Phthisis for example, where we

* An abridged translation is published in 5th vol. *British American Medical and Physical Journal*.

sometimes find the liver enlarged, and in the condition termed "fatty" by Louis, the amount of sugar present appears to be very great indeed.

To determine whether this rule, the natural existence of sugar in the livers of Mammalia, would stand good with respect to another class of the Vertebrata, namely birds, which rank next in importance to Mammals, I instituted a series of experiments.

It will be remembered, that, in birds, the liver is a viscus of considerable magnitude, consisting of 2 principal lobes, and firmly suspended in situ by broad ligaments and membranous processes. The vena porta, supplying that venous blood from which the bile is elaborated, is formed by vessels, derived from numerous sources, receiving not only the veins of the stomach, spleen, and intestines, as in Mammalia, but likewise the renal and sacral veins.*

There is also a difference in the amount of fat contained in the livers of the different orders of birds. Thus in the Palmipedes or web-footed Birds, and the Grallæ or Waders, the larger number of species possess quantities of fat in their livers. In the Gallinæ or Poultry, again, in very many species there is a notable absence of fat.

The quantity present, or absent, of the fat, influences the amount of sugar to be detected, at least such is the conclusion numberless experiments lead me to.

If, again, the hepatic cells of the livers of birds are examined with the microscope, they are found even more free from fat globules than are those of Mammalia, and they are almost entirely filled with amorphous biliary particles.†

In the following experiments, the livers were pounded in a clean mortar to a pulp, then boiled in a very small quantity of water for some minutes, and filtered. After cooling, the filtered fluids were examined. They are examples selected from a number.

No. 1.—Small chicken.

Moore's Test gave the merest trace of sugar.

Trommer's showed its presence satisfactorily, but still in small quantity.

Cappozzudi's was also satisfactory, the yellow deposit of oxide of copper being pretty clear, after the lapse of some hours.

No. 2.—Larger chicken than the last was killed by dividing the jugular vein, collecting the blood as it flowed. This fluid was allowed to separate into its 2 portions, and the serum examined for sugar, but no satisfactory results were obtained.

* Rymer Jones, *Comparative Anatomy*.

† *Principles of Physiology, General and Comparative*, by W. B. Carpenter, edition 1851.

The liver was treated in the usual way.

Moore's Test showed the presence of sugar greater than in the last experiment, but still in small quantity.

Trommer's was pretty satisfactory, and showed the presence of a tolerable quantity.

Cappezuoli's was also equivocal, more so than in the last experiment.

No. 3.—Liver of a *Fowl*.

Moore's Test light brown.

Trommer's, very marked indeed.

No. 4.—Liver of a *another Fowl*.

Moore's Test pale brown.

Trommer's, darker brown.

No. 5.—Liver of a *Turkey*.

Moore's Test, light brown.

Trommer's, darker brown.

No. 6.—Liver of a *Goose*.

Both Tests very much marked indeed, indicating a large quantity of sugar.

No. 7.—Liver of a *Duck*.

Both Tests, marked in a similar degree to the goose.

Sugar was detected in every bird's liver I examined, the quantity being in proportion to the amount of fat present, and this was invariably large in the web-footed or water birds. There is a striking analogy to this; in the Phocida, among the mammalia animals living almost entirely in the water, as the Walrus and Seal, and in which their livers are found to be almost masses of fat, and the quantity of sugar in that of the Seal is enormous.

M. Bernard, in his experiments, examined the blood as well as the liver, and found sugar to be a normal ingredient in both. I was unable to examine the blood, excepting in one instance, and discovered none.

To pursue these investigations farther, experimental examination should be made on the livers of Reptiles and Fishes, which are store-houses of fat and oil; the livers of cod and other large fishes prove this from their yielding a considerable supply of the latter. And the great bulk of the liver in the Crustacea, Mollusca, and cold-blooded Vertebrata just mentioned, has reference apparently, not to a large production of bile, but to an accumulation of fat.

The deductions to be drawn from the fact of sugar existing in the liver and blood, cannot as yet be satisfactorily arrived at, until our knowledge is farther advanced on the subject. M. Bernard considers that a regular function of the liver is the formation of sugar, and that the liver alone has the power of producing sugar without starch. The

sugar, as it is formed, is conveyed away by the hepatic veins, the vena cava inferior and right side of the heart; and as none is found in the pulmonary veins returning from the lungs, Magendie infers, that it must have undergone destruction in the lungs and the carbon eliminated.*

The presence of sugar in the blood of the portal vein, which takes venous blood from the intestines and other viscera to the liver, is accounted for by M. Bernard, by the regurgitation of the blood from the liver, when the pressure of the abdominal parietes is removed on opening the abdomen; and this is permitted, he says, by the absence of valves. In this view, I cannot altogether coincide with the author, but do believe, that the sugar found in the Vena Porta is totally independent of that in the liver itself, probably arising in most instances from the mesenteric veins.

67 Craig Street.

ART. XXII.—*Observations on the Sanatory Institutions of the Hebrews as bearing upon Modern Sanatory Regulations.* By the Rev. ABRAHAM DE SOLA, Lecturer on Hebrew Language and Literature in the University of McGill College, &c.

(Continued from page 141.)

THE Sanatory Institutions of the Hebrews may be considered as regarding—First, *Persons*;—Secondly, *Places*; and Thirdly, *Things*. Our remarks will have reference to them under these three heads; but we have considered it advisable to follow, as closely as possible, the order of the sacred volume, and, after due attention to its teachings, shall offer such illustrations afforded both by Christian and Jewish writers, as may be within our reach or memory, and necessary to do full justice to our subject. And first—

OF THE PROHIBITION OF BLOOD.

The first law best calculated to promote man's physical, as well as moral, perfection, is contained in the 28th verse of the first chapter of Genesis, and further expounded in the second chapter of the same book and in subsequent portions of the Sacred Writings. But we defer our remarks upon this law, until we reach the subsequent legislation of Moses thereon. In the seventh chapter of Genesis, we find the distinction made between "beasts that are clean" and "beasts that are unclean." This subject we also defer for after-notice, and proceed to examine the prohibition to eat blood, first expressed in the ninth chapter, third and

* See Dunglison's Human Physiology, for a clear consideration of these experiments, vol. 2, 1850, a work that ought to be in the Library of every enquiring Physician.

fourth verses, of the book of Genesis, in the following terms, "Every moving thing that liveth shall be food for you, even as the green herb have I given you all. But flesh with the life (nefesh) thereof, *which is the blood thereof*, shall ye not eat." Such is the translation and interpretation given to this passage by the English authorised version,—an interpretation which we believe to be in strict accordance with its grammatical construction; and such also is the interpretation of the great majority of commentators of all ages and countries. 'Here, it may, perhaps, be only necessary to cite those not generally attainable. "The prince of Jewish commentators," R. Solomon Jarchi, commonly known as Rashi, on the words "with the life thereof, which is the blood thereof," remarks, "God here prohibits to them (the tearing off and eating) the members of a living animal, and saith, as it were, to them, 'So long as the *life (nefesh) is in the blood*, thou shalt not eat the flesh.'"

R. Abraham Aben Ezra on the same passage says, "The meaning of these words is this,—but the flesh *with its life, which is its blood*, shalt thou not eat, and this is in accordance with the reason (subsequently) given in Holy Writ, 'Thou shalt not eat the life with the flesh, for the life of all flesh is its blood, &c.'" Don Isaac Abarbanel has the following observations on this passage, he says: "And because in slaughtering animals for food, they might acquire cruel habits, God prohibited to them the eating of the members of a living animal—a custom which is certainly the height of cruelty. Therefore saith the text *אך בשר בנפשו דמו לא תאכלו*. The ב (beth) in *בנפשו* (benafsho) is used for *עם* (ngim—with) just as it is in *ברכבו ובפרשיו* (berichbo oobpharashav Ex. xv. 19,) &c. The text meaneth, therefore, And the flesh while yet its life (nefesh) is in it, the blood ye shall not eat of that flesh. Such is, doubtless, the right and proper exposition of this passage." Agreeably with his usual custom, before he proceeds to his exposition, Abarbanel states those questions he deems requiring particular notice, and here he seems ironically to ask, whether the blood be dependent upon the life, or the life upon the blood? "Surely," he exclaims, "the exposition of Haramban (*i. e.* R. Moses ben Nachman) which is 'but the flesh with its life *which is its blood, &c.*' and which opinion makes the life to be identical with the blood, is a very erroneous one, and not for a moment to be entertained." It is with regret that we find ourselves unable to subjoin the exact language of Nachmanides, but must reserve our quotation from him, for an appendix. It seems, however, from Abarbanel's own words, that he merely asserts what Rashi and Aben Ezra, nay, the sacred penman himself, seems to assert, *viz., the vitality of the blood*; and in such case, his opinion does not deserve censure, since it has met, during the last two centuries, with many deeply learned advocates, who, however, merely reiterate to a

great extent, what Jewish exposition and tradition have maintained centuries before them.*

The learned Dr. Townley in his translation of a portion of the "Moreh Nebuchim" (Guide of the Perplexed) of Maimonides, says:—

"The doctrine of the vitality of the Blood, thus suggested by the Laws of Moses, does not appear to have been avowed by Medical Writers before A. D. 1628, the time of the celebrated Harvey, the discoverer, or the reviver, of the doctrine of the circulation of the blood, who, in his writings, maintained the opinion, but was never much followed, till Mr. Hunter, Professor of Anatomy in London, defended the hypothesis with much acuteness and strength of argument in his *Treatise on the Blood, Inflammation, &c.*, London, 1794, 4to. The arguments of Hunter were vigorously attacked by Professor Blumenbach, of Gottingen, who fancied he had gained a complete victory over the defenders of the vitality of the Blood. But his translator, Dr. Elliotson, in the notes he has added to the Professor's *Institutions of Physiology* (Sect. vi. p. p. 43, 44, London, 1817, 2nd ed. 8vo.) thus sums up what he regards as the true state of the question:—"The great asserter of the life of the blood is Mr. Hunter; and the mere adoption of the opinion by Mr. Hunter would entitle it to the utmost respect from me, who find the most ardent and independent love of truth, and the genuine stamp of profound genius in every passage of his works. The freedom of the blood from putrefaction while circulating, and its inability to coagulate after death from arsenic, electricity, and lightning, may, like its inability to coagulate when mixed with bile, be simply chemical phenomena, independent of vitality. But its inability to coagulate after death from anger or a blow on the stomach, which deprive the muscles likewise of their usual stiffness; its accelerated coagulation by means of heat, perhaps its diminished coagulation by the admixture of opium; its earlier putridity when drawn from old, than from young, persons; its freezing like eggs, frogs, snails, &c., more readily when once previously frozen

* Hence the groundlessness of the following remarks in Wood's Mosaic History. It would appear that Mr. Wood had never studied the Talmud, or read Jewish commentators. We will not dwell here on the incongruity of his assertion that Paul (and therefore no doubt the Hebrews of that day) knew well and taught this doctrine, and yet, that (a somewhat gratuitous assumption we conceive) "it was 3600 years before it arrested the attention of any philosopher." Mr. Wood, perhaps, forgot that even before Paul, and long before Harvey or John Hunter, there were philosophers among the Jews who did direct attention to it. And yet Mr. Wood continues: "This is more surprising, as the nations in which philosophy flourished, were those which especially enjoyed the divine oracles in their respective languages." It is yet more surprising that Mr. Wood at "one fell swoop" taketh from Cæsar what belongeth to Cæsar and by this *ipse facto* assertion shows his utter want of information on the subject. We repeat, it would appear that Jewish tradition and commentary, like other small matters, had not troubled much, in other respects, the learned Mr. Wood. This, however, is not surprising.

(which may be supposed to have exhausted its powers) ; its directly becoming the solid organised substance of our bodies, while the food requires various intermediate changes before it is capable of affording nutriment ; the organisation (probably to a great degree independent of the neighbouring parts) of lymph effused from the blood ; and, finally, the formation of the genital fluids, one, at least, of which must be allowed by all, to be alive, from the blood itself, do appear to me, very strong arguments in favour of the life of the blood.*

Let us now see whether the sacred volume itself does not further support this doctrine of the vitality of the blood. With reference to the passage before us, in which, for the first time, it is apparently taught, we have already stated that we do not think the correctness of the rendering we have adopted can be disputed on grammatical grounds, and Abarbanel has, here, evidently adopted his interpretation, an erroneous one as we conceive, from not having paid due attention to the accentuation and division of the proposition, but to which, on other occasions, he attaches great importance.† Were there a disjunctive accent after the word “benafsho” (with its life,) then his interpretation would hold good ; but, as it is a connective, it is, so far as accentuation has weight, plainly untenable, while the commentaries above referred to, and to which we may also add the Targum of Onkelos, are clearly correct. But prior to entering upon an examination of the other passages of Scripture bearing upon our subject, it may be proper to ascertain whether the word “nefesh,” which is translated above, “life” has really such a signification. And this we can only ascertain by inquiring what are the meanings which some of the most eminent lexicographers have attached to the word.‡

R. David Kimchi, in the first place, applies in his “Sepher Hashorashim,” (Book of Roots), all the various significations to *nefesh* which we find given, secondly, by Gesenius, which are : 1, breath ; 2, life, the vital principle in animal bodies, *anima*, which was supposed to reside in the

* “Blumenbach’s Institutions of Physiologoy,” translated by Dr. Elliotson, Sect. vi. Notes p. p., 43, 44, Dr. Hunter’s arguments may be found in an abridged form in Dr. A. Clark’s Commentary on Levit. xvii. ii., and Encyc. Perth art. *Blood*.

† It may be known to most of our readers that the Hebrew language possesses an all but perfect system of rhetorical accentuation, known as the Masoretic. The accents which are also musical, are capable of dividing a sentence into the smallest propositions, and may be considered as consisting of two classes, disjunctives and connectives. With the system, however, as presented in the Psalms and some other of the sacred writings, no one is fully conversant.

‡ The Spanish Jewish translators, however, here (Gen. ix. 4,) render “nefesh” by the word *alma*, which, if we mistake not, always corresponds with “soul.” Thus R. Menasseh ben Israel (*Humas* ; Amst. A.M. 5415) translates *Impero carne consu alma que es su sangre no commereys*. So also Dias and Fernandes (Bib. Esp. A. M. 5486, Amst.) Cassiodoro de Reyna, the earliest Christian Spanish translator, renders it *anima*, also meaning soul, but adds in a note, “*La sangre se dice ser el anima de la carne porque en ella residen los espiritus vitales sensitivos.*”

breath ; 3, a living being, that which has life ; 4, the soul, spirit, as the seat of the volitions and affections, (the reader will be pleased, however, to compare what Parkhurst says, lower down, on this subject, under No. 4) ; 5, desire ; also, the object of desire ; 6, scent, fragrantcy, odour. Buxtorf, Furst, David Levy, and Newman, give nearly all the same significations. Parkhurst has the following :—As a noun, it means, 1. A breathing frame, the body, which, by breathing, is sustained in life. See Gen. ix. 4, 5 ; Lev. xvii. 10—14, xxiv. 17, 18 ; Deut. xii. 23. From the above passages, he continues, it seems sufficiently evident not only that the animal body is called *nefesh*, but that this name is in a peculiar manner applied to that wonderful fluid, the blood, (Comp. Ps. cxli. 8., Isa. liii. 12.) whence we may safely conclude that the blood is that by which the animal doth in some sense *breathe*, that, agreeably to the opinion of many eminent naturalists,* it requires a constant *refreshment* or *reanimation* from the external air ; and that this is one of the great ends of respiration. Aristophanes, Nub. lin. 711, in like manner calls the blood “*ψυχη και την ψυχην εκπινησι* And they drink up my soul or life, *i. e.*, my blood.” And Virgil applies the Latin *anima* to the same sense Æn. ix., lin. 349. “*Purpuream vomit ille animam*, he vomits forth his purple soul or life.”* The word means, 2ndly, adds Parkhurst, a living creature ; 3, the affections, desires or appetites ; 4, *nefesh* has been supposed to signify the spiritual part of man, or what we commonly call his soul. I must for myself confess that I can find no passage where it hath undoubtedly this meaning. Gen. xxxv. 18 ; 1 Kings xvii. 21, 22 ; Ps. xvi. 10, seem fairest for this signification. But may not *nefesh* in the three former passages be most properly rendered *breath* and in the last a breathing or animal frame.” Thus far Parkhurst ; and we think we need now but look at the significations of *nefesh* as defined by the high authorities just quoted, to decide that we must translate it in Gen. ix. 4, as we have done, viz :—LIFE.

