Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- ☐ Coloured covers / Couverture de couleur
- ☐ Covers damaged / Couverture endommagée
- ☐ Covers restored and/or laminated / Couverture restaurée et/ou pelliculée
- ☐ Cover title missing / Le titre de couverture manque
- ☐ Coloured maps / Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations / Planches et/ou illustrations en couleur
- ☐ Bound with other material / Relié avec d'autres documents
- ☐ Only edition available / Seule édition disponible
- ☐ Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.

- ☐ Coloured pages / Pages de couleur
- ☐ Pages damaged / Pages endommagées
- ☐ Pages restored and/or laminated / Pages restaurées et/ou pelliculées
- ☑ Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- ☐ Pages detached / Pages détachées
- ☑ Showthrough / Transparence
- ☑ Quality of print varies / Qualité inégale de l'impression
- ☐ Includes supplementary materials / Comprend du matériel supplémentaire
- ☐ Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.

☑ Additional comments / Commentaires supplémentaires: Continuous pagination.

THE

MEDICAL CHRONICLE.

VOL. IV.] NOVEMBER, 1856. [No. 6.

ORIGINAL COMMUNICATIONS.

ART. XVI.—*On disease of the supra-renal capsules, with a case.* By D. C. MacCallum, M.D., M.R.C.S.L., Professor of Clinical Surgery, McGill College. Physician to the Montreal General Hospital, &c.

The thymus gland was, with great honesty, very properly termed by Joseph Franck, the *corpus incomprehensible*. Nor is it the only organ in the body to which the term is applicable. The functions of these other bodies allied to the thymus, including with Eckert the *pituatory gland*, which are known as the vascular or ductless glands, are apparently as little understood by authorities in physiology now as ever they were. And this, notwithstanding the repeated investigations of careful and talented observers. As regards the supra-renal or atrabiliary capsules, so diverse are the statements made by different anatomists and physiologists concerning their structure and functions, they would appear to be peculiarly entitled to the appellation of incomprehensible bodies. These capsules or glands are small, flattened, triangular bodies, which vary considerably in size in different individuals. They ordinarily measure, however, about one inch and a half in height; an inch in width, and from one to two lines in thickness. The weight of each is from one to two drachms. According to Rokitansky they are occasionally deficient, especially when there is a deficiency in other organs also; they are generally present when one kidney is absent; and the fusion which so often occurs in the kidneys, is not found to take place in them. "Accessory supra-renal capsules, indicating an apparent excess of development, are of frequent occurrence. Several flattened accessary supra-renal capsules are then found in the renal and solar plexuses, and on the ganglia of the latter, varying in size from a millet or hemp-seed to that of a pea." Meckel has also found supernumerary

capsules, although he does not mention their site. He merely observes that the phenomenon is interesting as being one which is frequently observed in regard to a neighboring organ, the spleen. "Une anomalie primitive très générale consiste dans leur petitesse extrême ou même leur absence totale, qui accompagne le developpement incomplet de l'encéphale et de la moitie supérieure du corps en général. On ne connait que deux ou trois cas de cette espèce dans lesquels les capsules surrénales aient été trouvées, offrant le volume qu'elles ont ordinairement." The capsule is composed of an external or *cortical*, and an internal or *medullary portion*. *The cortical structure forms the greater* portion of the substance of the organ, is firm and striated, and of a deep yellow colour; the medullary is soft, pulpy, and brownish-black in hue. From the dark colour of their interior, and from a supposition that they were the organs which secreted the *atrabilis*, Caspar Bartholinus, and the older anatomists, named them the atrabiliary capsules. According to Simon, the *cortical* portion consists of closed tubes, having no communication with each other, arranged in columnar masses perpendicularly to the surface of the capsule. They are surrounded by a plexus of blood vessels supported by fine processes sent inwards from an outer fibrous investment of the organ. Their interior is lined by a delicate limitary membrane, and in this opinion he is supported by Ecker and Frey, and Hassall. The tubes are filled with a granular plasma, nucleated cells and oil globules. Mr. Gulliver has found that the *granules* form the principal mass of the gland. Their size varies from 1-6000th to 1-24000th part of an inch in diameter. The *nucleated corpuscles*, according to the same observer, are few in number in the human subject, although they are numerous in the ruminantia. Kolliker describes the cortical portion as being composed of a fibrous stroma of connective tissue, so arranged as to leave oval spaces, which are filled with a granular plasma, oil particles, and nucleated cells. He denies that these spaces are lined with a proper limitary membrane, thus differing from Simon, Ecker and Hassall. The *medullary* portion consists of a stroma of connective tissue derived from the cortical substance. It contains numerous blood vessels, a plexus of minute veins, according to some anatomists, and a large supply of nerves derived from the sympathetic system. The tissue is arranged in laminæ, and the interspaces are filled by a granular plasma, in which are nucleated cells in different stages of development. "The recent observations of Kolliker upon the nature of these cells," says Dr. Carpenter, "which are confirmed by the researches of Leydig upon the corresponding organs in the amphibia, seem to indicate that they are really *ganglionic* in their character."

Marjolin, Boyer, Mandl, and others, describe a cavity in the interior of the organ of a somewhat triangular form, into the inferior part of which projects an oblong eminence, resembling a cock's comb. The existence of this cavity is denied by others. Kolliker believes it to result, when found, from the separation of the medullary from the cortical portion after death. Gulliver says, "the gland has seldom a cavity, although a large and distinct venous sinus sometimes exists." Cruvelhier considers it doubtful whether the supra-renal capsules have a cavity in their interior, as their name would seem to indicate; and Meckel, after careful research, adopts the opinion of those who deny the presence of a cavity. "Je pense," he further adds, "que cette cavité n'existe pas, du moins dans l'état régulier, qu'elle ne se forme qu'après la mort, et qu'elle est le résultat soit de la décomposition spontanée de la substance interne, qui a très peu de consistance, soit de la destruction de cette même substance par les manipulations auxquelles on soumet l'organe en l'examinant."

Many of the older anatomists supposed that these bodies possessed an excretory duct, by means of which they communicated with other organs. This opinion is completely exploded by modern observers. Bartholin, Peyer, Valsalva and Ranby, believed them to communicate with the testicles; Kulmus with the thoracic duct; and Huermann and Bendt with the pelvis of the kidney. Gulliver thinks it probable that the veins are the excretory ducts of the gland.

They are largely supplied with nerves derived from the solar and renal plexuses of the sympathetic. According to Bergmann they receive filaments from the phrenic and pneumogastric nerves. They are also richly supplied with blood vessels from the aorta, the phrenic and the renal arteries.

The functions of the supra-renal bodies are still undetermined. All researches into their anatomy have been barren of results, so far as their physiological action is concerned. It yet remains to be seen, however, what light pathology will throw upon this obscure subject. The recent discovery by Dr. Addison, of a connection between certain abnormal conditions of the system and a diseased state of the supra-renal capsules may lead to the establishment of their true value in the economy. For, as that gentleman has truly observed, "if pathology be to disease what physiology is to health, it appears reasonable to conclude, that in any given structure or organ, the laws of the former will be as fixed and significant as those of the latter; and that the peculiar characters of any structure or organ may be as certainly recognized in the phenomena of disease as in the phenomena of health."