We proceed to enumerate all other passages having reference to the prohibition of blood, or to its vitality. In Leviticus, ch. iii., v. 17, blood is coupled with the *cheleb* (sacrificial fat or suet) as being everlastingly prohibited to the Israelites. In the 7th chapter of the same book, 26th and 27th verses, *excision* is denounced against the eater of blood ; “*Moreover ye shall eat no manner of blood, whether it be of fowl or of beast, in any of your dwellings. Whatsoever soul it be, that eateth any manner of blood, even that soul shall be cut off from his people.*” At the 17th chapter, verse 10—15, the prohibition of blood is again

* See Tho. Bartholin, *Anatom.* p. 285 ; the Rev. William Jones' *Physiological Disquisitions*, p. 153 ; Dr. Crawford on *Animal Heat*, &c., p. 354, 2nd edit, and *Encyclopædia Britannica* in *ÆROLOGY* No. 89, &c., and in *BLOOD* No. 22, &c.

* See the *Encyclopædia Britannica* in *BLOOD* No. 19, &c.

repeated, and its vitality apparently again taught. Verse 10, "And whatsoever man, &c.,* I will even set my face against that soul that eateth blood, &c. Verse 11, For the life of the flesh is in the blood, &c.; Again in verse 12. In verse 14, For it is the life of all flesh, the blood of it is for the life thereof, therefore I said unto the children of Israel, ye shall eat the blood of no manner of flesh, for the life of all flesh is the blood thereof, whosoever eateth it shall be cut off."

Rashi remarks on this verse, "Its blood is here in place of its life, for the latter is dependent on the former." Again, "Life is the blood." And Aben Ezra says, "It has reference to the life, for it is known that the veins which proceed from the left side of the heart, are divided into two kinds, those of the blood, and those of the air, and these are (dependent upon each other) like the oil and flame of a lamp."† And here it becomes us to quote also what Abarbanel has written on this passage, in his elegant and elaborate commentary, since it will best serve to show our readers how the doctrine of the vitality of the blood long ago engaged the attention of the old Hebrew commentators, who, by the way, merely wrote in accordance with the received traditions of the Jewish Church.‡

Abarbanel says, "The illustrious Maimonides writes in his *Moreh Nebuchim* that the Chaldeans (Zabii and others,) although as a rule they rejected the use of blood as unclean, would yet eat of it when desirous of holding communion with evil spirits in order to know of matters future," (compare this remark of Maimonides with an illustration from Horace, which we shall have occasion presently to quote.) And therefore doth the law prohibit the eating of blood, and devote it to be poured out and sprinkled upon the altar. And therefore, too, doth the law proclaim, 'I will set my face against that soul that eateth blood,' as it does with reference to the giving of seed to Moloch, but which is not said with reference to any other precept. But Ramban objects to Maimonides that the Scripture doth not so teach, but that the reason always assigned for the prohibition of blood, is that the life of all flesh is in the blood, &c., and that consequently, the prohibition is here on account of the life (of the blood,) and not because it was used for converse with evil spirits. Now, I cannot but be surprised that Maimonides doth not refer to the text quoted by Ramban, teaching the vitality of the

*Mendelsohn says that the stranger of proselyte referred to in this verse is the proselyte of righteousness, צדק נא notwithstanding which the Talmudise Treat, Sandrin affirms that the prohibition applies to others than the Israelites.

† From this passage it would appear Aben Ezra entertained an opinion, universally prevailing, among the learned of his time, but which modern science and investigation have since exploded.

‡ See remarks on Woods' *Mosaic History*, note p. 205.

blood, as above, nor take notice of them, and that Ramban himself doth not refer to the passage Levit xvii. 7. ‘And they shall no more offer their sacrifices unto devils, &c.,’ which supports the opinion of Maimonides.” It were needless to notice here the discussion into which Abarbanel enters on this subject, after these introductory remarks. Sufficient be it to state, that, with the Hebrew commentators, he here also maintains the life of the blood.

Thus far then we have three reasons assigned by the Jewish commentators for the prohibition of blood. The first is, that an end might be put to a kind of cannibalism, “which obtained,” says the learned Dr. Townly, “even in the time of Noah, viz:—eating raw flesh, and especially eating the flesh of living animals, cut or torn from them, and devoured whilst reeking with the warm blood.” Plutarch, in his *Discourse of eating flesh*, informs us, that it was customary in his time to run red-hot spits through the bodies of swine, and to stamp upon the udders of sows ready to farrow, to make their flesh more delicious; and Herodotus (l. iv.) assures us, that the Scythians, from drinking the blood of their cattle, proceeded to drink the blood of their enemies. It is even affirmed that both in Ireland and the Islands and Highlands of Scotland, the drinking of the blood of live cattle is still continued, or has but recently been relinquished. Dr. Patrick Delaney says, “There is a practice sufficiently known to obtain among the poor of the kingdom of Ireland. It is customary with them to bleed their cattle for food in years of scarcity;”* and the *Analytical Reviewers* observe: “It will scarcely appear credible at a future time, that at this day, towards the close of the eighteenth century, in the Islands, and some parts of the Highlands [of Scotland,] the natives every spring or summer attack the bullocks with lances, that they may eat their blood, but prepared by fire.”† The celebrated traveller, Bruce, relates with minuteness the scene which he witnessed near Axum, the ancient capital of Abyssinia, when the Abyssinian travellers, whom he overtook, seized the cow they were driving, threw it down, and cutting steaks from it, ate them raw, and then drove on the poor sufferer before them.‡ Sir John Carr states that “the natives of the sandy desert [between Memel and Koningsberg,] eat live eels dipped in salt, which they devour as they writhe

* The Doctrine of Abstinence from Blood defended p. 124., note, London 1734. See also “Revelation examined with candour,” vol. 2, p. 20, London 1732, 8vo.

† Analytical Review, vol. 28, July, 1789. Retrospect of the active world, p. 105.

‡ Bruce’s Travels, vol. 3. p. 332—334, 8vo. See also some learned remarks by him on the present subject, vol. 4, p. 477—481, in which he designates Maimonides as “one of the most learned and sensible men that ever wrote upon the Scriptures,” and an able defence of the statement of our author in Murray’s Life of Bruce, p. 74., note.

with anguish round their hands."* Major Denham also says that "an old hadgi named El Raschid, a native of Medina," who at different periods of his life "had been at Waday, and at Sennaar, described to him a people east of Waday, whose greatest luxury was feeding on raw meats cut from the animal while warm and full of blood.† And it is a well-known fact, that the savage natives of New Zealand continue to quaff the blood of their enemies when taken in battle."

A second reason for the prohibition of blood is that assigned by Maimonides as referred to by Abarbanel as above, an authority respected as the highest in these matters by all theologians and biblical critics of all creeds.‡ We quote here in full the passage in his *Moreh Nebuchim*, to which Abarbanel apparently alludes, "Yet excision was denounced against some of them; as *the eating of blood*, because in those times men were too apt to be led into a desire and precipitancy of eating it by a certain kind of idolatry, which was the chief cause why it was so strictly forbidden." And although Nachmanides, as noticed in our quotation from Abarbanel, refers the prohibition of blood to its vitality, yet is he also of opinion that its prohibition was grounded on the intent and design to suppress idolatrous customs and practices. He thus comments on Deut. xii. 23. "They gathered together blood for the devils, their idol gods, and then came themselves and ate of that blood with them as being the devil's guests, and invited to eat at the table of devils, and so were joined in federal society with them, and by this kind of communion with devils, they were able to prophesy and foretell things to come." These last words of R. Moses bar Nachman lead us to the illustration from the writings of Horace, already referred to, when quoting a similar passage from Maimonides. It occurs in his *Satires*, 1st book, Sat. 8.

Vidi egomet nigrâ succinctam vadere pallâ
 Canidiam, pedibus nudis passoque capillo,
 Cum Saganâ majore ululante. Pallor utrasque
 Fecerat horrendas aspectu. Scalpere terram
 Unguibus, et pullam divellere mordicâs agnam
 Cœperunt: cruor in fossam confusus, ut inde
 Manes elicerent, animas responsa daturas. |

* Carr's Northern Summer, or Travels round the Baltic in the year 1804, p. 436 London, 1805.

† Denham and Clapperton's Travels and Discoveries in Northern and Central Africa, vol. 2, p. 36, note, London, 2nd edition, 1826, 8vo.

‡ See Bruce as quoted above.

| Thus elegantly rendered by Francis:—

Canidia with dishevell'd hair,
 (Black was her robe, her feet were bare)
 With Saganâ, infernal dame!
 Her elder sister, hither came,
 With yellings dire they fill'd the place,
 And hideous pale was either's face.

Dr. Townley affords us further support and interesting illustration of the assertion of Maimonides. He says "The sacred books of the Hindoos exhibit traces of the same kind of worship formerly prevailing amongst them. In the Asiatic Researches, vol. v., is a translation of the "*Rudhiradhyaya* or Sanguinary Chapter" of the *Calica Puran*, by W. C. Blaquiere, Esq., from which the following are extracts :

"Birds, tortoises, alligators, fish, nine species of wild animals, buffalos, bulls, he-goats, ichneumons, wild boars, rhinoceroses, antelopes, guanans, reindeer, lions, tigers, men, and *blood* drawn from the offerer's own body, are looked upon as proper oblations to the goddess *Chandica*, the *Bhairāvās*, &c. The pleasure which the goddess receives from an oblation of blood of fish and tortoise, is of one month's duration, and three from that of a crocodile. By the blood of the nine species of wild animals, the goddess is satisfied nine months, and for that space of time continues propitious to the offerer's welfare.—That of the lion, reindeer, and the human species, produces pleasure which lasts a thousand years.—The vessel in which the blood is to be presented, is to be according to the circumstances of the offerer, of gold, silver, copper, brass, or leaves sewed together, or of earth or of tutenague, or of any of the species of wood used in sacrifices. Let it not be presented in an iron vessel, nor in one made of the hide of the animal, or of the bark of the tree, nor in a peuter, tin, or leaden vessel. Let it not be presented by *pouring it on the ground*,* or into any of the vessels used at other times for offering food to the deity. Human blood must always be presented in a metallic or earthen vessel, and never on any account in a vessel made of leaves, or similar substances."

To be continued.

ART. XXIII — *On Nitric Acid in Hooping Cough and Asthma.* By F. C. T. ARNOLDI, M. D., Lecturer on Midwifery and Diseases of Women and Children, St. Lawrence School of Medicine, Montreal, &c., &c.

THE few following remarks I take the liberty of communicating to the profession, through the pages of this excellent Journal, feeling perfectly confident they will be read with pleasure, inasmuch as they are somewhat novel as regards the alleviation of hitherto supposed intractable diseases, viz : hooping cough and asthma. The modus oper-

Soon with their nails they scrap'd the ground,
And fill'd a magic trench profound,
With a black lamb's thick streaming gore,
Whose members with their teeth they tore,
That they may charm the sprights to tell
Some curious anecdotes from hell.

*The very opposite, it will be prevailed, of the Mosaic Institution.

andi of the remedy, I will not at present attempt to explain, but from the results of my own practice and that of my medical confrères who have watched it and adopted it, I confidently recommend its application to all such as meet with similar cases. In hooping cough, at whatever age, whether it be a child at the breast, or a full grown adult, I administer nitric acid in solution, as strong as lemon juice, sweetened ad libitum. I have given to a child of two years of age, as much as one drachm and a half of concentrated nitric acid, in the above manner per diem, and I have never known the disease to resist its use beyond three weeks. In one instance, that of a child at the breast, only seven months old, the disease disappeared within eight days. In another instance of a young lady fifteen years of age the paroxysms were subdued within the first twenty-four hours, and the disease disappeared within ten days. Again, in the cases of two boys about ten years of age living at a great distance from one another, who had had the cough for several weeks, and to such a violent degree, that both of them had the circumference of their eyes ecchymosed as though they had been pummeled in pugilistic combats, the acid acted positively like a miracle. A medical confrère of mine had four of his children severely affected with the same disease in the middle of winter, and although they had to be kept in-doors owing to the inclemency of the weather, they were nevertheless all perfectly cured within three weeks. I might go on to cite a hundred similar instances, but these, I am satisfied, will prove sufficient to induce the profession to adopt this treatment. As regards asthma, the use of nitric acid has proved not only in my own practice, but in that of others who have adopted it, truly marvellous, and I trust that the profession will remain satisfied by my quoting two special cases. One is that of an elderly person, who had been for five years a frequent inmate of the Montreal General Hospital, a thorough victim to this disease. He generally remained under treatment the winter, and used to be discharged when the disease seemed to have exhausted itself. This patient, about eighteen months ago, was again admitted into the Hospital, under the care of my friend Dr. David, who, observing the obstinacy of the paroxysms, resolved on trying the use of nitric acid, the result was that the first night was passed tolerably; the second night he slept well; the day after the third night he reported himself perfectly convalescent, and on the fifth day he was discharged at his own request, since which he has never been heard of. The other case is that of a stout plethoric servant girl, about thirty-five years of age, who applied to me in the early part of December last. She was then labouring under very severe asthmatic distress, and told

me that she had been a martyr to repeated attacks, equally severe for four or five years past; that she had consulted many medical men, but could never obtain any relief, until, as she said, the disease had spent itself. I gave her a prescription containing half an ounce of concentrated nitric acid, and I have never seen her since, but during the New Year holidays, happening to call at the house where she served, I made inquiry about her, when I was told, much to my merriment, that the reason why she never came back to see me was that she thought I had bewitched her. She had often taken medicines which gave her no relief, but that the very first night after taking the acid she slept perfectly sound, and had not, up to that time, had any return of the symptoms. Now, these are obstinate facts, and I trust that this familiar method of communicating them will not diminish their value, nor need any of the profession to be too sceptical to follow the treatment.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

A Treatise on the Diseases of the Chest, being a Course of Lectures delivered at the New York Hospital. By JOHN A. SWETT, M. D., Physician to the New York Hospital, &c., New York, D. Appleton & Co.

IN the first number of this Journal, we lamented the neglect which the subject of Thoracic Disease received from the enthusiastic and zealous members in the junior walks of the Profession who have cultivated the field of modern investigation, and enriched medical science within the last few years; and we explained the fact in a manner which, we believe, will be considered satisfactory by all who know any thing of the difficulty of the subject, the research, study, patience, talent, and opportunities, necessary to make the accomplished and skilful auscultator. In the medical classes, that year after year come under the observation of the Clinical Teacher, how few, amongst even diligent pupils, can he point out as ever likely to become skilful or learned in this branch of diagnosis, and how few amongst the present race of physicians have given to the subject, either during their pupilage or when in practice, the attention its importance demands. It is with no ordinary feeling of pleasure then, that we receive the present volume, coming from a practitioner of high standing, of enlarged hospital experience, and who has evidently devoted many years to the study of chest diseases. Dr. Swett is not generally known. In our investigations we have come across his name, and we have from other sources learned, that he has long cultivated thoracic pathology and

diagnosis, though as yet unknown to the Profession in this Province and in Europe, but we are greatly mistaken if the work before us will not place his name in the first rank of those who have written upon the subject.

Having said so much, we pass now to the work itself, which is divided into thirty-five lectures, the first two being devoted to the subjects of *Physical Signs and Rational and Constitutional Symptoms*.

We notice that, under the head of Physical Signs, Dr. Swett has omitted *Mensuration*, which we hold to be a most important sign of thoracic disease. It is true, he has pointed out *Depression* and *Dilatation*, but he has classed them under the head of *Inspection*, and from his silence on the subject, we infer that he does not fully estimate the value to be derived from measuring accurately the chest in certain diseases.