Bartholinus, as I have before observed, believed them to be the secreting organs of the atrabilis of the ancients. Treviranus considered them incomplete rudiments of generative organs. Sir Everard Home thought they acted like a filter, "by which any oil left in the arterial branches that are near the kidneys may be separated and prevented from making its escape by the tube uriniferæ of these glands." Many moderns, classing them with the vascular glands, assign them an unknown office in the preparation and maintenance of the blood. The opinion of Wharton and Duvernoy, that the supra-renal capsules are ganglia of the renal nerves, has been revived and adopted by recent investigators. Kölliker considers the cortical and medullary portions to be physiologically distinct. The former he places with the ductless glands, the latter he believes to be an appendage to the nervous system. Carpenter says that the medullary bears no relation to the cortical substance, but is really a sympathetic ganglion; and he adds, "a curious observation strikingly confirmatory of this view of the peculiar relation of the medullary substance to the nervous system, has been recently made by M. Brown-Sequard, viz: that injuries to the spinal cord, in the dorsal region, produce congestion and (after a time) hypertrophy of the supra-renal capsules." The relation of the accessory capsules, observed by Rokitansky, to the renal and solar plexuses, is, in our opinion, also strongly confirmatory of this view.

M. Brown Séquard has recently performed a number of experiments with the view of determining the effects of extirpation of the supra-renal capsules. From the results of these experiments he declares that they are as essential to life as the kidneys. He experimented on dogs, cats, guinea pigs and rabbits. "The average duration of life after extirpation of both organs was about eleven hours and a half. As yet even after the removal of but one capsule death has invariably resulted. The principal symptoms observed consisted in a remarkable debility, difficulty of respiration, disturbed circulation, and at length convulsions, giddiness, delirium and coma. He believes that after the removal of the capsules the blood becomes charged with a poisonous principle, which is the cause of death. Messrs. Flourens, Rayer and Claude Bernard have been appointed a commission by the Academy of Sciences, Paris, to examine M. Brown Séquard's statements.

"M. M. P. Gratiolet has also read a paper to the Academy of Sciences on the same subject. M. Gratiolet's experiments have been made on guinea pigs only, and do not appear to have been very numerous. His conclusions are as follow:—1. After the removal of the left capsule only, the animals recovered and regained perfect health. In one in-

stance the animal lived two months and a half, and was quite well when it was killed by a second experiment. 2. After removal of the left capsules, or even of the right only, in all cases the animals died within forty-eight hours, the autopsy showing peritonitis and inflammation of the liver." (Mr. Jonathan Hutchison in *Medical Circular*.)

If great uncertainty has hitherto prevailed regarding the anatomy and physiology of the supra-renal capsules, until recently, absolutely nothing was known of the effects produced on the system by their disease. Indeed, the medical world has been startled from its propriety, by the recent publication of Dr. Addison's monograph on "the constitutional and local effects of disease of the supra-renal capsules," which proves, almost beyond a doubt, that a diseased condition of these bodies is one of the most serious contingencies to which poor humanity is liable, nearly every instance, as yet recorded, having proved fatal.

Dr. Addison had for a long time met with a "very remarkable form of general anæmia, occurring without any discoverable cause whatever; cases in which there had been no previous loss of blood, no exhausting diarrhœa, no chlorosis, no purpura, no renal, splenic, miasmatic, glandular, strumous, or malignant disease." Whilst seeking to throw some light on this form of anæmia, he discovered the disease, the leading characters of which are:—"Anæmia, general langour and debility, remarkable feebleness of the heart's action, irritability of the stomach, *and a peculiar change of color of the skin, occurring in connection with a diseased condition of the supra-renal capsules.* As has been observed in other forms of anæmic disease, this singular disorder usually commences in such a manner, that the individual has considerable difficulty in assigning the number of weeks or even months that have elapsed since he first experienced indications of failing health and strength; the rapidity, however, with which the morbid change takes place, varies in different instances. The patient falls off gradually in general health; he becomes languid and weak, indisposed to either bodily or mental exertion; the appetite is impaired or entirely lost; the whites of the eyes become pearly; the pulse small and feeble, or perhaps somewhat large, but excessively soft and compressible; the body wastes, without, however, presenting the dry and shrivelled skin, and extreme emaciation, usually attendant on protracted malignant disease; slight pain or uneasiness is from time to time referred to the region of the stomach, and there is occasionally actual vomiting, which in one instance was both urgent and distressing; and it is by no means uncommon for the patient to manifest indications of disturbed cerebral circulation. Notwithstanding these unequivocal signs of feeble circulation, anæmia, and general

prostration, neither the most diligent enquiry, nor the most careful physical examination, tends to throw the slightest gleam of light upon the precise nature of the patient's malady; nor do we succeed in fixing upon any special lesion as the cause of this gradual and extraordinary constitutional change; but, with a more or less manifestation of the symptoms already enumerated, we discover a most remarkable, and, so *far as I know, characteristic discoloration taking place in the skin*—sufficiently marked, indeed, as generally to have attracted the attention of the patient himself, or the patient's friends. This discoloration pervades the whole surface of the body, but is commonly most strongly manifested on the face, neck, superior extremities, penis and scrotum, and in the flexures of the axilla and around the navel. It may be said to present a dingy or smoky appearance, or various tints or shades of deep amber *or chestnut brown; and in one instance* the skin was so universally and so deeply darkened, that, but for the features, the patient might have been mistaken for a mulatto.

"In some cases this discoloration occurs in patches, or perhaps certain parts are so much darker than others, as to impart to the surface a mottled or somewhat chequered appearance; and in one instance there were, in the midst of this dark mottling, certain insular portions of the integument presenting a blanched or morbidly white appearance, either in consequence of these portions having remained altogether unaffected by the disease, and thereby contrasting strongly with the surrounding skin, or as I believe from an actual defect of coloring matter in these parts. Indeed, as will appear in subsequent cases, this irregular distribution of pigment-cells is by no means limited to the integument, but is occasionally also made manifest on some of the internal structures. We have seen it in the form of small black spots, beneath the peritoneum of the mesentery and omentum—a form which in one instance presented itself on the skin of the abdomen.

"This singular discoloration usually increases with the advance of the disease; the anæmia, languor, failure of appetite, and feebleness of the heart, become aggravated; a darkish streak usually appears upon the commissure of the lips; the body wastes, but without the extreme emaciation, and dry harsh condition of the surface, so commonly observed in ordinary malignant disease; the pulse becomes smaller and weaker, and without any special complaint of pain or uneasiness, the patient at length gradually sinks and expires. In one case, which may be said to have been acute in its developement as well as rapid in its course, and in which both capsules were found universally diseased after death, the mottled or chequered discoloration was very manifest, the anæmic condition strong-

ly marked, and the sickness and vomiting urgent; but the pulse instead of being small and feeble as usual, was large, soft, and easily compressible and jerking on the slightest exertion or emotion, and the patient speedily died."