In his opening lecture, Dr. Swett remarks: "At the time I commenced the study of these diseases it was in its infancy in this country—those among our Hospital Physicians, who were not too old to improve, were groping their way in search of light—mistakes were of course constantly made, and many, even distinguished men, who saw these mistakes, pretended to ridicule an art which they were neither willing to learn nor to appreciate. But this feeling has passed away. Those who do not practise auscultation, now admit its importance, and no physician of the old school would wish his son to be educated in his profession, without making himself thoroughly acquainted with the art"—page 1.

We are glad to learn that this change has taken place in New York; we can, as a set-off, state, that in Canada there are some who are too old, and others who are too lazy, to learn the Science, who, nevertheless, pretend to a familiarity with it, and who, on all fitting occasions, apply the stethoscope, fill up insurance papers, give certificates of health, and go throughout the form of examining a patient with as much nonchalance as *though they really heard any thing at all through the stethoscope*. We have improved upon our neighbors—they "groped their way in search of light"—we have made a plunge into the full glare of diagnostic light, without any troublesome groping, although, as every day's experience proves, not without our share of "Mistakes."

Dr. Swett concludes his very plain though clear remarks, upon physical and general symptoms, with the following very true observations.

"The difficulties attending the thorough investigation of pulmonary diseases are by no means trifling. Many mistakes are made by carelessness or ignorance of the Physician. The art of examining a patient implies many high qualifications: a natural talent for observation improved by practice, an ardent desire to learn the truth, an accurate

knowledge of other diseases which may be mistaken for the disease under examination. Many difficulties also arise from the ignorance, carelessness, or stupidity of patients. They are often surprisingly ignorant of their constitutional tendencies to disease, of their previous diseases, of the time when their actual symptoms commenced, and of their subsequent development. All those unfavourable circumstances render the art of diagnosis a work of much labour, of many disappointments. Still persevere. An intelligent mind, a sincere love of truth will gradually overcome the difficulties, and the reward will be a knowledge of the diseases of your patients, and of the proper indications of treatment."

The chapter on Bronchitis, the first which treats of the diseases, will well repay a careful perusal. We have only one fault to mention, and that is, the meagre details our author gives us for making the diagnosis between some varieties of this disease and phthisis. It is no uncommon thing for junior practitioners, and those unacquainted with auscultation to be misled by the apparently insignificant signs of simple bronchitis detected in certain cases, but which are, in reality, the precursors of the more unequivocal indications of phthisis; and they may have been led into this error by the statements of some who have undertaken the depreciation of the stethoscope as a means of diagnosis.* The signs to which we allude, are, *sharp, sibilant, piping râles*, at the apices of the lungs most frequently heard in front, but often behind in the supra and infra scapular, and occasionally, in the axillary, regions.

These signs are very often considered as merely indicative of bronchitis, but, in the majority of cases, they are caused by tubercular infiltration producing congestion and even inflammation of the minute bronchial tubes, and, according to our experience, these râles portend a *more rapid course of the disease* than any of the other physical signs of incipient phthisis. We have often remarked that though slight roughness of the respiratory murmur, feebleness of respiration, crumpling, (*bruit de frolement*) and a comparative dulness may be present, and the patient exhibit constitutional symptoms of consumption, such as sweating, rapid pulse, cough, loss of strength, and flesh, hæmoptysis, and sinking of infra-clavicular regions, yet all these have vanished (particularly since the discovery of cod-liver oil) and the patient has returned to his ordinary duties and mode of life, but we do not recollect any case, where *persistent sibilant râles occupied the upper portion of both lungs and resisted treatment for bronchitis*, in which other signs of phthisis were not quickly developed, and rapidly hurried on their victim to dissolution.

* See Propositions on the "FALLACIES OF PHYSICAL DIAGNOSIS IN DISEASES OF THE CHEST," by THOMAS ADDISON, M. D., &c. *Critically Examined* by ROBERT L. MAUDONNELL, M. D., &c., "British American Journal of Medicine," vol. iii., p. 1.

Cod-liver oil in these latter cases has not been of much, if any, service in our practice. It may be asked, how is common bronchitis to be distinguished from tubercular bronchitis? We answer, by attention to the following rule, which we laid before the profession some years ago, and which subsequent experience has fully confirmed—" *a bronchitic râle confined to the upper lobe of one or both lungs, resisting treatment and accompanied by dulness, at first slight, but which gradually increases, is as valuable a physical sign of phthisis as any we possess.*" Ordinary bronchitic râles are not situated in the apex of the lung; they are easily removed by treatment; they are not at any time accompanied by a dulness which, from being slight, gradually becomes more intense, and the disappearance of these râles is followed by healthy respiratory murmur; whereas, the change from the bronchitic râle of phthisis, is to one still more characteristic of that malady.

We have pointed out what we believe to be a deficiency in Dr. Swett's chapter, and cannot leave it without mentioning that he has also omitted all allusion to the condition of the bronchial tubes in cancer of the lung or to the peculiar signs and symptoms of bronchitis that attend that affection.

We have dwelt on this subject, because we are well aware that inexperienced practitioners frequently mistake the meaning of these sounds and do not attach the importance to them they deserve. Their presence must be regarded as calling for the utmost attention of the physician, and, should they become associated with the other signs we have pointed out, must excite his apprehension, and constitute grounds for an unfavorable prognosis.

The chapter on Pneumonia contains a good summary of the ordinary features of the disease, but little that will guide the practitioner in the diagnosis and treatment of the rarer forms of the malady. Dr. Swett's experience coincides with our own, (as often expressed) that *real* chronic pneumonia, by which he means the condition so well described by Dr. Walshe, is very rarely met with—the great majority of the cases, which are treated as examples of this affection, being either latent pleuritic effusions, or chronic tubercular infiltration.

"Chronic pneumonia," remarks Dr. S., "is so rare a form of disease, that I know nothing positive of its symptoms. I have never met with a single recorded case. Laennec states that he had noted some cases, but that they had been mislaid. Andral mentions, that in this form of disease the symptoms of chronic bronchitis exist, with emaciation, and with the physical signs of dulness on percussion, and bronchial respiration. But these symptoms and signs are not characteristic; they might occur in cases of dilatation of the bronchi, or in tubercular diseases of the lung. Stokes's opinion, that such cases, when cured, result in a

contraction of the affected side, render it probable that he mistook cases of pleuritis for this disease." Page 107.

We are quite confident that the views contained in the above extract will be confirmed by careful observation and experience.

We must say we have been disappointed in not obtaining more extended information on the subject of cerebral symptoms in pneumonia. Our author does not even allude to the statements of some good observers that this complication is usually present with pneumonia of the upper lobes, nor does he do more than allude to the combination of delirium tremens and pneumonia. He adds nothing to our knowledge of the subject.

We have also to complain of the unsatisfactory manner Dr. S. treats of "Gangrene of the Lung," to which he devotes exactly fifty-nine lines. He makes no allusion whatever to the recent valuable researches of Stokes upon the subject, nor does he speak of the difficulty, not unfrequently encountered, in determining the presence of Gangrene, for, as we have years ago shown, many of its most prominent symptoms are exhibited in other affections of the lungs.

The treatment of pneumonia is clearly stated so far as it goes, but is not very full. In an American treatise we were disappointed at not finding some mention of the value of Senega and Lobelia as stimulating expectorants in certain stages and forms of the disease under consideration. We pass over the chapter on Pleurisy, and also that on Laryngitis, merely remarking that Dr. Swett makes no mention of the employment of solutions of Caustic locally to the diseased membrane in chronic laryngitis. This omission is hardly pardonable, for we are indebted to his fellow citizen, Dr. H. Green, (whose name, by the by, he does not even mention) for the revival and promulgation of the practice. The discussions and controversy that ensued upon the publication of Dr. Green's book, both in the United States and in Europe, excited a great deal of attention, and Dr. Swett ought to have given us the result of his experience, when bringing out a new treatise in New York, for, as he knows, the views of Dr. Green have met with more opposition from his own countrymen, and particularly his fellow citizens, than from strangers.

It is true, that he alludes to the employment of Nitrate of Silver locally, in acute laryngitis, but not in such terms as to encourage others to use it. Here are his words, "There is reason to hope, and some reason to believe, that the application of the Nitrate of Silver to the larynx, 40 to 60 grains to an ounce of water, by means of the whalebone and sponge, may be attended with benefit, especially in cases in which the inflammatory action has originally been inconsiderable, or has been subdued by other means. There is reason to think that this remedy not only

acts favourably upon the mucous membrane, but that this mode of application may be made useful by aiding mechanically, in the removal of loose or of partially detached membranes in the larynx." Page 162. *Hoping, believing and thinking*, of the probable utility of a remedy is not what we want. We expect a practical writer to tell us, it is a *good* or it is a *useless* remedy. We cannot infer from the above passage if Dr. Swett has ever used caustic, or if he is going to use it, or if he advises us to use it—all is indefinite. We ourselves have employed it in acute laryngitis, without benefit, in chronic laryngitis, with most decided benefit. Such is our experience.

The lectures on Emphysema and Tubercle of the lungs, occupy eight lectures, and are well worthy of careful perusal. In those on tubercle, the reader will find an accumulation of information not to be obtained in any other treatise with which we are acquainted; but we regret being again obliged to notice the very scanty information our author gives us upon the treatment of Phthisis. The all absolving question of the value of Cod Liver Oil is discussed in a manner, which the great value attached to it, not only by the profession, but by the public, does not warrant. There is no evidence that our author has undertaken any careful clinical researches to establish its utility, to point out the cases to which it is suited, the stage of the disease in which we may expect most benefit from its employment, or the mode of administering it. In short, were a medical man, himself affected with symptoms threatening phthisis, to consult Dr. S.'s work, he should find little to guide him to, or dissuade him from, a trial of the remedy. All that he says is contained in the following meagre summary:—

"Antimony, Digitalis, Iodine, have all had their day of imaginary success, and all have been forgotten. Cod Liver Oil, the present popular remedy, is destined to experience the same fate. It has not, in my opinion, any specific influence in phthisis. It has not, in my experience, performed any wonderful cures. I do not, however, mean to deny its usefulness in this disease. It certainly sometimes appears to diminish the emaciation, to improve the appetite. It is good nourishment; nothing more, and I think it very probable that other kinds of oil, equally well prepared, may exert the same beneficial influence." Page 309.

When so many thousands are using this remedy, and so many Physicians employing it in their own cases and giving it to members of their own families, we are not satisfied at the way the subject has been treated in a large work on pulmonary diseases.

Dr. S. omits all mention of that curious and interesting disease, *Atalectesis Pulmonum*, which is the more extraordinary, as it is at present attracting more than usual attention from pathologists. The

liability of its being mistaken for chronic pneumonia, alone entitles it to investigation. Many years ago, Drs. Stokes, Corrigan and others, exhibited at the meetings of the Dublin Pathological Society, specimens of diseased lungs, which they considered as examples of new, and not previously described forms of pneumonia, and termed them cases of "blue pneumonia," "acute induration of the lung," and a striking anomaly appeared to consist in the absence of all inflammatory products, either on the surface of the lung, in the pleural cavity, or in the parenchyma of the lung, immediately adjoining the indurated portions. These cases, we are now satisfied, were examples of atelectesis, and not in any way connected with inflammatory action within the thorax. Our readers will admit that a subject which has called forth more than one bulky volume for its discussion should not have been neglected in a Treatise published in 1852.

The last two lectures upon pulmonary disease, are devoted to cancer of the lung and mediastinum. Dr. S. has only met with three examples of this affection. He says "but few cases have been recognized during life, I have succeeded once in three cases. In time we shall understand the subject more fully, if you make yourselves well acquainted with the more common diseases with which cancer of the lungs may be confounded, and you meet with a case which presents anomalous symptoms or signs which cannot be explained, think of cancer of the lung." From this passage one would suppose that the diagnosis of cancer of the lung was to be made out by negative and not by positive signs—that we have no other guide than *par voie d'exclusion*. This is not so, there is no disease, the diagnosis of which is more clearly established by positive signs and symptoms than cancer of the lung. It is much easier to mistake the ordinary diseases for cancer, than to mistake cancer for the ordinary diseases; and if we recollect that the pathology and diagnosis of this remarkable affection have been worked out only recently, the first accurately recorded case being that published by Graves, in 1834, and the last and the most remarkable, as yet on record, by ourselves, in a late number of the *British American Medical Journal*, it is truly astonishing to what a degree of perfection the diagnosis has been brought. In our case, we ascertained the nature of the malady, and delivered a clinical lecture upon it, long before the patient's dissolution.

The second part of Dr. Swett's work is devoted to Diseases of the Heart and Blood Vessels, and is in every respect an admirable addition to our knowledge of this still obscure subject. The extent to which this notice has already stretched, precludes our going fully into a discussion of our author's views. We remark, however, that he does not claim for physical diagnosis perfect infallibility, in this department,

which many over-zealous auscultators have done, thereby bringing the science into unmerited disrepute, and by their assertions that we had already arrived at perfection, putting a stop to further inquiry on the subject. We are amongst those who believe that much yet remains to be done in cardiac diagnosis, and the first step towards advancement must be to divest ourselves of many of the incumbrances heaped upon us by fanciful and hasty observers. The real difficulty of cardiac diagnosis consists in this, that *we rarely find but one morbid condition present*. There are usually several, and the practitioner must make allowance for the manner in which some alterations of structure modify the signs produced by others, and he must bear in mind this fact, that having made the diagnosis between an organic and an inorganic disease, the *variety, modification, or locality* of the organic change will not be ascertained unless he carefully study the general symptoms, and the condition of the lungs, liver, &c., in connection with the physical examination of the heart. From these two sources combined, he will derive accurate information, but not from either of them alone.

Did space permit, we would quote some of the excellent passages we have noted in this section of the work, but we must draw our remarks to a close, with the expression of our opinion, that notwithstanding the faults we have pointed out, the work of Dr. Swett is a most valuable addition to modern medical literature: in it, the practitioner who wishes to master the subject, will find a judicious, and what is rare in these days of book-making, an experienced guide; and the student, a careful, pleasing, and intelligible instructor, and we feel confident that the well-merited reputation of Dr. Swett will be still further advanced by the excellent work before us. We should be guilty of an unpardonable omission, did we not notice the admirable manner in which the book has been got up. It is printed on good, well glazed paper, the type is clear and large, and the binding very neat. It is in short, one of the best specimens of publishing, we have seen issue from the American Press.

R. L. M. D.

SCIENTIFIC INTELLIGENCE.

SURGERY.

[WE have always been of opinion that much valuable matter is left out in the scientific intelligence of some of our contemporaries, by their omitting the discussions that have ensued upon the reading of the differ-

ent papers from which they copy extracts; and hence, we have adopted the custom [which we have reason to know meets the approbation of many of our readers] of giving in full, not only the paper itself, but the discussions held on it, as from the latter, not unfrequently, the greater amount of information is to be derived. The following series of articles we consider of great practical importance, and therefore reprint them, without abridgement, for the benefit of our readers:—]

Formation of an Artificial Anus. By MR. ADAMS, of the London Hospital.

THE patient was a lady, aged 35, the mother of children. She had for a considerable time complained of great difficulty in passing her motions. This was accomplished with pain and much straining, and she was the subject of hæmorrhoids. She was hereditarily predisposed to cancer. About a year ago, a surgeon pronounced her case one of cancer of the rectum, with ulceration. The bowels were constipated nine days, and the usual purgatives were administered, and scruple doses of calomel, without effect. Her sickness was allayed by opium and sucking ice. The rectum-tube could not be passed above four inches. Scirrhus rectum, very high up, was presumed to be the cause of the obstruction. Metallic mercury, to the extent of two pounds, was given, a small quantity of which passed soon after. The operation was performed according to Dr. Luke's method. The descending colon and sigmoid flexure were undistended. In the course of a few hours, a large quantity of fluid fæces passed, and the relief was complete. She continued to progress favourably, and since the operation has been better than she had been for some years. Occasionally a small quantity of fæces pass per anum, but it is nearly all discharged by the wound; there is also occasionally a small quantity of bloody mucus passing per anum. A light truss is used to restrain the constant passage of the fæces, and there is a distinct tendency to pass them twice daily. A large quantity of the mercury passed by the wound soon after the operation, but a very considerable quantity was retained until a short time ago, and it then passed per anum. The patient was slightly salivated, apparently from the calomel, the mercury being unaltered.