Dr. Addison reports eleven cases of this disease in his monograph, accompanied by plates exhibiting the appearance which the skin presented in eight of the patients. Since the publication of these cases, six additional ones have been observed in London, and reported by Mr. Jonathan Hutchinson, in the "Medical Times and Gazette." Two cases have been observed in Paris; one by M. Trousseau, the other by M. Cazenave, of the St. Louis Hospital; and one in Nantes by M. Malherbe of the Hotel Dieu. On this continent three undoubted cases of disease of the supra-renal capsules have been diagnosed. Two of them in New York, the third in Montreal. In the September number of the "New York Journal of Medicine," Dr. Isaac E. Taylor has an able article, "on the sunburnt appearance of the skin as an early diagnostic symptom of supra-renal capsule disease; with colored illustrations," in which he reports five cases. Two have terminated fatally, and the post mortem appearances confirmed the diagnosis; three yet remain for confirmation. I agree with Dr. Taylor that the term "sunburnt appearance," particularly in this country, will convey a better idea of the shade of discoloration than that of "bronze," introduced by Mr. Hutchinson.

The following are the particulars of the case noticed in this city, from notes taken by Mr. Thurlowe Cunynghame:—

William Fraser, æt. 28, a native of Scotland, was admitted into the Montreal General Hospital on the 4th July, 1856. On admission, his symptoms and appearance indicated the second stage of phthisis, which a more complete subsequent examination fully confirmed. He states that his occupation having been that of attendant on a saw mill, he was obliged to be frequently in the water, and being exposed to sudden alternations of temperature, he got a severe attack of pneumonia, which kept him in hospital at Three Rivers for two months. When he had recovered from this attack, he returned to his former employment, and caught a second cold, more severe than the preceding one. It was followed by a severe cough and profuse expectoration. He experienced at this time great pain in the region of the kidneys. From the period of this last attack he has been unable, through debility to do anything. He first noticed that his skin was discolored about fifteen months ago, while he was last in Hospital in Three Rivers. It was then more distinct than at any subsequent period, especially on the face, neck and chest.

On the 1st of August, when Dr. MacCallum entered on the duties of the hospital, his condition was as follows:—Great emaciation; surface generally of a sallow hue; on the face, neck, chest, shoulders, and in the axilla, are large patches of discolored integument, resembling in shade the color produced by long exposure to a hot sun; the patches on the chest are covered with a mealy desquamation; those on the face occupy the most prominent parts; on the forehead the coloration extends to near the commencement of the hair; it is not found on the scalp. There is on the mucous membrane of the lips, near its junction with the integument, and surrounding the mouth, a well-marked deep brown line. Conjunctivæ of a pearly whiteness; ends of fingers clubbed, and nails incurvated. Great flattening of thorax in the infra-clavicular regions, with diminished expansion movement of both sides, that of the right side being most marked; elevation-movement quite distinct. Percussion elicits a sound of equal intensity on opposite sides of the chest; the resonance, however, is much less than that of a healthy thorax. Auscultation discovers in the right infra-clavicular and mammary regions gurgling râles, cavernous respiration and pectoriloquy; in the infra-mammary and axillary regions of the same side, large mucous râles. In the left infra-clavicular region there are mucous râles, which gradually disappear as the mammary region is approached. Sounds and rhythm of heart normal; pulse frequent and weak; cough very annoying; profuse muco-purulent expectoration. Fraser has a melancholy, dissatisfied expression of countenance; his movements are sluggish: appears disinclined to converse with any one; speaks slowly and with an apparent effort. He complains of great debility; but what appears to give him most uneasiness, and, indeed, engages his entire attention, is a sensation of pain seated in the epigastric, and extending into the hypochondriac regions. This pain is constant, is not an acute, but rather a dull, gnawing pain. It is not accompanied by vomiting; is not increased after the ingestion of food, or by pressure made on the abdomen.

Dr. MacCallum diagnosed:—*Cavities, with extensive softening in the right lung; tubercular infiltration throughout, with commencing softening in the apex of the left lung; disease of the supra-renal capsules, probably tubercular.*

The treatment on which Fraser was placed when first admitted into hospital, was continued. It consisted in the administration, with slight variations, of cod liver oil, quinine, sedative cough mixtures, porter, wine, and nourishing diet. Various remedies were given to relieve the dyspeptic symptom, with, however, only partial success. The combi-

nation which afforded most relief was the following:—R Acidi hydrocy. m. xl.; morphi sulphæ gr. iss.; aquæ, ℥vi. *m.* A table spoonful to be given every fourth hour. Very little change occurred in his condition until about a fortnight before dissolution, when colliquative diarrhœa set in; emaciation and debility became extreme; he rapidly sunk and died on the 3rd October.

Post-mortem twenty-four hours after death. Reported by Dr. Craik

On opening the chest, both lungs were found to be completely adherent to the parietes of the chest by organized lymph, so much so, that it was impossible to remove the lung without lacerating them. The upper part of the right lung was interspersed with large vomicæ, and was so much disorganized as to be broken down by the slightest attempts at separating the adhesions. The lower part of the lung was infiltrated with softened tubercular matter. Throughout the whole of the left lung crude tubercles were plentifully disseminated, and at the apex there existed a small vomica.

The thymus gland was seen projecting into the thorax on the right side, and was considerably enlarged, being about an inch and ¼th in length and one inch in breadth. In form and consistence it resembled closely a bunch of enlarged mesenteric or lymphatic glands.

Pursuing the examination upwards the thyroid gland was found altered in appearance and size. The right lobe was about twice the size of the left, and measured 2¼ inches in length by 1¼ in breadth. It was semi-transparent, with a smooth surface and the consistence of cartilage.

The heart and the pericardium were healthy. The abdomen was next opened, and all its contents found to be unusually vascular. The liver was slightly enlarged, but in other respects was normal.

The spleen was large, weighing 10¼ ounces, and was firmer in texture than usual.

The coats of the stomach seemed slightly thickened, and there was considerable vascularity of the organ.

The left kidney was next carefully removed without separating it from its capsule, which latter was found much enlarged, forming a large projection on the upper part of the organ fully an inch in diameter. It had lost its flattened cocked-hat shape, and was almost round. On cutting it, it was found to be tough and cartilaginous in structure, and divided into several distinct lobules or masses, which were all included in the same investing membrane. The appearance was uniform throughout, and no trace of a division to be found. A thin section being made and placed beneath the microscope, it presented a fibrous stroma containing in its meshes, which were widely separated, a granular plas-

ma, with numerous tubercle corpuscles scattered through it. The kidney itself was of the usual size and presented nothing remarkable.