Two cases in which the operation for Artificial Anus was performed.
By MR. W. J. CLEMENT, F. R. C. S., Shrewsbury.

Case 1.—The author visited, on the 8th of October, 1841, a married woman, aged 47, who was suffering from obstruction of the bowels of fourteen days' duration, accompanied by great distension of the abdomen, hiccough, incessant vomiting, which during the last two days had become fæcal; the countenance was anxious; the pulse small, rapid, and

fluttering. It appeared that for the previous seven or eight years the patient had suffered from habitual constipation, and had required the constant use of drastic purgatives. The abdomen was tympanitic on percussion everywhere except on the right inguinal and iliac regions, where it was dull. It was evident, from the fact that several pints of fluid could be injected into the colon, that the obstruction was not in its descending portion. On the 10th, the symptoms having undergone no abatement, and the patient's state being evidently hopeless unless relief could be obtained by operation, it was proposed by the author, and performed on the same day. The patient was placed on her belly; the incision was made midway between the last rib and the crest of the ilium, extending from close to the spinal column to a line cutting the anterior superior spinous process of the ilium perpendicularly. The colon was found to be distended. It was secured by a couple of ligatures passed through its coats; and a vertical incision being made into it, a large quantity of liquid fæces escaped, together with much flatus. Immediate relief was obtained; the unfavourable symptoms ceased; the fæces were passed more or less freely through the wound, and at the end of six weeks the patient was able to walk a mile. About this time the discharge through the artificial anus became gradually less; at the end of seven weeks vomiting and colicky pains returned, but ceased after the expulsion of a mass of plum-stones, when a free exit for the fæces was again established. The patient lived for more than three years after the operation, enjoying tolerable health, and able to walk a considerable distance, and to attend to her domestic affairs. Aperient medicines were taken regularly, and the passage of fæces was pretty free. Plum-stones were passed at intervals; the total number collected was 116. The patient's health declined for some months before her death, the appetite decreasing, the strength failing, and emaciation progressing. On examination, a very complete stricture was found to exist in the transverse colon, which would not admit even the passage of a bristle. It was about a quarter of an inch in length. The coats of the bowel at this point were of a dense, white cartilaginous structure. The muscular coat of the cæcum and ascending colon was much thickened, and there was great distension of the gut behind the stricture. No traces of inflammatory action were to be found in the peritoneal cavity, with the exception of three membranous bands, which extended in a lateral direction, connecting the lower part of the ilium with the cæcum and ascending colon.

Case 2.—The driver of a mail coach, a stout, muscular man, aged 43, consulted the author in January, 1847, suffering from constipation and external piles. In the month of March the constipation had become more obstinate, and the patient was obliged to give up his occu-

pation. The symptoms were relieved by cupping on the loins, calomel, and other purgatives. On the second of April, rigors, which had occurred once during the month of March, returned, and were followed by vomiting, which continued for two or three days. Examination of the rectum showed the existence of a stricture about six inches from the anus. The attempt to pass rectum bougies of the smallest size failed. An elastic gum urethra bougie passed the obstruction, and upon withdrawing it, liquid fæces and flatus were voided. This operation caused great constitutional disturbance, rendering bloodletting, leeches, and calomel and opium, necessary. The discharge from the bowels was very slight; the vomiting recurred frequently. On the 12th of May, three small fleshy bodies, with a little feculent matter, were voided. No fæces passed from the rectum subsequently. During the remainder of the month of May the patient suffered greatly from hiccough, vomiting, and most troublesome tenesmus. On the 30th, the formation of an artificial anus was proposed, but declined by the patient. On the 18th June, feculent vomiting began, and returned on the 20th, and the patient then consented to have the operation performed. Examination of the rectum with the finger had given evidence of a morbid growth within the rectum, which was increasing in bulk. The operation was performed on the 20th June. No feculent matter having passed the rectum since the 12th of May, the abdomen was enormously distended. The incision was made on the left side, in the same direction as in the former case, but of greater extent. The bowel was secured by ligatures, and a free incision made into it, but nothing but flatus escaped. As moderate pressure over the abdomen had no effect in causing a discharge of fæces, the patient was placed in bed on his left side. The vomiting and hiccough continued; about eight hours after the operation an immense discharge of liquid fæcal matter took place, and with some abatement of the symptoms. The author gives a detailed report of the patient's state during seven days following the operation, during which there was considerable constitutional irritation, with much tenderness of abdomen, and retention of urine. The catheter was passed repeatedly, but the secretion of urine was very scanty, the fæcal discharge continuing more or less constant and copious. At the end of the week the improvement was very decided, and continued for ten days—viz., until July 8th, when acute pain in the left side of the abdomen and rigors occurred, followed by enlargement of the glands in both groins; and sloughing of the skin over the sacrum and right hip, which had begun four days after the operation, but subsequently had appeared likely to cease, began again to extend itself, in spite of the partial removal of pressure by means of the water-bed, &c. It was found, on examination, that the morbid growth occupying the rectum had increased very

much, and it was evident that the difficulty attending the emptying the bladder, was caused by its pressure. A tumour projected through the sphincter and a few days before the patient's death, which bled on being touched. The enlarged glands in both groins continued to increase in size, and the skin in the left groin began to ulcerate. Death occurred on the 26th of July. No examination of the body took place.

The Descending Colon Opened in the Left Loin. By A. BAKER,
Surgeon to the General Hospital, Birmingham.

ON the 15th of August, 1849, the author was called to visit Mrs. T——, aged 62, who was suffering from severe pain in the umbilical and hypogastric regions, with retching and vomiting, fulness in the abdomen, flatulence, and constipation. The symptoms were at first attributed to her having eaten indigestible food, and were treated with that view. The symptoms for the most part disappeared, but the pain continued from time to time. On the 1st of October she had a recurrence of the symptoms, not referrible to any obvious cause; and again on the 11th. On the 9th of November, the author was summoned to her, and found many of the signs of intestinal obstruction present, and within reach of the tip of the finger, the rectum was found obstructed by a firm growth, occupying its whole circumference. Attempts were made for a few days, and with partial success, to unload the bowels, by passing a small œsophagus-tube into the stricture, by injections, and the use of purgative medicines. In a few days, however, constipation returned, and with symptoms of peritonitis. These symptoms were subdued, and diarrhœa came on; but this ceased spontaneously, and constipation returned gradually; and on the 17th of January, 1850, perfect obstruction took place. On the 23rd, the symptoms were so urgent, that an operation was proposed and assented to. The descending colon was opened in the left lumbar region, an incision being made transversely across the left loin for five inches. After the division of the muscles and fascia, the quantity of fat which presented itself was so great, that it was necessary to cut away part of it. The intestine was attached by four sutures to the skin before opening it. The opening was followed by the escape of a large quantity of semi-liquid fœces. The daily reports of the state of the patient after the operation are given by the author. She went on favourably, and on the 18th of April, it is reported that she got up, three weeks after the operation; that her general health is good; and that she has gained flesh. The lumbar opening is large enough to admit the index-finger, and the motions pass easily through it. She wore an ivory plug, attached to a padded steel plate, fastened by a belt; but after a time the plate was found inconvenient, and the plug was at-

tached simply to a plate of vulcanized India-rubber. Up to this time, she has remained free from symptoms of intestinal obstruction; but within the last few months, has been attacked with symptoms which indicate that the morbid growth in the pelvis has extended to the abdomen. The author then gives his reasons for preferring the operation in the loin, in this case, to that proposed by Littré, which were—1st. That there was less risk of rekindling inflammation of the peritoneum. 2nd. That the presence of femoral hernia, which existed in this case, might have given rise to displacement and adhesion of the intestines, so as to interfere with the finding of the large intestine, in an operation at the groin. 3rd. That as the point of obstruction was ascertained, there was no need of any exploratory incision: and he then points out the general advantages of the operation selected. In commenting on the operation at the loin, the author adverts to the fact, that the appearance of the anterior layer of the lumbar fascia may induce the supposition that the intestine is arrived at, as it has at times a bluish green colour, and looks like intestine. But the longitudinal fibres which characterise the large intestine will not be seen; and on making a careful puncture of the fascia, a protrusion of loose renal fat will take place; and until this fat is reached, the operator may be sure that he has not arrived at the bowel. In speaking of the tendency which always exists, after these and all similar operations, to contraction of the cicatrix, the author expresses his belief that this tendency, in the present case, has materially lessened the habitual use of the plug, which, he says, was a great comfort to the patient, as it enabled her to go about, and mix with the world, without the fear of the accidental escape of the contents of the bowel; and he adds that the patient was able herself to adjust the apparatus, and attend to the evacuations and to the dressing of the wound, without requiring the aid of any second person.

Case of Intestinal Obstruction. By Mr. J. LUKE, Surgeon to the London Hospital.

▲ BLACKSMITH, aged 30, was admitted into the hospital on the 16th December, 1851, under Dr. Pereira, complaining of rheumatic pains in the hips and knees, and with a history of having suffered from rheumatic fever seven years since. It was found, moreover, that there had been no passage through his bowels for five days, that the abdomen was tympanitic, very painful and tender to the touch, and that there was vomiting of all food and drink. The last motion passed had been a copious one. There was inguinal hernia on the left side, reducible. The usual means were employed for four days after his admission, with-

out any abatement of the symptoms taking place. On the third day, the vomiting became *faecal*. A stomach-pump tube introduced into the rectum met with obstruction at four or five inches from the anus. The secretion of urine was plentiful; the pulse ranged from 80 to 90; soft and compressible. On the fourth day after admission, a consultation was held, when it was agreed that the seat of obstruction was probably in the upper part of the rectum or sigmoid flexure of the colon. Owing to some abatement of the symptoms this day, the operation was not determined upon. The next day, another consultation took place, and the patient's state having become worse in the interim, the operation was determined upon, and performed by the author. A perpendicular incision, about two inches long, was made above Poupart's ligament, on the outside of the course of the epigastric artery. The incision through the peritoneum was about an inch long, through which the finger being introduced, it was found that the portion of the rectum within reach of the sigmoid flexure, and the descending colon above it, was contracted and healthy. The small intestines were distended, and a portion of them, on being drawn through the aperture, was found to be discoloured. The incision was enlarged to the extent of three inches, and a careful exploration was made, but without discovering the seat of stricture. The patient becoming exhausted, the wound was closed, and he was sent back to bed with an opiate, which was ordered to be repeated at intervals, if necessary. The symptoms of obstruction increased, the pulse became accelerated and more feeble, and the patient died on the fourth day after the operation. On examination, the small intestines were found to be much distended, and there were marks of recent but not very intense inflammation. The whole length of the colon was found to be empty and contracted; the *cæcum* contained a hard lump of *faeces*. About four feet of small intestine above the valve were empty and contracted, beyond which there was a sudden distension of the gut. At this point the cause of the obstruction appeared to exist in a narrow band, which completely encircled the gut from one surface of mesentery to the other, and which was considered to be congenital. About three or four inches below the band there was a diverticulum three inches in length. Adhesions had taken place between the surfaces of the wound, and also between it and the omentum lying in contact with it.

The time of the Society having expired, and there being another paper on the subject unread, it was arranged that Mr. C. Hawkins' paper should stand over until the next meeting, and the discussion on all the cases take place afterwards.

FEBRUARY 24, 1851.

Case of Stricture of the Colon, successfully Treated by Operation after thirty days' Obstruction; with an analysis of forty-four cases of Artificial Anus. By CÆSAR H. HAWKINS, Surgeon to St. George's Hospital.

IN this case a lady, aged about 44, was relieved by the performance of Amussat's operation on the descending colon, in August, 1851, from the effects of nearly complete obstruction in the sigmoid flexure of the colon, and continues in good health to the present time, experiencing so little inconvenience as to be able to enter as usual into society, the artificial anus being kept free by means of an ivory plug of proper size and length, the natural passage being only in part restored. The author proceeded to say, that although M. Amussat could only find six instances of artificial anus, when he brought forward his *Memoirs* in 1839 and 1841, the operation had been performed in almost every year since that time, and four persons were now living in London, whose lives had been saved by its performance, and therefore he thought that sufficient cases might now be brought together to show what was the real value of the operation in surgery. He had therefore framed tables of every published case with which he was acquainted, and of seven unpublished cases besides his own, for the particulars of which he was indebted to the operators. The tables were divided into those which had been operated on through the peritoneum, seventeen in number, and those in which the bowel had been opened external to the peritoneum, which amounted to twenty-seven cases; and they showed the name of the operator and the date of the operation, with references to the published accounts of each case; the sex and age of each patient; the nature of the obstruction; the part which had been opened, and the mode in which the operation was performed; and the result, with the date of the death or of the last account of the case; and, finally, the cause of death and the condition of the patient if alive. The *results* of the operations were next tabulated, from which it appeared (omitting one case in which the operation was performed for fistula) that ten had died within forty-eight hours after the operation, and twenty-one within the first five weeks; and that twenty-two only could be fairly considered as having recovered from the operation. It was next shown, that of the twenty-two which recovered, six died in about six months from the time of the operation; others were still alive, or were so at the last known date; and that only *nine* patients were as yet known to have survived as much as one year. Against this apparently unfavourable result the author brought forward proof that, whatever the time was that the patient had survived, the life had in every case been clearly pro-

longed by the operation, since Mr. Luke's case was the only one in which the fæces had chiefly passed by the natural anus after the operation; in Mr. Clement's case, which lived three years, not even flatus had passed per anum; and in Mr. Maitland's case none whatever had passed naturally after the first two years, although the patient survived the operation seventeen years. A number of tables were next brought forward, but were only partially read at the Society, to show how far the results might be influenced by different circumstances. The sex of the patients did not appear to have any influence; the table of ages showed the curious fact that of eight persons not exceeding thirty, who had been operated on, no less than five had died, while of seven exceeding sixty, only two had died; but nevertheless, the age exerted less influence than might be supposed from this circumstance, since the cases below forty and those above fifty, each showed nearly an equal number of deaths and of recoveries. The table of diseases for which the operation was performed, showed that no less than seventeen were believed to be cancerous; but although the immediate deaths were slightly increased by the debility of cancer, the deaths of those that recovered were not produced at an earlier period than in non-malignant diseases. It was next shown from the tables of the assigned or apparent causes of death, both in those who recovered, and in those who died in the first five weeks, that scarcely any died of the operation, but that organic changes or other effects of the disease itself could in almost every case be clearly traced as the ground of want of success at first, or of death at an early period after the operation. The tables of the situation in which the artificial anus was made, led to remarks on the comparative propriety of Littre's or Callisen's operations, from which it appeared clearly right to operate externally to the peritoneum on the right side of the body; but the question was left undecided as to the descending colon, so far as the much smaller number of eight cases, compared with twenty, could decide the point; the dangers of peritonitis, the facility of keeping open the artificial anus, and the errors of diagnosis, being discussed *seriatim*, with reference to the choice of the mode of performing the operation. With regard to the latter point of the diagnosis, Mr. Hawkins showed that very few errors appeared to have been committed in deciding whether the opening ought to be made in the right or left colon, and consequently that there was no necessity for always operating on the right side, as M. Baudens had advised, even when the obstruction was believed to be in the rectum or sigmoid flexure. But the author brought under notice several cases, showing the difficulty of distinguishing whether an obstruction was situated in the small intestines or in the large, and that even when the peritoneum was opened, the seat of the

obstruction had not always been discovered, the difficulty being, as it seemed, liable to be increased still further by the existence or supposed existence of a hernia, of which some instances were also given at the conclusion of the paper.

MR. NORMAN begged the attention of the Society to one or two considerations in respect to the diagnosis of such obstructions—the real point of importance and difficulty in the question. These had occurred to him for cases that had come under his notice in practice, and he thought them deserving of attention. In the first place, the existence of diarrhœa prior to the complete obstruction. This had been alluded to as occurring in the case given to the Society by Mr. Adams on the former evening, and was the occasion of doubt and difficulty in a case that he (Mr. Norman) had attended some years ago. The subject, an elderly female, had laboured for some days under an attack of diarrhœa; the purging was frequent, though not profuse; and when it ceased, vomiting, which eventually became profuse and stercoraceous, with tympanitis and entire cessation of the ordinary fœcal evacuations, showed that there was a complete obstruction of the bowel at some part. This did not seem to be in the great intestine, on account of the large quantity of fluid which could be injected in enemata, and retained, and there was an entire absence of symptoms by which he, or others who saw the patient with him, could determine the situation of the obstruction. The patient died, and on a post-mortem examination, the coils of small intestine were found so matted together by old adhesions, that they could with great difficulty be separated from each other, and at length in the lower third of this gut was found a stricture, occasioned by the contraction of the plastic effusions of an old attack of peritonitis, which had reduced the calibre of the gut to that of a crow quill; nevertheless small scybalæ or pellets of solid fœcal matter, were found below the stricture. These had probably passed the stricture in a fluid state, and become more firm by subsequent absorption of the more liquid parts. In the next case that he would name the diagnosis of the cause of obstruction was rendered difficult by the fact that a previous attack, of a similar character, had terminated happily under medical treatment, and several years of perfect health had been enjoyed. The patient, a respectable tradesman, aged about 50, called on Mr. Norman for advice. Two evenings before, he had “felt bilious,” and had taken a dose of pills, which produced some action of the bowels, but without relieving him from any uncomfortable feeling of pain and fulness in the belly, nausea, and flatulence. Severe symptoms of intestinal obstruction, with distension of the belly, vomiting, and a constant pain on the left side of the umbilicus set in. At length, by the various means used, the symptoms abated, the bowels

began to act, the patient came down stairs, and seemed to be convalescent, so that two days before his death he cut out a pair of trousers, being a tailor. The same night, pain and the other symptoms returned with more severity, and were soon followed by a fatal termination. On a post-mortem examination, a loop of small intestine was found stric-tured in a ring produced by an appendix vermiformis at the end of a diverticulum of the small intestine, which crossed that bowel over the front of the spine, and adhered to the brim of the pelvis on the right side. The obstruction was altogether on the right side of the umbilicus, and below it; the pain altogether in the left side, and above the umbilicus. The patient was attended during his illness by Dr. Babington, Dr. Hare, and Mr. Balderson, along with Mr. Norman. It was in cases such as the above that information was needed to guide us in practice. As regarded the resort to surgical operations, when the rectum was the seat of obstruction, it appeared to him (Mr. N.) from all he had heard, and read, and seen, that the course was pretty clear, and that much important light had been thrown upon the subject by the excellent papers of that and the preceding evening.

MR. ADAMS said that the presence of diarrhœa before the occurrence of obstruction, as a diagnostic mark in these cases, had been illustrated in his own case; and he then briefly stated the chief points in it, which will be found in the abstract preceding.

DR. MURPHY inquired whether Mr. Cæsar Hawkins had performed the operation for artificial anus on infants with imperforate rectum, and whether it was likely to succeed in such cases? He (Dr. M.) had had it performed in one case, but it failed—mainly, he thought, from having been resorted to too late.

MR. ADAMS remarked that he had omitted to state that, in the case he had related to the Society, the patient now evacuated the bowels comfortably twice a day, and was healthier than she had been for years.

MR. CÆSAR HAWKINS had not performed this operation on infants. It had, however, been performed, sometimes with success, sometimes without. Of course much would depend on the individual case and the seat of obstruction.

MR. PARTRIDGE had, in one case of an infant born with imperforate anus, performed Amussat's operation. The child lived a few days.

MR. HODGSON said that undoubtedly the diagnosis of these cases was the most important point connected with them, and was surrounded with difficulties. It had been stated that the distended appearance of different parts of the intestines would aid us in pointing out the seat of obstruction, but this was an uncertain sign, and liable to lead us into

error, for in fat persons, or where the obstruction had long continued, there would be a general fulness, and no certain information could be gained from this sign. We should be aided much in our diagnosis, however, by a very careful study of the history of the case, going fully into its particulars, and inquiring as to where distension was first perceived, and other symptoms. From these inquiries, we might often form a pretty accurate guess where the obstruction was; but the most certain symptom as to whether the obstruction existed in the large or small intestines was to be found in the existence of vomiting and the history of this symptom. When the obstruction was low in the colon, the vomiting did not generally come on until some time afterwards, but when it was situated in the small intestines, it was an early symptom; and if in such cases the vomiting is not stercoraceous, the obstruction may be fairly supposed to be in the small intestines. When the obstruction was in the large intestines, the vomiting became fæcal after the obstruction had existed for a shorter time than when it existed in the small intestines. The cases which had been read at the last meeting of the Society bore out this observation. He thought the preferable operation, when it was decided that the seat of obstruction was below that point, was Amussat's, in the left colon; for it was important that the site of the artificial opening should be as low in the intestinal canal as possible. When the opening was made in the small intestines, the patient became perfectly nourished, and soon sunk. In Mr. Clement's case, in which the opening was made in the caput coli, and the patient lived about three years, and death seemed to have been induced by atrophy, the body, when opened, was found very attenuated, probably from want of that part of alimentation which was consequent upon the processes which went on in the colon. It was best, therefore, that the opening, when practicably, should be made in the left colon. When this could not be effected, from the circumstances of the case, then the opening should be in the right colon. An artificial anus from the small intestines was justifiable, when the patient was informed that its chance of prolonging life to any considerable length was but very small. The objection to Amussat's operation was, that there was a great disposition in the orifice to contract, and to render the passage of the fæces difficult or impossible. This was no doubt the fact in some cases, but the considerations relating to nutrition above noticed, were sufficient to make an opening in the left preferable to one in the right colon, and still more so, in his opinion, than in the small intestines. After speaking of the services rendered by the authors of the papers to the settlement of the question, he said this operation, as proved by statistics, had been performed with as great a degree of success as many of the great operations in surgery.

MR. DE MORGAN remarked that in a case which had been under the care of Mr. Moore, at the Middlesex Hospital, a very simple mode of proceeding was hit upon to determine in a case of obstruction, that it was not in the large intestines. There was tympanitis to some extent. A tube was passed up the bowel some distance, and an injection thrown up. The stethoscope was then applied to the abdomen, and on changing the position of the patient, the fluid was distinctly heard to traverse the right side. From this it was inferred that the large intestines were free from obstruction. This proved to be correct, as after death a band was found encircling a portion of the small intestine.

MR. MACILWAIN thought that in cases of obstruction the operation for artificial anus should be resorted to only as a last resource. He made some strong observations on the employment of powerful purgatives in cases where obstruction existed, and he related some cases to show their evil tendency.

MR. CÆSAR HAWKINS had little to say in reply. With respect to the diagnosis of the seat of obstruction by the distension of the colon above the seat of stricture, this could not be depended upon. This might be air alone, and mislead us in our diagnosis. When there was a soft and solid state of the colon on examination, it was more likely to aid us in our diagnosis. With regard to the vomiting as a symptom of the seat of obstruction, no doubt, as a general rule, this would hold good, as this symptom generally came on earlier when the small than when large intestines were the seat of obstruction. But in many cases, however, vomiting came on as early when the obstruction was in the large intestines as when it was in the small, and the converse of this also obtained. In his own case, vomiting was an early symptom, but it ceased after a few days.—*Lancet*.

MIDWIFERY AND DISEASES OF WOMEN AND CHILDREN.

On Sudden Death in the Puerperal State. By ALFRED H. McCLINTOCK, M. D., F. R. C. S. I., Ex-Assistant of the Dublin Lying-in-Hospital.

(Continued from page 175.)

ABOUT the year 1808, Le Gallois, in the course of some experiments upon animals, observed in three different cases air to penetrate into the vena cava from the uterine veins, and that this was followed by instantaneous death. His son, writing twenty-one years afterwards—viz., 1829, after citing these experiments, asks this question: In many of the

cases of sudden death after delivery, might not this event have been caused by the entrance of air into the circulating system through the uterine vessels? We find Ollivier repeating the same suggestive query in 1833, in the article "Air" of the *Dictionnaire de Médecine*. Since then, the advance of obstetric knowledge has placed nearly beyond a doubt the possibility of such an occurrence, and thus added one other to the manifold causes of death in the puerperal state. To Dr. Rose Cormack belongs the praise of having elucidated this very obscure subject; and of his instructive essay I have largely availed myself in the subjoined remarks. His experiments and reasoning, together with subsequent observations, justify our drawing the following conclusions—1st, that the admission of a certain quantity of air into the current of the circulation is capable of destroying life almost instantaneously—a fact, indeed, which the records of surgical practice fully corroborates; 2ndly, that the possibility of air occasionally finding an entrance into the vascular system through the uterine vessels, seems highly probable; and 3rdly, that in some few instances of sudden death soon after delivery, the only cause for the catastrophe, which a minute inspection of the body could discover, was the existence of air-bubbles in the heart and vena cava.

It would be irrelevant to my present purpose to enter into the general question of the history and pathological effects of the presence of air in the veins. Those who are desirous of an enlarged acquaintance with this interesting topic, I would beg leave to refer to an essay by the late Dr. John Reid, published in the same volume with his other researches. This will be found to contain a most able and comprehensive analysis of all that is known on the subject.

The mechanism, so to speak, by which the introduction of air into the uterine veins can be effected, admits of being explained in a few words. The veins of the gravid womb present four remarkable characters—namely, their extraordinary large size; their freedom of inosculation; the total absence of valves; and their termination on the internal surface of the uterus at the site of the placenta, by large open orifices. If the uterus be examined soon after delivery at the full term, the majority of these apertures will readily admit a goose quill, and some will even allow the little finger to penetrate without laceration. During contraction of the uterus, all these openings are hermetically closed, but when it is relaxed they again become proportionately more or less patulous. From this it is manifest that the same condition of the organ which causes flooding, is exactly that which is indispensable for the ingress of air; so that the latter, when it does take place, is almost of necessity preceded or accompanied by hæmorrhage. This fact is of some value, viewed in connexion with the history and progress of those cases where

it was supposed that air had gained admission into the circulation through the uterine veins after delivery ; for Amussat found in his experiments upon the entrance of air into the venous system, "that the period of death was hastened considerably in those animals whose vessels had previously been depleted of part of their blood." (Reid.) But, it will naturally be asked, does the air ever gain access to the uterine cavity, for otherwise it could not possibly find its way into the vessels of the womb ? This question, I am of opinion, can safely be answered in the affirmative. Confining ourselves to the simple matter of fact, it may suffice to state, that Professor Meigs assures us he noticed the expulsion of air from the uterus immediately after delivery, "a great many times." Dr. Rose Cormack has made the same observation ; and I have myself remarked a similar occurrence on at least three or four different occasions. Dr. Meigs, in his Letters to his Class, minutely describes the process by which the air is drawn up into the uterus ; but it is unnecessary to delay you by quoting his remarks. With these considerations before us, then, we are in a position to adopt the language of Dr. Cormack :—"I have, therefore, (writes this gentleman), not only no difficulty in believing, but am constrained to admit that, should any impediment be offered, in such cases, to the free exit of air by the os uteri, it must be forced into the uterine veins, were their mouths not protected by coagula ; and thence it would rapidly pass, by the current of the circulation, up the vena cava into the right auricle." *London Journal of Medicine*. vol. ii., p. 941.)

The intensity of the symptoms when air is taken up by the uterine veins would seem, as in other cases, to depend very much on the quantity, and on the condition of the patient. Death may ensue in a few moments from the rapid distension of the right auricle with air, and its consequent inability to contract. This first danger over, she may still perish at a remoter period from asphyxia, induced by gradually augmenting pulmonary obstruction.

Dr. Cormack refers, in support of his views, to seven cases from different authentic sources, in all of which death was supposed to have been more or less directly occasioned by the passage of air through the uterine veins into the vena cava and heart. These cases, taken collectively, form a body of evidence which it is hard to refute. In six of them, the presence of air in the veins was demonstrated upon inspection of the body, and no one of those cases exhibited any other morbid lesion adequate to account for death. In all, with a single exception where there was prolonged retention and putrefaction of the after-birth, the fatal event took place within a very few hours after parturition. The symptoms which presented themselves in these cases were very various ; and those most frequently observed were by no means pathognomonic.

Great anxiety of countenance, embarrassed respiration, with a sense even of impending suffocation, and a weak, rapid, faltering pulse, seem to have been the prominent features of the cases where there was time for the development or observance of symptoms.

Besides the seven instances above alluded to as being adduced by Dr. Cormack, I find another recorded in the *Provincial Medical and Surgical Journal* for November 27, 1850, by Mr. Berry. The leading features of this case it may be well to give. A woman, aged 22, was delivered of her first child after a natural labour, at seven in the evening of June 17, 1850. The placenta came away in twenty minutes, unattended by any immoderate loss of blood. At half-past eight, she expressed herself comfortable, and at eleven took some gruel. At one o'clock of the same night, her husband, who lay in the room with her, became alarmed by the patient's difficult breathing and feeling of faintness, and immediately sent for her medical attendant, but before his arrival, at two o'clock, she was dead. She lived seven hours after delivery. "The cause of death could not be accounted for as there was no hæmorrhage, and apparently nothing in the condition of the patient to prognosticate such a termination. . . . Upon opening the abdominal cavity, the uterus was seen midway between the umbilicus and pelvis, the peritoneum covering it, and the intestines healthy, but pale; the stomach contained a small quantity of fluid; liver healthy; the kidneys presented a granulated appearance, and the uterine which remained in the bladder was ascertained to be, by the application of heat, slightly albuminous. Upon cutting into the uterus it was found empty, and the vessels where the placenta had been attached, patulous: the vagina contained, at its superior part, a moderately sized clot of blood; within the chest, both lungs were congested, and contained scattered tubercles within upper lobes; the heart was the size of a male heart, and apparently distended. Upon making an incision into it, a gush of air escaped, and the organ became flaccid; no blood was found in its cavities. About an ounce of serum was observed in the pericardium. The brain was healthy in every respect. No signs of decomposition existed in any part of the body." From the remarks of the writer of this case, it is plain the impression on his mind was, that the immediate cause of death could have been no other than the air in the heart. If this conclusion be denied, we are met by the question—How, then, is the woman's sudden decease to be accounted for? It is hardly possible, I think, that the granular disease of the kidneys, which she appears to have had, could have brought about the fatal event. This, however, I leave for the Society to determine. One point in the case deserves some consideration before admitting it to possess any value, and it is this, the

examination of the body was not made for at least fifty hours after the woman's death, which, be it remembered, took place in the month of June. Mr. Berry has expressly stated that there were no signs of decomposition present; still the fact I have mentioned diminishes in some degree, perhaps, the importance that would otherwise justly belong to the unusual circumstance of air being present in the heart. Dr. John Ramsbotham narrates a case which I am tempted to introduce here, from the resemblance in many of its features to the foregoing history, and from the presumptive evidence it affords that if special search had been made for it, air might probably have been found in the heart, and thus explained the cause of the patient's unexpected death. It was the lady's first child, and the labour was tedious, requiring the use of the forceps. "A dead child was soon produced into the world without any particular difficulty or accident, and as soon as it was born a quantity of offensive gas, with that olive-coloured fluid elsewhere mentioned, escaped from the vagina. Uterine action did not seem disposed to return, and after waiting some time a separated placenta was withdrawn. After this the uterus felt well contracted, and the woman was left in a favourable state between two and three o'clock. In the evening my friend called to inform me that this poor woman had died very suddenly and unexpectedly between five and six. All he knew about the matter was, that he was called in a hurry to the poor woman, who was represented to be in a fit, but he found her dead, with her belly much swelled. Anxious to learn the cause of so melancholy an occurrence, leave was obtained to open the body, which was inspected the next morning. . . . On dividing the parietes the intestinal canal was seen somewhat distended with gas, but the rest of the viscera were healthy. The uterus was much extended and felt flaccid; and on pressing it a quantity of fœtid gas escaped from per vaginam; after its escape the organ became still more flaccid. On opening into its cavity there was only one small coagulum at the os uteri. The appearance of the uterus on dividing the abdominal parietes was not unlike one at the fifth or sixth month of pregnancy. I must confess (continues Dr. R.) that before the uterus was handled or opened, I suspected death to have been occasioned by internal hæmorrhage: that certainly was not the case." (op. cit., p. 122).