On proceeding to remove the right kidney the supra-renal gland was found also much enlarged, but so much softened as to render it impossible to remove it entire. It was so soft as to be easily broken down between the fingers. Tubercles in the process of softening were distributed through the cortical portion of the organ.

The brain was examined and found healthy.

The foregoing case differed materially from those of Dr. Addison's, as regards the deepness of the integumental discoloration, if we are to take, as faithful, the representations made by the artist for his monograph. There was certainly a general sallowness, which was not, on the patient's own testimony, his natural complexion, but this did not amount to more than what we observe in various cachectic conditions of the body. The true browning was limited to the places mentioned in the notes of the case. The spots on the surface of the chest with their mealy desquamation, were such as I have been accustomed to regard as pityriasis versicolor, when it is of a brownish tint. I regret now that I did not examine for the fungus discovered by Eichstadt. For, if that had been found, it would have assisted in determining a question which has yet to be worked out, viz: Is there any connection between those diseases, characterized by disordered chromatogenous functions of the skin, which are known under the different names of melanopathia or nigrities; melasma or pityriasis nigra; pityriasis versicolor, chloasma, maculæ hepatica, maculæ gravidarum, &c., and disease of the supra-renal capsules? I have now a case under observation which, should it pursue the usual fatal course of supra-renal disease, will tend to throw some light on the subject.

The most marked symptom in Fraser was certainly the peculiar sensation of pain which he experienced in the epigastric region. When questioned as to his feelings he invariably referred to it as the only condition which was worthy of attention. The cough, though very severe, and debility, though well marked, were not the subject of complaint. His constant appeal was, "relieve me from this pain and I'll be comfortable." And when the dull gnawing, depressing sensation at all abated from the action of medicines, he became comparatively cheerful. The relation of the supra-renal capsules to the sympathetic system, sufficiently accounts, in my estimation, for the character and persistance of this sensation.

The fact of the other ductless glands exhibiting departures from a normal condition, is rather interesting. The thymus was long and

tongue-shaped and evidently the seat of tubercular deposit. The thyroid body was slightly increased in size, retaining however its natural form. Its texture was completely changed; it was of a cartilaginous consistence; had a waxy feel, and was completely anæmic. It, in short, exhibited the appearances frequently observed as the result of struma. The spleen was in a state of hyperæmia.

ART. XVII.—*Medical Coroners.* By A. Von Iffland, M.D., Vice President of the College of Physicians and Surgeons, C.E. &c., Grosse Isle.

The medical profession, however closely identified with the general interests and happiness of the people, has seldom met with that appreciation on the part of Governments, which its importance and usefulness to the social fabric, ought at all times to claim; I was therefore gratified to perceive by your excellent editorial in the August number of the *Medical Chronicle*, that so important a subject, as the necessity of selecting *Coroners* by our Provincial Government, from among the best educated and most respectable members of the medical profession, had also engaged your attention.

It is not my intention of taking a retrospective view of the numerous inquests, on cases of the highest interest and importance, which for many years have fallen under my immediate observation in Lower Canada, and which have sometimes evidenced, not only the most culpable ignorance on the part of Coroners, in guiding the investigation of juries, but have frequently resulted in impunity to crimes of the most flagrant character. And I need scarcely advert to the enormous expenses which have unnecessarily been incurred by the Province, by entrusting the attainment of the ends of justice, to men whose acquirements rendered them totally inadequate to the fulfilment of the office.

Have we not seen, in times of irresponsible Government, and perhaps since it has assumed a responsible character, lawyers, yet unqualified in the opinion of the members of that profession, to practice in the Court of Justice, (I make the *amende* to one of the late Coroners of Montreal, as a gentleman of high attainments, and now placed in a position to exercise them), appointed to the office of Coroner. It is surely inconsistent, if not absurd, to place such men in a situation where they are to become the expounders of science in its rarer, and more obscure bearings, and when it is often necessary to lay bare before a Jury all those difficult and abstruse subjects, on which, if not from his-

own experience and observation, the collected intelligence of our best authors may throw some light.

It is well known to you, as well as the medical public of Canada, for Medical Journals, unfortunately, seldom extend farther than to our professional brethren, that after some years had been spent in agitating the question, a great reformation took place throughout England, with regard to the necessity of appointing medical men as Coroners. And I am happy to observe, that gentlemen now educated to the profession of medicine, are generally selected, not only in England, but in Upper Canada, to fulfil that judicial office; in Lower Canada, no such reform has taken place, the present incumbents are, I believe, men of respectable standing in society, but the question arises, are they possessed of those educational acquirements which are indispensably necessary to meet the high and important intentions of the law. Are they competent in all cases to decide as a Physician, or rather, as a critical anatomist would, upon the nature of wounds, contusions, fractures, &c., discoverable upon the dead body of a fellow-creature, the cause of whose death, if at all involved in obscurity, is to be first explained, as far as it can be, by that Officer. I shall offer no observation touching toxicology, because, in all cases where *poisoning* is supposed to have caused death, the analysis is generally referred to the most experienced and scientific Chemists. Yet, the Coroner should be well acquainted with the definitions of poisons, the symptoms following the taking of poison, whether irritant and corrosive, narcotic and narcotico-irritants, &c., and the certain character whereby symptoms of poisoning may be distinguished from those of disease. It is an established fact, that 12 years ago, out of 100 cases requiring medical evidence, either before the Coroner, or in the Superior Courts of Law, in England, there were of *poisoning*, 45; wounds and personal injuries, 35; infanticide, 10; all other cases, 10. Since that period, the number of cases of poisoning, has certainly much increased, particularly since the last 12 months.

A Coroner, in my humble opinion, and I believe it is one which carries conviction to every intelligent mind, should be well versed in Medical Jurisprudence, *i. e.*, the application of medicine to legislation and medical police, comprising, wounds, fractures, infanticide, burns, scalds, drowning, hanging, strangulation, lightning, inanition, insanity, (delirium tremens,) &c., &c.

In the *London Lancet* of March, 1851, we have the opinion of one of the most eminent judges in England, and who, during the progress of a trial, in which reference was made to the Coroner's Court, stated emphatically, "*that none but medical men ought to be appointed to the office*

of Coroner, as from their education they were peculiarly qualified to discharge efficiently the duties of the office." "This opinion of his lordship," the *Lancet* adds, "has been acted upon very generally, both in England and in Ireland, as medical men are selected in almost every place where a vacancy occurs."

I would scarcely need any other authority to bear conviction on the necessity of Government nominating medical men of ability and experience, whenever it was practicable, to that important and responsible office, I may, however, be permitted to add the observation of another respectable periodical on the same subject, the *Journal of Medical and Physical Science*, edited by Dr. Archd. Hall, and than whom, none has contributed more largely to the medical literature of this country, and to promote the interests and elevate the character of the profession.