Now, sir, from what has preceded, it may be safely asserted, that if the possibility of death from the admission of air into the uterine veins be not established on conclusive evidence, enough has still been adduced to show the absolute importance of making special examination for its presence in all obscure cases of sudden death following parturition. In conducting this examination our attention should be chiefly directed to the heart and vena cava. If air exist in the latter, it will probably be

discoverable through its coats; at all events, before cutting into it the heart should be taken out. Previously to doing this the great vessels leading to and from the organ should be tied, and then after its removal the right auricle and ventricle are to be carefully opened under water, by which process the escape of any air will at once be demonstrated.

There are strong grounds for believing, as has been already hinted, that the idiopathic asphyxia of M. Chevallier is merely another name for syncope. Discarding all preconceived opinions, and looking only to facts, we find very many examples recorded of sudden death from fainting, in which the condition of the heart was precisely similar to that described as having existed in M. Chevallier's cases. The decision of this question, however, does not affect my present object, nor the remarks which I have ventured to offer, though I admit that it is one of no small interest and importance.

I must now, sir, bring this communication to a close; on a future occasion I hope to resume the subject, and to proceed with the examination of the other causes which may suddenly destroy life in the puerperal state. So far you perceive I have been chiefly occupied with two only—viz., syncopal attacks and the entrance of air through the uterine veins. If I have succeeded in placing the detached fragments of our knowledge with respect to these in anything of a tangible or connected form, my humble endeavours will have been amply rewarded.

Dr. H. KENNEDY said that although he could not speak from experience, concerning the causes of sudden death in puerperal patients, yet he might say that he had met with it in other instances, which might be considered—at least to a certain extent—as bearing upon the subject of the present communication. In phthisis, for example, he had on some occasions known sudden death to occur long after the general symptoms which might lead to that result had subsided; and upon examination of the body after death the heart was found in the same flabby or atrophied condition, as it was found in the majority of cases of sudden death connected with the puerperal state. He was at a loss to understand why the heart should not be as frequently affected with debility as the brain, lungs, and other organs of the body. For his own part, he had reason to believe that a weak acting heart was far more common than was supposed, and if the heart of a puerperal patient was in this state, it was easy to understand how sudden death might take place in the way described by Dr. McClintock. With regard to the presence of air in the heart and veins, he was inclined to suspect that it was, in every case, the result rather of secretion or exhalation than of the entrance of air through the veins of the uterus, as suggested in the communication before the Society. He had seen it in

connexion with a fatty heart, and in one case the air had formed under the mucous membrane of the stomach. In two or three instances he had seen it in the heart and veins. In the case at Dundalk, mentioned by Dr. McClintock, the patient was remarkable for fatness, and if a search had been instituted, air would in all probability have been found in the heart and veins. Dr. Kennedy also observed that in many cases of fever, death had rapidly supervened during the convalescence of the patient. In his own practice he had not met with any instances where death had taken place under these circumstances; but many such were upon record; and he had seen one case where death had suddenly occurred, in a patient who made an exertion, which the system was not fitted at the time to undergo, in consequence, as he supposed, of the weak action of the patient's heart.

Dr. McCLINTOCK said that Dr. Kennedy's statement appeared to him to be one of considerable value. He (Dr. H. K.) had stated that on two or three occasions he had found air in the heart and veins. The cases in which he had seen it, were not, he believed, puerperal cases, but that circumstance did not affect what he was about to say. It had been assumed by Dr. Rose Cormack, that air never, under ordinary circumstances, existed in the vena cava, as, for example, in the case of a woman who died after a rupture of the uterus or some other accident, not resulting from positive disease. Such was the assumption, and certainly it was the most probable side of the question; but it should be borne in mind, that in questions of a medical or physiological nature, nothing ought to be taken for granted; and though Dr. Cormack had assumed that air had never been found in the heart or vena cava at a post-mortem examination, yet it was easy to believe that if air had made its way into those cavities, it might readily enough escape observation. With regard to the air being a secretion, he supposed he was to understand from what Dr. Kennedy had advanced, that it was secreted before the patient's death. Now, if such were the case, it seemed reasonable to expect that some symptoms would have occurred to throw light upon the post-mortem fact; but if, on the other hand, the air was generated after death, he must look upon it as a fact of great importance, and worthy of further investigation.

Dr. KENNEDY mentioned that some time since Professor R. W. Smith laid before the Pathological Society the details of a case of flabby heart, in which a quantity of air was discovered in the vena cava.

Dr. GEOGHEGAN—Devergie has recorded more than one case in which sudden death took place where no cause capable of explaining it could be discovered, except a spontaneous evolution of air which was observed in the right cavities of the heart and vena cava. The bodies

were quite free from putrefaction. With reference to the entrance of air *ab externo* into the uterine sinuses, such an occurrence was rendered probable, not alone by the fact stated by Dr. McClintock of the occasional indications of air in the maternal passages after labour, but was also borne out by analogous facts observed lately in some inquiries relative to the condition of the cerebral veins after decapitation. These latter were found loaded with air-globules, which had no doubt entered through the patulous orifices, of the divided venous trunks. Now, between the condition of the inner surface of the uterus immediately after delivery, and that of a recent wound, there is (as maintained by French writers) a good deal of analogy.

Sanguineous Uterine Tumour.

SEVERAL of the later meetings of the Surgical Society of Paris have been occupied with the consideration of *Peri-Uterine Sanguineous Tumours*. M. Monad detailed a case which resembled displacement of the womb backwards, but which proved to be effusion of blood into the utero-rectal pouch. The tumour was punctured and gave issue to semi-coagulated blood. The patient died of peritonitis. M. Nelaton stated that he had met with six cases of this affection. He described the symptoms as very undecided, and not to be distinguished from those of other uterine maladies. The effusion generally appears first in the recto-vaginal cul de sac, whence it may extend into the iliac fossæ. In one of his cases simple puncture was sufficient to effect a cure, in others, larger incisions were required; in two, spontaneous evacuation of blood took place by the rectum.

M. Robert believes that these extravasations are formed gradually, a fresh addition being made at each menstrual congestion. He also spoke of the resemblance of the tumour thus formed, to the retroverted fundus. The diagnosis is made out by the aid of the uterine sound. It is still more difficult to distinguish them from pelvic abscess, especially when the broad ligaments are implicated. In attempting the evacuation of these large collections of blood, M. Robert prefers puncture with a trocar to incision with a bistoury. He speaks of one case in which the extravasation formed a tumour reaching nearly to the umbilicus, with great exhaustion and severe expulsive pains. In this case puncture was resorted to several times.

According to M. Huguier these extravasations may be situated between the uterus and rectum, or in the lower part of the peritoneum. He divides them into two principal classes:—1. Those situated beneath the peritoneum in the cellular tissue, which unites the uterus and rectum,

and extends on each side to the uterine appendages. 2. Those situate in one of the uterine appendages, and involving several varieties, such as—1. The pseudo-hæmatoceles which result from extra-uterine conceptions arrested in the second or third month. 2. Retention of blood in the genital cavities, or in the recto-vaginal cul-de-sac. 3. Hæmatocele arising from rupture of the ovarian bloodvessels. The symptoms are a tumour felt in the posterior wall of the vagina, with obscure fluctuation, and displacing the uterus forwards.

FORSENIC MEDICINE.

[WE have much pleasure in introducing to our readers the following article upon the use of chloroform, a drug very generally employed in this city, and throughout many parts of Canada, with the exception of Quebec, where we learn it is but sparingly employed, for what reason we know not. This article will give our readers a fair idea of how such investigations are conducted in France, as well as point out the necessity there exists for caution in the administration of chloroform:—]

*Procès intenté à un Médecin pour un cas de mort par le Chloroforme.
—Règles nouvelles pour l'emploi de la méthode.*

Le dernier numéro de la *Gazette Médicale de Strasbourg* renferme le compte rendu d'un procès intenté à un officier de santé du Bas-Rhin, pour un cas de mort par le chloroforme. Cette affaire, intéressante à plus d'un titre, mérite de fixer l'attention de nos lecteurs. Nous reproduisons plus loin les débats dans lesquels ont figuré à titre d'experts plusieurs professeurs de la Faculté de Strasbourg. La gravité de ce procès au point de vue de la responsabilité médicale, aussi bien qu'au point de vue des principes qui y ont été émis, nous oblige à nous y arrêter d'une manière toute particulière.

Dans le cas objet du procès, il a été unanimement reconnu que la mort avait été causée par le chloroforme. Le chirurgien traitant pas plus que les experts n'ont élevé le moindre doute à cet égard. C'est déjà un progrès. L'accusation d'homicide par imprudence reposait donc uniquement sur la question de savoir si le chirurgien, qui n'était qu'officier de santé, avait le droit d'administrer le chloroforme sans le concours d'un docteur, et si en l'administrant il avait observé les règles de l'art propres à garantir l'innocuité du remède.

Relativement au premier point, il a été reconnu par les experts et par le tribunal, qui a admis leur doctrine, que l'administration du chloroforme, comme moyen anesthésique, ne saurait être assimilée à une grande

opération chirurgicale. Toutefois MM. les experts, prenant en considération le danger auquel expose toujours la pratique de la chloroformisation, ont émis le vœu que cette application soit réservée désormais aux docteurs en médecine, comme offrant à la société des garanties plus sérieuses que les officiers de santé. On ne peut qu'approuver la sagesse de cette restriction. Cependant nous sommes obligé de le faire remarquer, il y a entre cette réserve, dictée par la prudence, et l'opinion émise par M. Sédillot, au sujet de l'innocuité du chloroforme employé avec précaution, un opposition qu'il est à peine nécessaire de signaler. Si la chloroformisation est toujours exempte de danger quand on l'emploie suivant certaines règles que l'honorable professeur a cru pouvoir préciser, elle ne doit pas plus être interdite aux officiers de santé que l'administration d'un agent toxique quelconque, la strichnine, l'acétate de morphine, etc. Toute la difficulté consiste donc à savoir si en réalité l'art est aujourd'hui en possession de règles qui garantissent toujours l'innocuité de la chloroformisation. Nous sommes heureux de le reconnaître, MM. les professeurs Tourdes, Rigaud et Cailliot ont été on ne peut plus circonspects à cet égard ; tout en recommandant les précautions reconnues les plus utiles, ils ont fait ce aveu : " que dans quelques faits " malheureux, ces précautions paraîtraient avoir été prises, sans qu'on " ait pu éviter un résultat fatal." On ne saurait trop applaudir à la sagesse et à la franchise de cette déclaration. M. Sédillot, beaucoup plus rassuré et plus convaincu, a affirmé devant le tribunal, comme il l'avait fait dans ses écrits, " que le chloroforme pur et bien administré ne tue " jamais." Cette affirmation, d'une gravité extrême, produite en présence de la justice, émanant d'un homme sérieux et justement considéré, doit être sévèrement examinée dans ses motifs. Si elle est suffisamment fondée en effet, elle marque un progrès qu'on ne saurait trop vulgariser ; si, au contraire, elle n'est que l'expression d'une conviction aventureuse, on ne saurait trop la combattre, dans la crainte qu'elle ne serve d'encouragement à des abus, ou de bouclier à des actes téméraires.

L'argumentation que M. Sédillot a développée dans ses derniers ouvrages et devant le tribunal consiste en une dénégation des faits contraires à sa manière de voir, et dans une affirmation appuyée sur les faits qui lui sont favorables.

On a vu précédemment que les collègues de M. Sédillot avaient reconnu que, " dans quelques faits malheureux, toutes les précautions capables de prévenir le danger avaient été prises sans qu'on ait pu éviter " le résultat fatal." M. Sédillot n'admet pas cela. Dans le cas poursuivi devant le tribunal, il s'inscrit en faux contre les témoignages les plus explicites. Des témoins déclarent avoir vu que le mouchoir imbibé de chloroforme avait toujours été tenu à distance : " M. Sédillot

“ n'accuse pas le sentiment consciencieux de ce témoignage, mais il “ n'hésite pas à *affirmer* qu'il manque d'exactitude.” Si on lui demande pourquoi ? Parce que le résultat lui paraît impossible, et il est impossible parce qu'il est contraire à la règle qu'il a posée. L'honorable professeur, analysant tous les cas de mort causés par le chloroforme, leur applique le même raisonnement. Il est arrivé à cette conviction, qu'en tenant le linge imbibé de chloroforme à une certaine distance du nez et en ne le laissant respirer que par petites doses, on ne fait courir aucun danger au malade ; il en conclut que, dans les cas de mort où cette précaution est réputée avoir été prise, elle ne l'a pas été, et que c'est par illusion pure qu'on a cru le contraire. Voyons donc sur quoi repose cette conviction inébranlable de M. Sédillot. Elle repose à la fois sur une certaine théorie qu'il s'est faite de la manière dont le chloroforme peut causer la mort, et sur l'expérience des cas assez nombreux, qui lui sont propres, de chloroformisation dans lesquels il ne lui est arrivé aucun malheur. Sa théorie est celle-ci : quand on fait respirer le chloroforme trop vite, en trop grande quantité à la fois et de trop près, les malades peuvent être frappés d'asphyxie ou de syncope, et ils succombent. Ce n'est donc pas, dit M. Sédillot, le chloroforme qui tue, mais la manière vicieuse dont on l'emploie. Inutile de s'arrêter à cette subtilité, qui ne repose que sur un abus de langage. Tout le monde comprend en effet qu'on aurait beau employer de cette manière une substance non toxique, on ne parviendrait jamais à tuer les malades. La doctrine de M. Sédillot n'est qu'un perfectionnement, qu'un raffinement de celle qu'on a tenté naguère de faire prévaloir au sein de l'Académie, lorsqu'on a prétendu que tous les cas de mort attribués au chloroforme avaient été le fait des appareils employés, le résultat de l'asphyxie causée par ces appareils, et non l'effet du chloroforme, incapable de produire la mort par lui-même. L'asphyxie de M. Sédillot n'est pas aussi mécanique que celle du rapport de la commission du chloroforme, mais c'est toujours le même non-sens, et surtout la même méprise, quoique moins grossière. Pour le démontrer sans réplique, que faut-il ? Il suffit de faire remarquer que des milliers de cas de chloroformisation pratiquée contrairement aux règles posées par M. Sédillot n'ont été suivis d'aucun accident d'asphyxie ou autres. Ce n'est donc pas dans le mode d'emploi du toxique que gît le danger, et les résultats plus ou moins nombreux que le savant professeur de Strasbourg invoque en faveur de son procédé ne prouvent pas plus ni mieux que les succès des autres méthodes ne prouvent la parfaite innocuité du chloroforme. Il est des personnes, il est vrai, qui croient encore le contraire. Il en est même qui, comme M. Gibert, par exemple, continuent à être doués d'une confiance si robuste, que malgré les cas de mort connus, qui dépassent aujourd'hui la centaine, persistent à

regarder le chloroforme comme un agent parfaitement innocent, et déclarent ennemis de la science et du bien public, comme disait Broussais, quiconque n'est pas de cet avis. Quant à nous, nous ne sommes rassuré ni par la foi de M. Gibert, ni par la logique de M. Sédillot. Nous persistons à croire qu'il faut chercher ailleurs que dans l'influence des appareils asphyxiants ou des méthodes de chloroformisation trop brusques et trop immédiates les véritables dangers du chloroforme. Pour les bons esprits, la preuve de cette assertion est vulgaire et se rencontre à chaque pas. Cette preuve, la voici : La même dose de chloroforme, employée suivant la même méthode, avec les mêmes précautions, produit chez l'un une anesthésie subite ; chez un autre, elle ne produit aucun ou presque aucun effet. Retournez l'observation. Chez un malade, telle dose produit l'anesthésie simple ; chez un autre, très-exceptionnellement à la vérité, elle produit la mort. C'est-à-dire, n'est-ce pas, que dans l'un et l'autre cas les susceptibilités diffèrent et produisent des résultats souvent opposés. Comment une vérité aussi simple a-t-elle pu être contestée ou méconnue ? Parce que, au point de départ fixe et certain que nous avons proposé, on a préféré les confusion de la théorie. Nous avons dit : A une dose déterminée, le chloroforme tue toujours et quels que soient les organismes ; cela n'est pas contestable. A des doses moindres, il perd de son action toxique, mais il la conserve en proportion relative aux dispositions individuelles. Quelles sont ces dispositions ? Voilà le vrai problème à résoudre. Et c'est ce que M. Sédillot a complètement méconnu. Nous sommes loin de contester l'influence du mode d'application qui peut plus ou moins favoriser le développement des accidents dans certaines conditions qui les priment. A ce point de vue, on ne saurait trop louer M. Sédillot d'avoir montré tous les avantages qui peuvent résulter d'un mode d'emploi plus rationnel et plus circonspect de la méthode. Mais s'il persiste à s'en tenir à ce moyen de sécurité, nous craignons bien qu'au moment où il s'y attendra le moins, il lui fasse complètement défaut.