"It has not seldom happened that cases of poisoning have occurred in the Country parts, and on the opinion of the neighbouring Physicians, innocent of all knowledge of the action of poisons, and the proper methods of detecting it either pathologically or chemically, persons implicated in a most nefarious deed, have escaped detection and punishment. But had the Coroner been a Physician of high attainments, and who by study and practice could at once detect the errors in which the medical witness might fall, he would have assisted the less initiated practitioner, or would have ordered the attendance of a man better qualified in such matters; one familiar equally with pathology, chemistry, and the present state of science; one on whose testimony a Surgeon could rely. And on the other hand, he might on very many occasions save the country the expense of *post-mortem* examination in cases of sudden deaths or accidents, where no suspicion or foulplay could be anticipated."

As I have already observed in some of my writings "it is not with us as in other professions, where the possessors of talent and genius may raise themselves to situations of great eminence and dignity, and where the remote chance of a high prize seems more likely to produce extraordinary exertions, than a greater certainty of an inferior one; yet, none comprehends so very extensive a range of knowledge, its truths are often so profound and so much concealed by a cursory inspection, so intricate, so much disguised, distorted and obscured by a multitude of delicate and invisible causes, that nothing less than the all-commanding eye of the most enlightened understanding, than the all-penetrating and all-searching power of genius, can possibly recognise that which is hidden in darkness, can follow that which is remote into the last traces that it represents, can separate the essential from the accidental, and finally, *can analyse and develope any subject of investigation so completely as to*

leave no further doubt respecting any of its properties, which are cognizable by human means." In a word, there is no science which requires so penetrating an intellect, so much talent and genius, so much force of mind, so much acuteness and memory, so much profound knowledge of mankind, as well as the secret recesses of the human heart, as the science of medicine. If then, these high attributes, and which appertain, alone, to the well educated Physicians, are contrasted with the recipients in general of the office of Coroner in Lower Canada surely, the reformation which has originated in England, Ireland and Upper Canada, will also be extended here, by a Ministry, composed as it is, of men, (whatever may be said in opposition,) prepared at all times to create such changes in our judicial, as well as in all other departments of government, as may tend to secure the happiness and general interests of the people.

ART XVIII.—*Narrative of Cases.* By DR. STEIN, Lachine.

In continuing my brief narrative, I will commence with notes that I have of a few cases in midwifery that have occurred to me, in which, at the time they were made, I considered that there were in them some things both interesting and unique.

A poor woman, with placental presentation, had had an attempt made upon her to turn the child, in accomplishing which, on the post mortem examination was found the uterus nearly torn away from the vagina. I have ever since then considered that a forcible effort made to introduce the hand should always be accompanied with support given to the fundus of the uterus through the abdomen from above and without.

The next is the case of a woman named Marshall, in whom, after the birth of the child, the horizontal or circular fibres of the uterus contracted so much as to throw the womb into the form of a cucumber, and where the hand could not be introduced to extract the placenta until this unfavorable condition subsided, which lasted for more than an hour, independent of her having taken a large dose of laudanum to subdue the spasm.

I have also the notes of a case of pregnancy at the sixth month, strongly resembling a large oval uterine tumor in the person of a woman named Euston, aged about 40. She had been lately married, and had miscarried with her first child. At this time she did not think herself pregnant, having suspected, from her age, that the catamenia had entirely ceased, and that the hard uterine swelling was a condition of dis-

ease. This state, however, was constituted by the head of a child being grasped by the walls of the uterus, which surrounded it like a piece of parchment, and which only extended by the growth of the child's head, and did not enlarge by the usual form, viz., cell-deposition, throughout its structure. The head continued in this position at the fundus of the womb during the remainder of pregnancy, and at delivery which was as usual in other respects, the child was born by foot presentation.

I was called about six years ago to attend a Mrs. Rae. Lately she had not been in the enjoyment of good health. On the evening of my summons she had been out walking, and had taken so ill as to be obliged to rest by the way. She had all along been very bulky in the abdomen, with a strong feeling of bursting, and great faintness, and was not up to the full time by, I think, two months. There was little probability of any syphilitic taint. On rupture of the membranes, an immense quantity of liquor amnii was discharged, and soon after two small fœtuses, living, but too young to be viable. This was assuredly a case of dropsy of the amnion, but there was nothing antecedent in this woman's condition of health that could account for the disease. It may perhaps exist, or have its cause in the ovum itself. When a gush of liquor amnii, as in this case, comes away forcibly, it is very apt to carry the cord before it, as it did here, and has done in other cases that I have seen.

I have, as my last, the notes of a case of atony, or complete relaxation of the uterus after delivery, in a woman of the name of Mitchell, where this was so marked, that I wondered it should not have given origin to flooding. No untoward symptom occurred, but by and bye a state of irregular contraction came on, which passed on to complete firmness and tone, with contraction of the whole uterus.

I have notes of two series of cases where, in two distinct families, one of the name of Godfrey, the other of the name of M., a succession of children seemed to be carried off by that state of stomach termed *ramollissement*, mentioned by Burns in his work on midwifery. They all indicated similar symptoms, viz., excessive vomiting, sometimes of a muco sanguineous matter, and this continuing till death. I should like to know the experience of others on this subject, and whether it seems to be a common affection or not. These cases were not examined after death.

Next comes a case of large collection of matter over the region of the hip in a child; this had existed for some time, and there were observed on its surface numerous large veins, indicating perhaps the chronicity of

it, this was carefully watched for some time with supposition of the necessity for opening it, but it suddenly disappeared, I suppose by absorption, or perhaps as some would believe, by exosmosis through the integument.

I have notes of two cases perhaps somewhat allied, one of pericarditis, in a girl of the name of Selvick, in connection with rheumatism, where a large swelling like an abscess took place, over the scapula and beyond it, and shortly disappeared. The second, in a girl of the name of Clark, in whom the disease began with pain in the left arm; fits; loss of appetite; quickness of pulse; incapability of lying on the left side; pain in and constriction of the left side; bye-and-bye a swelling in the region of the latissimus dorsi; this swelling was punctured; no purulent matter reached; tent introduced; continuing of the same magnitude for five days; great weakness; flushing and swelling with the pain still continuing in the left side and the feeling of constriction. Bye-and-bye the pulse becomes small and imperceptible; no catamenia; swelling gone; there was greasy and dirty perspiration. This patient sunk with little or no delirium. No *post-mortem* was permitted. Puerperal fever and erysipelas, or inflammation of cellular tissue with influenza, were very prevalent during the occurrence of this case. The pain in the axilla, and swelling here were so prominent, that they nearly engrossed the whole of the treatment. What is the nature of such swellings as these?

I come to another case in the person of a young medical gentleman, Mr. S., whom I attended for fever of the relapsing type of Jenner, during convalescence and after putting his feet on the cold floor, a large swelling took place over the centre of the thigh, anteriorly on the right side, being like a collection of matter, I thought an iliac abscess pointing here; it was not punctured, however, for I afterwards looked upon it as a case of phlebitis, for which he was treated, and made a good recovery. These cases of phlebitis often occur after fever in certain epidemics, and have been pointed out by authors on the subject of different epidemics. I have notes of a case where the abdomen over the whole surface rose up in different places into rounded swellings produced by inflation of the intestines. This occurred in a person disposed to insanity. These tumors or swellings have lately been called phantom tumors, and seem to be common in hysterical females.

The last case of tumor in my possession is one in the mamma of a Miss B. The nature of it created a good deal of dispute at the time, but this was latterly set at rest by the growth exfoliating, being first preceded by a good deal of uneasiness in the mamma. This lady has

ever since fifteen or sixteen years ago, remained quite well, and enjoys most robust health.

The next that I have notes of is a case of ileus or obstruction of the bowels, where no urine was secreted for a couple of days or more. This condition has been pointed out lately by a London Physician, I think, as indicating that the seat of the obstruction exists near the stomach, there being little track of intestines existing for the accommodation of fluids, and little scope, therefore, for the function of the kidney; hence, as in this case, the want of secretion.

The following was, perhaps, a case of bronze skin, certainly it was not pityriasis versi color, in a young woman, Miss M. She had had dyspeptic symptoms for some time, with a marked cadaverous aspect. A large brown patch appeared on the forehead, and I believe on other parts of the body, and continued for about eight months, though all the chemicals that have been used in bleaching were had recourse to for dispelling it. This case occurred before Dr. Addison's views were published; but the girl made a good recovery, and now, I believe, enjoys good health.

I have a case of porrigo, or scald head, in a girl of about 11, who, on attempting the cure of it by the citrine ointment, first complained of pains flying through the chest, and afterwards became convulsed, and died, no doubt, from the repression of the eruption.

Next, I have the notes of two cases of tarsal inflammation, attended with conjunctivitis, in the ball in one with exophthalmos, and in the other with opacity of the cornea. where the disease, like the above, on its being palliated by treatment, always induced violent constitutional symptoms, indicating, as it were, the eruptive character of these affections, sometime; the views of Begbie were not known at the time, I attended the exopthalmos case, but I had a strong notion that the general inflammation of the conjunctiva had something to do with its origin.

The next case that I have to record is that of a woman who had been delivered quite naturally. She had some anomalous symptoms soon after this event, and immediately an eruption like scarlatina over the whole body appeared, indicating what has been pointed out some time ago by several writers, the entrance of air into the uterine veins.

The last case that I will give at present is a pretty well marked one of combined scarlatina and rubeola, in the servant girl of Mrs. G. She had arrived from Montreal, where scarlet fever was very prevalent and virulent, but at the same time she had been paying a visit to some relations of her own, among the children of whom measles were prevalent. My attention was directed first to the scarlet rash which was rather

abundantly out, and this formed my judgment in the first place, namely, of its being scarlet fever, but on the lady informing me that she had been exposed to the contagion of measles, I examined more closely and found the rubeolas eruption likewise, particularly about the hands and front of the arms. She had an angry-looking sore throat in addition, characterizing the scarlet fever, all the symptoms were moderate, and she is now convalescent. This subject has been discussed lately before one of the London Medical Societies.

ART. XIX.—*Remarks on a case of hernia recently recorded in the Medical Chronicle.* By Dr. A. DeCouagne, Lachine.

I beg to call your attention to Art. IV, in the July number of the *Medical Chronicle.* Amongst other valuable *notes*, that of a case of inguinal hernia struck me very forcibly, as relating to the identical case to which I was called first, and which my friend, the author of the notes, attended throughout. As I happen to be in a position to hear of such cases, when they occur in this place, you will allow me to doubt that Dr. Stein ever had another case resembling this so intimately in its prominent features. I never would have thought of taking up the matter, had the *note* not contained such a gross perversion of facts. Even this might have passed unnoticed. But it involves an unpardonable breach of professional etiquette, for which you may not find a parallel in all the *noted* records of surgery. For the *edification* of the profession at large, I trust you will pardon me for producing the facts as they are:—Last winter, an Englishman, or rather as I was told, a Scotchman, on his way up the country from the Montreal market, stopped at an hotel in this village. A messenger was despatched for me, not finding me at home, he went over for Dr. S. The messenger had not been out of my house a minute when I returned. I immediately answered the call. I found the patient with most intense pain in the bowels and stomach recurring at intervals, accompanied with vomiting, and great pain about the testicle. On examination, swelling of the scrotum, extending *very prominently* in the direction of the inguinal canal. The patient said that the swelling had come on suddenly the day previous, whilst he was unloading heavy bags of grain, but he paid no attention to it, as the same thing had occurred several times before, but the swelling would disappear as soon as he laid down. There was not the shadow of cynanche parotidea, alluded to in the *notes.* He had made several attempts to discharge his bowels in the morning but with little success,

I then tried taxis, but, as I expected, without any favourable result. The case was clearly one of strangulated scrotal hernia, in the incipient inflammatory stage. I concluded that a consultation was necessary and an operation probably indispensable. The patient's brother was directed to run into Montreal and return with an experienced Surgeon, in time to perform an operation, if necessary, before dark. It was then 2 P.M. I then came to my surgery for an aperient. On my return, I found Dr. S. near the patient. Without one word to me, he went away to countermand my orders to the brother. The patient said that he was sorry he could not accept my services any longer. Dr. Stein had *warranted* a *cure* in a *few hours;* he had said there was *no rupture* and *no need* of an *operation*. After due remonstrance I left the man to his fate, in the care of Dr. S. Next morning Dr. S. "desired a consultation, &c.," (not with me, though). "Enemata were administered and the bowels partially relieved, and after taking ten or twelve grains of opium during the night, he felt so *much better* that he was able to start in the morning to return home," packed up in Buffalo robes in a sleigh. Who would not after this enjoy a thirty miles winter ride in this predicament? The result my omni-sapient confrère gives you in a plain but very *elastic* language. "At the last *he* inferred that this was a case of hernia," and *in finale*, grants that "this was a case demanding an operation."

REVIEWS & BIBLIOGRAPHICAL NOTICES.

XXVIII.—*Human Physiology*, Statical and Dynamical, or the Conditions and Course of the Life of Man. By JOHN W. DRAPER, M. D., L.L.D., Professor of Physiology and Chemistry, in the University of New York. Illustrated with nearly 300 Wood Engravings. New York: Harper & Brothers. Montreal: B. Dawson. 1856.

It is so natural to begin an essay upon the structure or functions of the human frame with expressions of admiration, that the writer, who desires to descend at once to the foundations from which the explanations themselves arise, feels he is under no easily mastered embarrassment. For where else can more fit cause for eulogy, or where else is adoration more inevitable, than in contemplating the works we carry about in our own persons? Restraining such an episode, let us pro-

ceed to review some of the points in man's life as they fall within the scope of a physiological treatise.