Canada Medical Journal.

MONTREAL: JUNE, 1852.

CANADA MEDICAL JOURNAL.

IN another part of this number our readers will find the proceedings of the College of Physicians and Surgeons of Lower Canada, which took place at their semi-annual meeting, held in Montreal, May 11: and they will also find Dr. Arnoldi's formal protest against some of those proceedings. It is not our intention to offer any opinion upon the question at issue, as we have determined to avoid the discussion of medical politics, leaving to others, whose tastes lie in that way, the agreeable task. We cannot refrain, however, from remarking, that the sooner the important point referred to by Dr. Arnoldi, is settled, the better it will be for the profession, for we know that some of the members of the College have tried to dissuade students from being apprenticed, who afterwards were indentured to ourselves, and others have been advised to pursue a course of study in direct opposition to the enactments of the College, who commenced their studies at a period sufficiently recent to admit of their complying with all its requirements. Such a contradiction cannot long continue; the College either has the power to enforce obedience, or it has not. The solution of this question is what we wish to see established. If it has the power, by all means let it exercise it; if it has not, it must demand from the Legislature additional powers, for it can never be tolerated, that one set of students are to be obliged to comply with the very letter of the law, and another set are taught to set at defiance, and evade not merely the letter, but the very spirit of that law. We hope to see established a uniform standard of medical education for students both in Upper and Lower Canada, and, therefore, look forward with anxiety to the settlement of the above question.

We cut the following from our Toronto contemporary, from which it appears that the Yankee custom of suing for mal-practice is commencing. To such an extent was this carried a few years ago, in the

States, that even the most eminent surgeons used to refuse to undertake the management of a case, unless the patient, or his relatives, if he were a minor, bound themselves legally, not to institute proceeding for mal-practice, if the case did not terminate successfully. To pay a medical bill is a great annoyance to many people, but how pleasant to square off accounts with a threat for mal-practice, or to mulct some unfortunate doctor in heavy damages, for not restoring an irremediably shattered limb to a perfect state. We hope, however, that the result of this attempt to persecute a learned and honourable physician, will serve as a warning to all evil doers, and that some of the profession who are ever willing to drag their brother practitioners into courts of justice, and who encourage the public to do so, will likewise take a hint from it. We are satisfied, that the majority of these suits are entered upon, at the instigation of rival practitioners, and we regard their frequency as the best index of the bad state of professional feeling, where they occur.

We congratulate Dr. King on the verdict he obtained, and advise him, in future, to send all patients like Green to the Infirmary, where the nature of the accident, and the conduct of the patient can be attested by several witnesses.—R. L. M. D.

“A trial of much interest took place yesterday at the assizes before the Chief Justice. A man named Green, a carpenter by trade, brought an action against Dr. King for improper attendance, alleging that, in consequence of it, he had lost the use of his left arm. Several witnesses, on the part of the prosecution, stated that Dr. King had undertaken to attend upon Green, but had sent Dr. Lyons instead. Dr. Lyons, it was alleged, was incompetent and unskilful, and had caused Green to lose the use of his arm; and that he in consequence looked to Dr. King for damages. On the part of the defence, it was testified that Dr. King dressed Green's arm (which was fractured by a fall,) only once, as an act of charity, and told him to go to the hospital. Also that Dr. King had not sent Dr. Lyons to him. Both Dr. King and Dr. Herrick proved that Lyons was a skilful man, and understood his profession perfectly. Dr. Lyons stated that Green had not attended to directions which had been given him, but pulled off the bandages from his arm of his own accord, and contrary to his (Dr. Lyons') directions. The Chief Justice charged the Jury at great length. They retired, and after an absence of about half an hour, returned into Court with a verdict for the defendant, on the ground that they were not satisfied that the Plaintiff was a patient of Dr. King's. The verdict was received with marked satisfaction by the multitude in court.”—*Toronto Colonist*.

COLLEGE OF PHYSICIANS AND SURGEONS.

Montreal, 11th May, 1852.

THE regular semi-annual meeting of the Board of Governors of the College of Physicians and Surgeons of Lower Canada was held this day, when were present:

Drs. Morrin,	Drs. Bardy,	Drs. Dubord,	Drs. Holmes,
Brigham,	Russel,	Fowler,	Bouthillier,
Glines,	Hall,	Chamberlin,	Jackson,
Badeau,	Campbell,	Nelson,	Sutherland,
Marsden,	Michaud,	Weilbrenner,	Arnoldi.
Johnston,	Valois,	David,	

Dr. Morrin, President, having assumed the chair, Dr. Nelson rose and said he begged to thank the Members of the College for the compliment they had paid him, in not accepting his resignation at their last Meeting. In all his intercourse with them he had always experienced the kindest feelings from his brethren of the Board, and, although he felt himself compelled to resign, he should still continue to take a lively interest in the welfare of the College, as by its success, the dignity of the Profession and of its Members would be greatly advanced. Dr. Nelson then retired.

The minutes of the last meeting were then read, after which, the Secretary announced the death of one of the Governors of the College for the district of Montreal, when it was moved by Dr. Weilbrenner, seconded by Dr. Valois, and unanimously resolved: "That this Board has heard with regret of the death of the late Dr. Kimber, of Chambly, one of the Governors of the College, and that a copy of this resolution be sent by the Secretary to his nearest relatives." The Board then proceeded to fill up the vacancies caused by the resignation of Dr. Nelson and the death of Dr. Kimber. Drs. Bardy and Valois having been named Scrutineers. Dr. Smallwood was declared duly elected as one of the Governors for the District of Montreal in Dr. Kimber's place, and Dr. Bibaud for the City, in Dr. Nelson's.

The votes next being taken for Vice-President of the District of Montreal, Dr. Holmes was declared duly elected. Dr. Holmes returned thanks for the honour conferred on him.

Drs. Bibaud and Smallwood after being introduced took their seats at the Board.

A petition was read from Dr. Teesdale, but the Board could not accede to the request contained in it.

The Secretary called the attention of the Board to the fact, that se-

veral gentlemen, who presented themselves for examination, had only passed their *preliminary examination* during their studies, and not at the commencement, as required by the Law, on which Dr. Arnoldi moved, seconded by Dr. Bibaud, "That all applicants who commenced their medical studies prior to having submitted to a preliminary examination, in consequence of having been led into error on this point, be admitted this day to examination, their past time to be allowed to count, but that hereafter the Board do never listen to, nor entertain any such excuse," which motion was lost.

Some discussion now arose as to the powers of the Board to refuse licenses to certain Graduates of McGill College, who had not conformed to the law in passing their preliminary examination. An opinion was read from the Hon. Mr. Black, stating that the Board could not refuse licenses to any one presenting a degree or diploma from McGill College, and upon the gentlemen being brought in, Dr. Arnoldi entered his protest against their receiving their licenses. [See protest below.]

The following gentlemen possessing degrees were then brought in, and, after having been duly sworn, received their licenses :

James McFarlane, M. D., ...	Edinburgh,
W. Boswell, M. D.,.....	Dublin,
John Reddy, M. D.,	Glasgow,
Joseph Garvey, M. D.,	McGill College,
Henry T. Ridley, M. D.,	“ “
John Easton, M. D.,	“ “
Geo. H. Boulter, M. D.,	“ “
B. G. G. Demorest, M. D.,	“ “
Allen Ruttan, M. D.,	“ “
Richard Weir, M. D.,	“ “
Ed. Buck, M. D.,	“ “
Eric Sparham, M. D.,	“ “
Victor Perrault, M. D.,	“ “
Angus McDonell, M. D.,	“ “
Joseph Moore, M. D.,	“ “
Robert Thompson, M. D.,	“ “
Newton S. Powell, M. D.,	“ “
Amable Simard, M. D.,	“ “

The Board then divided into committees and proceeded to examine :—

When Messrs. Alfred Desjardin, Chs. F. F. Trestler, C. M. D. Cameron, Adolphe Bruneau, Henri J. Girouard, and A. DeCouagne, being found qualified, were granted their licenses, as was also Dr. Teesdale, an American graduate. Two Gentlemen were rejected.

The following were, after examination, admitted to enter upon the study of medicine :—

Herbert O'Meara,	Fred. Benoit,
Aug. Weilbrenner,	Timothé Sauriol,
Chs. L. Augé,	Ambroise Tremblay,
Henry Webster,	Louis D. Cyr,
H. O. Donoughe,	Siméon Varnier,
Alex. G. Lachlan,	Chs. Picault,
Casimir Dufresne,	Joseph Dupuis,
Fras. Bechard,	A. DeMartigny,
James B. Turner,	Patrick O'Leary,
Gideon Lafleur,	Mesuile Palardy.
Henri St. Germain,	

And three were rejected.

One Gentleman, presenting a diploma from the College of Surgeons of London, refused to submit to an examination on the Practice of Medicine, therefore did not receive his license.

Drs. Marsden, Weilbrenner and Badeau, having been appointed to examine the Treasurer's accounts, reported them correct.

The Board then adjourned.

A. H. DAVID, M. D.,
Secretary.

COPY OF PROTEST.

ON this Day, the twenty-fifth of May, in the year of our Lord one thousand eight hundred and fifty-two, we the undersigned Public Notaries, duly commissioned and sworn in and for that part of the Province of Canada heretofore constituting the Province of Lower Canada, residing in the City of Montreal, in the said Province, at the request and instance of Francis Cornelius Thomas Arnoldi, of the said City of Montreal, Esquire, Physician and Surgeon, went to the residence of Andrew Ferdinand Holmes, in the said City of Montreal, Esquire, Physician and Surgeon, one of the Vice-Presidents of the College of Physicians and Surgeons of Lower Canada, and to the residence of Aaron Hart David, in the said City of Montreal, Esquire, Physician and Surgeon, one of the Secretaries of the said College of Physicians and Surgeons of Lower Canada, where, being and speaking to each of them, personally declared and made known unto the said Andrew Ferdinand Holmes, and Aaron Hart David, in their capacities aforesaid; That whereas in virtue of the Act to incorporate the members of the Medical Profession in Lower Canada, and to regulate the Study and Practice of Physic.

and Surgery therein, X and XI Vict., chap. XXVI, the twenty-sixth day of July, one thousand eight hundred and forty-seven, it was stipulated as follows: "That the Laws now in force in Lower Canada, for regulating the Practice of Medicine, Surgery and Midwifery, require amendment; and whereas it is highly desirable that the Medical Profession of Lower Canada aforesaid be placed on a more respectable and efficient footing, and that better means should be provided for the conviction and punishment of persons practising the same without License."

And whereas it is enacted, by the eighth clause X and XI Vict., chap. XXVI, That from and after the passing of this Act, no person shall be admitted as a Student of Physic, Surgery or Midwifery, unless he shall have obtained a certificate of qualification from the said Provincial Medical Board.

And whereas it is enacted by X clause of the same chapter, that the said College of Physicians and Surgeons shall have the power: Firstly, To regulate the Study of Medicine, Surgery, Midwifery, and Pharmacy, by making rules with regard to the preliminary qualification, duration of study, curriculum to be followed, and the age of the candidate applying for a certificate to obtain a License to practise &c.: Secondly, To examine all credentials purporting to entitle the bearer to a certificate for License to practise in this Province, and to oblige the bearer of such credentials to attest (on oath to be administered by the chairman for the time being,) that he is the person whose name is mentioned therein, and that he became possessed thereof honestly.

And whereas, by the By-laws, rules and regulations of the College of Physicians and Surgeons of Lower Canada, amending and approved of, on the tenth day of October, in the year one thousand eight hundred and forty-eight, by His Excellency the Right Honourable James, Earl of Elgin and Kincardine, Governor in chief, in and over the Provinces of Canada, &c., &c.

"It is expressly stated in the rules and regulations, that candidates for Provincial License commencing their Studies subsequently to the passing of the act of Incorporation of this College (on the twenty-eighth day of July, one thousand eight hundred and forty-seven,) will require to submit to a Literary and Classical examination on entering upon their Studies."

"That, at the preliminary examination, the candidate must furnish proof of his possessing a good moral character and a competent knowledge of Latin, History, Geography, Mathematics and Natural Philosophy; and that from and after the year one thousand eight hundred and fifty, he must also possess a general knowledge of the French and English languages."

Wherefore we the said Notaries, at the request aforesaid, and speaking as aforesaid, did, as by these presents we do, most solemnly protest as well against the said Andrew Ferdinand Holmes, and Aaron Hart David in their said capacities, as against Joseph Morrin, the President of said College, Jean Blanchet, one of the Vice-Presidents, Pierre Martial Bardy, one of the Secretaries, James Arthur Sewell, Alfred Jackson, Jean L. Nault, William Marsden, Robert H. Russel, March Paschal De Sales La Terrière, Alexis Thomas Michaud, Anthony Von Iffland, David S. Marquis, Ludger Tetu, Joseph Marmette, Tiburce Charest, George Badeau, William A. Robert Gilmor, Louis Edouard Dubord, William Hollingworth Fowler, James Bell Johnston, M. Sylvester Glines, George William Campbell, William Sutherland, Archibald Hall, Hector T. Peltier, Joshua Chamberlain, M. F. Valois, Remy Claude Wilbrenner, Thomas Bouthillier, Stephen Sewell Foster, Josias S. Brigham, Charles Smallwood and Jean Gaspard Bibaud, officers of said College of Physicians and Surgeons of Lower Canada, and all others whom the same doth, shall, or may in any wise concern, against the validity of the several Licenses granted, and the right or power of the said Board of the said College of Physicians and Surgeons to assume and take upon themselves to grant such Licenses to Joseph Garvey, John Easton, George H. Boulter, Buckham, G. G. Demorest, Allen Ruttan, Richard Weir, Edward Buck, Victor Perrault, Angus MacDonnell, Amable Simard, Joseph Moore, Robert Thompson, Newton W. Powell, Eric Sparham and Henry Ridley, at the meeting of the Board of Governors of the said College of Physicians and Surgeons of Lower Canada, held on the eleventh day of May instant, and which said meeting was held according to Law for the purpose of admitting Gentlemen to the Study of Medicine for the examination of Students, and for the granting of Licenses to such as produced degrees or diplomas, lawfully obtained from Universities or Colleges in her Majesty's Dominions, inasmuch as the degrees produced by the said Joseph Garvey, Henry J. Ridley, John Easton, George H. Boulter, Buckham, G. G. Demorest, Allen Ruttan, Richard Weir, Edward Buck, Eric Sparham, Victor Perrault, Angus MacDonnell, Amable Simard, Joseph Moore, Robert Thompson, and Newton W. Powell, obtained respectively this Spring at the University of McGill College, were obtained in accordance with the statutes which regulate the medical curriculum of the said College only, and not in conformity with, but on the contrary and in direct contravention of, the clauses, rules and regulations above mentioned, and for all which we do hereby most solemnly protest.

And to the end that the said Andrew Ferdinand Holmes and Aaron Hart David, in their several capacities, may not plead ignorance in the

premises, we have served them each respectively with a copy of these presents, in signification thereof speaking as aforesaid.

Thus done and protested at the said City of Montreal, on the Day, Month, and Year first, before written and executed under the number one thousand three hundred and forty.

In testimony whereof, we have hereunto set our hands.

(Signed,)

H. J. MEYER, N. P.

JOHN C. GRIFFIN, N. P.

A true copy of the original herein remaining of record in my office.

H. J. MEYER, N. P.

DUBLIN HOSPITALS.

[It was contemplated by the late Imperial Ministry to withdraw gradually the Government support from all the Hospitals in Dublin, receiving aid from that source, but, owing to the strong remonstrances sent in by the Colleges of Physicians and Surgeons, and the profession generally, backed by the advice of Lord Clarendon, the project was abandoned. The following report was called for by the Government, and is now published under its sanction. There are many practitioners in Canada who look back with interest to the once doomed Institutions, who will be glad to learn that the fatal blow has been averted, and that their old haunts are still in existence and flourishing. For their information we publish the following documents] :—

Return to an Order of the Honourable the House of Commons, moved for by G. A. Hamilton, Esq., M. P.

RICHMOND SURGICAL HOSPITAL.

Return setting forth the Number of Admissions into the Richmond Surgical Hospital of the House of Industry, Dublin, during each of the Three Years ended 31st December, 1849, 1850, and 1851; and also of the Numbers of such Persons, as far as can be ascertained, as were resident in the City of Dublin at the period of their Admission.

	1849.	1850.	1851.	Total.
Admitted.....	1,577	1,418	1,349	4,344
Resident in the City of Dublin.....	1,109	1,001	942	3,052

(Signed,)

HENRY H. STEWART, GOVERNOR.

Return showing the Number of Medical Pupils who attended at the Richmond Surgical Hospital of the House of Industry, Dublin, during each of the Three Years ended 31st December, 1849, 1850, and 1851; and also the Number of Lectures,

Clinical, or other, delivered in connexion with said Hospital by the Physicians or Surgeons attending the same.

	1849.	1850.	1851.	Total.
Pupils attended.....	87	92	96	275
Clinical lectures delivered.....	} More than 100 lectures by the surgeons and physicians; and also clinical instruction in going through the wards of the hospital.			
Other lectures delivered.....				

N. B.—The Richmond Surgical, and the Whitworth and Hardwicke Medical Hospitals, constitute one institution for the relief of the sick; and also for clinical, surgical, and medical instruction.

HARDWICKE FEVER HOSPITAL.

Return, setting forth the Number of Admissions into the Hardwicke Fever Hospital of the House of Industry, Dublin, during each of the Three Years ended 31st December, 1849, 1850, and 1851; and also of the Numbers of such Persons, as far as can be ascertained, as were Resident in the City of Dublin at the period of their Admission.

	1849.	1850.	1851.	Total.
Admitted.....	2,479	2,362	2,187	7,028
Who were Resident in the City of Dublin...	2,163	2,104	1,995	6,262

(Signed,)

HENRY H. STEWART, Governor.

Return, showing the Number of Medical Pupils who attended at the Hardwicke Fever Hospital of the House of Industry, Dublin, during each of the Three Years ended 31st December, 1849, 1850, and 1851; and also the Number of Lectures, Clinical or other, delivered in connexion with said Hospital by the Physicians or Surgeons attending the same.

	1849.	1850.	1851.	Total.
Pupils attended.....	87	92	96	275
Clinical Lectures delivered.....	} More than 100 lectures by the physicians and surgeons; and also clinical instruction in going through the wards of the hospitals.			
Other Lectures delivered.....				

N. B.—The Hardwicke and Whitworth Medical Hospitals and the Richmond Surgical Hospital constitute one institution for the relief of the sick, and also for clinical, medical and surgical instruction.

WHITWORTH CHRONIC HOSPITAL.

Return, setting forth the Number of Admissions into the Whitworth Chronic Hospital of the House of Industry, Dublin, during each of the Three Years ended 31st December, 1849, 1850, and 1851; and also of the Number of such Persons, as far as can be ascertained, as were resident in the City of Dublin at the period of their Admission.

	1849.	1850.	1851.	Total.
Admitted.....	1290	1255	1151	3696
Who were resident in the City of Dublin...	1015	997	910	2922

(Signed,)

HENRY H. STEWART, Governor.

Return, showing the Number of Medical Pupils who attended at the Whitworth Chronic Hospital of the House of Industry, Dublin, during each of the Three Years ended 31st December, 1849, 1850, and 1851; and also the Number of Lectures, Clinical or other, delivered in connexion with said Hospital, by the Physicians or Surgeons attending the same.

	1849.	1850.	1851.	Total.
Pupils attended.....	87	92	96	275
Clinical Lectures delivered.....	} More than 100 Lectures by the Physicians and Surgeons, and also Clinical instruction in going through the Wards of the Hospital.			
Other Lectures delivered.....				

N.B.—The Whitworth Medical, Richmond Surgical, and Hardwicke Fever Hospitals, constitute one institution for the relief of the sick, and also for Clinical, Medical, and Surgical instruction.

DOCTOR STEVENS' HOSPITAL, DUBLIN.

Return of the Number of Patients admitted during the Three Years, as follows: also, the Numbers who received Out-door Relief during the same period.

Year ended.	Admitted.	Cured.	Relieved.	Died.	Dispensary.
December, 31 1849	2,671	2,366	214	91	10,218
December, 31 1850	2,332	1,957	290	85	4,895
December, 31 1851	2,322	1,929	293	100	11,126
	7,025	6,252	797	276	27,239

Number of Pupils attending during the Three Years, as follows.....	1849 ..	..	69
	1850 ..	..	57
	1851 ..	..	59

Number of Lectures delivered during the Winter Sessions of the Three Years, as follows:

Years.	Medical Lectures.	Surgical Lectures.
1849 ..	48	48
1850 ..	48	48
1851 ..	48	48

The average number of patients from the country is about one-third. The generality of them give Dublin as their residence, owing to an idea, prevalent among them, that patients from the country are not admitted without interest with the medical officers.

J.W. CUSACK, Jun., M.D., Resident Surgeon.

MEATH HOSPITAL AND COUNTY OF DUBLIN INFIRMARY.

Statement for the Three Years ending 31st Decem-ber.....	1849.	1850.	1851.
Number of patients relieved.....	1367	1298	1276
Number of ditto residing in the city.....	840	741	779
Number of pupils attending.....	109	99	101
Number of lectures.....	136	136	136

This hospital being the county infirmary, the number of patients admitted from the city is comparatively small.

(Signed,)

EDWARD B. STANLEY, Registrar.

HOUSE OF RECOVERY AND FEVER HOSPITAL, CORK STREET.

	Number Received.	Pupils Attending.	Lectures Delivered.
1849	2818	} None	None
1850	2543		
1851	1791		
Total	7152		

These cases were generally taken in from residences in the county and city of Dublin, but a number of them were strangers from the country parts of Ireland, from Scotland, and from England; sailors, &c.

Dublin, 12th February, 1852.

By order,

(Signed,)

CHARLES MATHEWS, Registrar.

WESTMORELAND LOCK HOSPITAL.

Year.	Number Relieved.	Dublin City.	Not from Dublin.
December 31, 1849	1050	320	730
December 31, 1850	1029	254	775
December 31, 1851	998	231	762
Total.	3072	805	2267

N. B.—No Medical Pupils attend, and there are no Clinical or other Lectures delivered by the Physicians or Surgeons attending this Hospital.

Signed,)

JOHN WEBB, Accountant and Registrar.

Westmoreland Lock Hospital, Feb. 17, 1852.

LYING-IN-HOSPITAL.

Return of the Number of Persons Delivered and Relieved in the Lying-in-Hospital, Dublin, during each of the last Three Years, ending the 31st day of December, 1851:

		Resident Dublin	Country	Total.	Yearly Totals.
1849	Labour patients delivered in the hospital	1917	156	2063	4654
	Patients in ward for female diseases....	66	25	91	
	Extern patients receiving advice and medicine; average annually.....	..	..	2500
1850	Labour patients delivered in the hospital	1848	142	1980	4552
	Patients in ward for female diseases....	55	17	72	
	Extern patients receiving advice and medicine; average annually.....	..	..	2500
1851	Labour patients delivered in the hospital	1937	132	2069	4637
	Patients in ward for female diseases....	50	18	68	
	Extern patients receiving advice and medicine; average annually.....	..	..	2500
Total for Three Years ..				13,843	

(Signed,)

ROBERT SHEKLETON, M.D., Master of the Hospital.
J. G. STRICKLAND, Secretary and Registrar.

Return of the Number of Medical Pupils who attended the Lying-in-Hospital, Dublin, during each of the last Three Years, ending 31st December, 1851, and the Number of Lectures delivered in the Hospital.

PUPILS.

	1849	1850	1851	Total.
Externs	50	51	66	167
Interns	14	17	17	48
Female	12	14	17	43
	76	82	100	258

Fifty-five of the male pupils were from England, America, and other parts of the world.

LECTURES.—There are two full courses of lectures on midwifery in all its branches, and the diseases of women and infants, of six months each, delivered annually in this hospital by the master and his assistants. The certificate of attendance upon these lectures is received as qualification in midwifery by the Royal College of Surgeons of London and Dublin, the Army and Navy Boards, and other licensing bodies. There are no clinical lectures delivered in the institution. A diploma, with the seal of the hospital attached, is granted to each pupil after six months' attendance upon the lectures and hospital practice, and undergoing a strict examination. Female pupils, who act as midwives throughout the country parts of Ireland, and sometimes England, undergo a strict and regular course of education, and after examination receive a certificate of qualification.

ROBERT SHEKLETON, M.D., Master of the Hospital.

Communications have been received from Dr. Nelson, Plattsburg; Dr. Gaucher, Portneuf; Dr. Mewburn, Queenston; Dr. Reed, Leeds; Dr. Duscheneau, St. Julie; Dr. Deschene, St. Paschal.

Obituary,—At Berthier, on the 28th ultimo, at the age of 60, Dr. J. M. R. Barbier.

FRENCH MEASURES AND WEIGHTS.

As it is our intention to publish, from time to time, interesting articles selected from the French Medical Journals, we have great pleasure in acceding to the request of one of our esteemed confrères, in inserting the following Tables, extracted from the last edition of *Malgaigne's Surgery*. From it, the Practitioner in this Country will be enabled to appreciate the quantities of the different remedies mentioned in the French Prescriptions.

MEASURES OF LENGTH.*

New Measures.	Approximate Value.	Exact Value.		
		Feet.	Inches.	Lines.
1 Millimètre.	1 Half-Line.	0	0	0.443
1 Centimètre.	4½ Lines.	0	0	4.433
1 Décimètre.	3 Inches 8 Lines.	0	3	8.330
1 Mètre.	3 Feet 1 Inch.	3	0	11.296
Old Measures.	Approximate Value.	Exact value.		
1 Line.	2 Millimètres.	2 Millim.	256	
1 Inch.	3 Centimètres.	27	072	
1 Foot.	32 Centimètres.	324	864	
1 Ell (<i>aune</i>).	1 Mètre 18 Centimètres.	1188		
The English Inch.	2½ Centimètres.	25 Millim.	399	
The English Foot.	30 Centimètres.	304	794	
The Yard. (3 Feet.)	91 Centimètres.	914	383	

MEASURES OF WEIGHT.

New Measures.	Approximate Value.	Exact Value.			
		lbs.	oz.	gros.	grs.
1 Centigramme.	½ Grain.	0	0	0	0.19
1 Décigramme.	2 Grains.	0	0	0	1.88
1 Gramme.	20 Grains.	0	0	0	18.82
10 Grammes.	2½ Gros.	0	0	2	44.28
100 Grammes.	3 Ounces 2 Gros.	0	3	2	10.80
1 Kilogramme.	2 Pounds.	2	0	5	35.15
Old Measures.	Approximate Value.	Exact Value.			
1 Grain.	5 Centigrammes.	0 Grammes		033	
1 Gros.	4 Grammes.	3		82	
1 Ounce.	30 Grammes.	30		59	
1 Pound.	500 Grammes.	489		50	

* The following table shows the exact relation between the new French and the English Measures of Length and Weight.

Measures of Length.	
Mètre, the 1-10,000,000th part of the arc of the Meridian from the pole to the equator.	39.370788 inches. 3 280899 feet. 1.093633 yard.
Décimètre, 1-10th of a mètre	3.937079 inches.
Centimètre, 1-100th of a mètre.	0.393708 inch.
Millimètre, 1000th of a mètre.	0.03937 inch.
Measures of Weight.	
Kilogramme, weight of one cubic decimètre of water of the temperature of 39° 12' Fahr.	2.6803 lb. troy. 2.2055 lb. avoirdupois 1.5438 grains troy.
Gramme, 1-1000th part of a kilogramme.	0.9719 scruples. 0.032 ounce troy. 1.5438 grain troy.
Décigramme, 1-10,000th of a kilogramme	0.1543 grain troy.
Centigramme, 1-100,000th	

SUBSCRIPTIONS HAVE BEEN RECEIVED FROM

Dr. Leclère, St. Hyacinth.	Dr. Michund, Kamouraska.
Dr. Turcott, St. Hyacinth.	Dr. R. H. Russel, Quebec.
Dr. O. Leary, St. Laurent.	Dr. J. P. Russel, Quebec.
Dr. Carter, South Newbury.	Dr. Cook, Norwich, C. W.
Mr. Larkin, Montreal.	Dr. M. Rankin, Melbourne.
Dr. Morrin, Quebec.	Dr. Dickson, Kingston.
Dr. Nault, Quebec.	Dr. Brassan, Nicolet.
Dr. Smallwood, St Martin.	Dr. Boswell, Quebec.
Dr. Wilbrenner, Boucherville.	Dr. MacFarland, Quebec.
Dr. Badeau, Three Rivers.	Dr. Cartier, Vaudreuil.

JOURNALS RECEIVED IN EXCHANGE.

Boston Medical Journal.
 Philadelphia Medical Examiner.
 American Journal of Dental Science.
 Dublin Medical Press.
 Nelson's Northern Lancet.
 Pennsylvania Medical Journal.
 New Jersey Medical Journal.
 Provincial Medical Journal.
 North-Western Medical and Surgical Journal, No. 1, Vol. 1.

BOOKS RECEIVED FOR REVIEW.

A Lecture delivered before the Natural History Society of Montreal, by Major Lachlan.
 This interesting pamphlet has been received too late to be noticed in this number.

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Montreal, April, 1852

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HENRY HOWARD, M. R. C. S. L., Oculist and Aurist, Ophthalmic and Aural Surgeon, Clinical Lecturer to St. Patrick's Hospital, Surgeon to the Montreal Eye and Ear Institution, and Lecturer upon Ophthalmic and Aural Surgery, St. Lawrence School of Medicine.

J. E. CODRE, M. D., Professor of Materia Medica and Therapeutics, in the Montreal School of Medicine and Surgery.

Montreal, March, 1852.

1

ST. PATRICK'S HOSPITAL.

THE SUMMER COURSE of CLINICAL INSTRUCTION and LECTURES, at the above Institution, will commence on the 1st MAY next, and be continued until the end of July.

Clinical Surgery,.....DR. MACDONNELL.

Clinical Medicine,.....DR. DAVID.

Clinical Ophthalmic and Aural Surgery,.....DR. H. HOWARD.

N. B.—The WINTER COURSES commence on the FIRST MONDAY in NOVEMBER.

Montreal, March, 1852.

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