Omne ex ovo was the Harveian maxim, and subsequent researches have severally confirmed it, affording a contradiction to the doctrine of equivocal generation which had been promulgated upon apparent results and unfounded reasonings. In every instance of genesis the law of germs will, upon inquiry, be found to prevail, and never to have been broken. In tracing organization from its *punctum saliens*, the various successive changes have been satisfactorily observed, and the steps of the building are recognisable. And yet, with all the accumulated information on this interesting topic, the conclusion which follows is, that our knowledge is only descriptive, and that we are still ignorant of explanatory intelligence. Attempts made towards the comprehension of the mysteries we are privileged to witness, have been, as a whole, unsatisfactory, because

> "Each new solution but once more affords
> New change of terms, and scaffolding of words."

Or else the conditions of the interpretation are soon found to be fallacious. In the hatching of the chick, there are a great number of occurrences we cannot understand. Dr. Draper endeavours to account for the most of them on chemical principles. The composition of the egg is astonishingly simple—it being water, albumen, mucus and yellow oil,—yet, from these four principles, and it is said the calcareous matters of the shell, are formed all the various parts of the bird, complicated and dissimilar though they be—as bones, flesh, muscles, nerves, viscera, feathers, beak, claws, &c. These, he believes, result from new combinations between the elements of the materials aided by oxygen derived ab-externo. Thus the phosphate of lime in the skeleton is formed as incubation proceeds,—"for in the yoke there is free phosphorous to which the air finds access through the pervious shell, and affecting its oxidation, phosphoric acid is the result. This reacts on the carbonate of lime of which the shell consists, decomposes it and the phosphate of lime forms." This fact might be established by ascertaining the weight of the shell before incubation, and after developement of the chick, and noting whether there were any difference or not, and ascertaining if this agreed with the proportionate quantity of lime in the bones. We know of no experiments that definitely settle the question. But we think the result would be a negation. Aside from this uncertainty, there are many circumstances which are opposed to the above opinion,—as the interruption afforded by the membranous covering which is not an organizable structure, and the presence of the bones beneath the surface, buried among the soft parts, in situations not approachable

by simple contact of external air. It is true that in removing this hypothesis we may not have another equally satisfactory to offer—but even this uncertainty is preferable to error, and is after all in unison with the very many other occurrences concerning nature, generally, of which we are with all our boasted enlightenment in deeply profound ignorance. It is to be expected that some light would be cast upon the obscurity by studying developement as it proceeds in the higher order of living beings. Dr. D. has confined himself to an enumeration of the description of the progress of the tissues in the animal ovum, without dwelling upon their origin, or investigating the laws of their evolution. In them we think there is a community of action, with the formation of the components of the bird, and that both have been constructed upon a general plan, and in obedience to a unity of design. Now, without entering into all the ramifications of the subject, we may express our belief, that organization universally exhibits a law of *self-multiplication*, which has for its end the increase of the substance in which it has been embodied, or concerning which it has been decreed. This law becomes a power or property when it is evoked by the nurturing circumstances that are favorable to vivification. It is clearly stamped upon every kind of organic matter, and seems to be their prerogative; but may it not also be extended to inorganic substances, for all organic matter is inorganic until vitality is implanted among its molecules. We perceive self-multiplication indubitably evidenced in cell growth, and as this is merely a genesis out of a proteinaceous blastema, we cannot see why there might not be a similar developement of saline particles when brought within the range of a formative power in full action. By such an extension of this principle, why might we not say that the production of the calcareous particles in the skeleton of the chick, was due to self-multiplication of parent molecules, such as already exist in both the glaire and the yoke of the egg. This supposition would refer the origin of the hard parts of the embryonic bones to the phosphate of lime which is known to form the residual ash of incinerated albumen. As an opinion, it is certainly more in keeping with the general operations of which we have more positive assurance, as in the soft parts immediately investing the skeleton. Dr. D. thinks the chemical view, we before announced, —and which is rendered unnecessary by accepting the preceding postulates—to be supported because "the shell becomes thinner and lighter"—but this effect may be merely an inevitable consequence of attrition, with application of heat and moisture, necessarily contracted during incubation. Unless the point were definitely settled, as we have before proposed, the mere fact, as above stated, is inconclusive. Do

not addled eggs that have been sat upon experience an equal loss of shell?

The law we have been expatiating upon is different to one for which it might be mistaken, and which is treated of, by Dr. D. under the name of "*plastic power*,"—this he defines to be "an innate power which resides in the germ, by the action of which the matters previously stored up in the seed by the parent plant are regrouped and so arranged as to constitute a new organization, but this power does not extend to the obtaining of new material." Thus very obviously, not having like the former, a power of creation, or making new materials like itself, *i. e.* of the parent perpetuating itself in an offspring. The plastic power is presumed to be in full operation during nutrition, and whoever is conversant with this function as it is known to be instituted, but must assent to the admission of such a force in living bodies. We there see matters used as aliment—analagous to the embryonic store—recombined in their integrant atoms—so as to become new substances, and as this reconstruction must go on under a special presidency—for it is not left to chance medley—we may call that controlling agency, their "plastic power." Now, this being conceded, we are at a loss to reconcile these statements with an assertion of Dr. D's, made under a previous section "digestion is not, therefore, to vitalize the food,"—because in this function the proximate principles of our aliment "are regrouped and so arranged as to constitute a new organization," and that whereas they were formerly lifeless particles, they are afterwards rendered organizable—and as if to yet more strongly declare the "plastic power," by which they were governed, they have received life, they form the blood which is living, they carry life to the tissues which they renovate, and if this is not being "vitalized" we apprehend that there would be great difficulty in determining what it (the food) yet wants to be so circumstanced.

Dr. D. has divided alimentary substances into two great classes, the histogenetic and the calorifacient. Had the latter been called thermogenetic it would have been more euphonious with histogenetic, and then both terms would have been derived from the same language, instead of standing, as in adoption, one from the Greek and the other from the Latin. There is nothing new in this arrangement, it is equivalent to the classes called by Liebig—nitrogenized and non-nitrogenized; or as Dr. R. Thomson changed the expressions, at one time to the plastic elements of nutrition, and elements of respiration, and at another to the nutritive, and calorifacient. Such a partitioning is unfounded in nature, as may be demonstrated by a single proof, *i. e.* albumen.

This aliment, according to the above separation, would be called an histogenetic, because it is resolved into albuminose, and this is the protinaceous foundation on which the tissues are erected, or rather out of which they are formed; but the truth is, it is equally a thermogenetic or producer of heat, inasmuch, as caloric is generated during its intromission, and in-dwelling in the system, as well as during the final transformation which it suffers before extrusion, or elimination through the renal emunctories. These changes are so many various combustions during which, it is believed, the albumen may have probably been progressively becoming fibrin, chondrin, and urea. And as such, are proportionately as powerfully calorifacient as any other instance of warming to be met with in the body. The objection then, is that the original substance in undergoing histogenesis must necessarily be instrumental to the evolution of heat—for the metamorphoses it sustains are of the character of those peculiar to the province of calorification itself; and upon this rule every other histogenetic, as fibrin, casein, &c., are equally thermogenetic. We have one more exception to take to Dr. D's opinions upon the subject of alimentation. He promulgates the doctrine that histogenetics are digested in the stomach, and thermogenetics in the intestines, and gives it prominence by heading a chapter accordingly. But this is equally improper with the former. The fact is, to some kinds of food, we are unable to say precisely, where they are digested, whether in the stomach or duodenum; while to others there can be no doubt both of these organs are subservient to their primary assimilation; leaving but few, indeed if any, which are unilocularly digested. Albumen, which has already been brought forward, may be further particularized here, as showing that the same substance may be digested in two cavities. In the stomach it is converted into a peptone to facilitate the endosmosis of a part, and the remainder is restored to the original albuminous condition in the duodenum before absorption by the lacteals. Fibrin, casein, gelatin, gum, and other proximate principles might also be adduced to establish the same fact. Now of our inability to correctly localize the seat of digestion, we may mention the ligneous, pectinaceous, acidulous, and other aliments. Dr. D. has followed Lehmann's opinions upon alimentary metamorphoses closely, as our recollection serves to remind us, and as long as he adhered to him he has been sustained by a safe guide; but when he has wandered elsewhere he has compromised the veracity of his text. Speaking of gelatine, he says, "it always appears to be derived from albumen." This opinion is certainly not Lehmann's, who is extremely cautious in what he says of the origin of gelatine; but, we believe, it is the late Dr.

Prout's who conceived that gelatine was imperfect albumen, and consequently was susceptible of the adaptations and transformations of the latter substance. But this hypothesis is improbable, for albumen has never yet been converted into gelatine, nor gelatine into albumen. Moreover, the nutritive properties of the two cannot be similar, for while the composition of protinaceous substances is identical with that of the flesh and blood, that of the gelatigenous tissues is not, and hence the difference between the two.

Dr. D. devotes an interesting chapter to the unity of man. He there alludes to the resemblances among nations, in the following eloquent appeal.

"Stripped of exterior coverings there is in every climate a common body and a common mind. Are not all of us liable to the same diseases? Have not all a tendency to exist the same length of time? Is it the temperature of our body, the beat of the pulse, the respiration that we observe—are they not everywhere alike? Or turning to the manifestations of the mind, is there not among all the tribes of our race, a belief in the existence and goodness of God? in unseen agents, intermediate between him and ourselves? and in a future life? Do we not all put a reliance in the efficacy of prayers? Have we not all the same delights, the same fears, the same aversions, and do we not resort to the use of fire, domestic animals, and weapons? Do we not all expect that the differences which surround us here, will be balanced hereafter, and that there are rewards and punishments? Is there not a common interpretation of all the varied forms of funeral ceremonies? a common sentiment of the sacredness of the tomb? . . . . It signifies nothing in what particular form our mental conceptions are embodied, it is the conception that concerns us, and not the aspect it has assumed." This reminds us of the declaration of Shylock, from which, probably, the above has been in part borrowed. "Hath not a Jew eyes? Hath not a Jew hands, organs, dimensions, senses, affections, passions, fed with the same food, hurt with the same weapons, subject to the same diseases, healed by the same means, warmed and cooled by the same winter and summer as a Christian is? If you prick us we bleed, if you tickle us we laugh? &c., &c. Act III, Scene I. These resemblances have an important bearing on the question of the unity of man; which has been generally received in the affirmative, but of late has been denied by the idea of Drs. Nott and Gliddon, that there was *ab initio*, "a multitude of centres of human origin." In the work of these gentlemen, Professor Agassiz gives "a sketch of the natural provinces." He divides the world into eight natural provinces; to each he has given

figures of the head and skull of the variety of man, as existing in that province, together with seven or eight animals found in the same province. This is intended "to show that the boundaries within which the different natural combinations of animals are known to be circumscribed upon the surface of our earth, coincide with the natural range of distinct types of men." We are happy to find that Dr. D. does not concur in this visionary fantasy which, alas, as we have elsewhere learned, has afforded the opportunity to others in the same volume of heaping on the Holy Scriptures and its ministers all manner of derision and contempt! Our space does not permit us to follow Dr. D. through the many pages in which he explains the differences in the various members of the human family; but as pertinent to the question we would refer to the following extracts, we have made from a monograph by Dr. Bachman, on this subject. After adducing a large body of evidence in favor of the unity of man; he concludes, with among other deductions, the following.

"Philology has shown that nations, however, widely separated bear a relationship to each other by the construction of languages, and that through this medium, Lepsius and others believe that the doctrine of the unity of the human race will be established. Anatomy and physiology in the hands of Tiedmann, Owen, &c., men who laboured for the advancement of truth, has led to the conclusion that all men were of one species. The facts collected by the individuals sent on the various exploring expeditions, has been in favor of the unity of the species. Natural history has established many laws which concur in the same opinion, such as the fact, that varieties which have once become established, are as permanent, both in form and color as species themselves. Animals once domesticated, that have been suffered to run wild for generations, partake of the characteristics of their immediate predecessors, and never run to the form or color of the original species. The varieties of men are placed precisely in the same category. Biblical history is opposed to the notion that men were created in groups all over the world. This would, we conceive, be requiring unnecessary miracles from the Creator. To establish his (Agassiz) theory he requires to show why the Creator, whenever he calls into the world more than one species, in a genus of lower animals, gave them the characteristics of species; but when he created man, he created him of the same species all over the world."

In conclusion, we would remark that Draper on physiology has been issued from the press with much typographical beauty, and that the illustrations, many of which are new, are remarkably well executed.

XXIX.—*An Introduction to Practical Chemistry*, including Analysis, by John E. Bowman, F.C.S., Professor of Practical Chemistry, in King's College, London; author of a hand-book of Medical Chemistry. Second American from the second, and revised London Edition. *Philadelphia, Blanchard & Lea; Montreal, B. Dawson.*

This little book aims at being a simple and familiar instruction in the manipulations and investigations of Analytical Chemistry. It supplies to the Medical Student a proportionate volume on kindred subjects, to that which his teacher possesses in the more elaborate works of Rose, Fresenius, and others. This, we believe, will be admitted to be the filling up of a want which had hitherto been experienced. To all who desire to practice the experiments of the chemist, pharmacologist or toxicologist, we would recommend it to them. For a few shillings it may be purchased.

XXX.—*Essays on the Physiology of the nervous system*, with an appendix on Hydrophobia, by Benj. Haskell, M.D., of Rockport, Mass. Gloucester, John S. E. Rogers. From the author.

These essays with which we have been recently favored, are upon subjects that must awaken the interest of every reader. They would also seem to be opportune at a period like the present, when public attention has been much arrested to their subjects, by various valuable papers from M. Hall, M.D., E. Brown Sequard and others. Their consideration can, we believe, never grow old; and what between undoing new discoveries, as they are styled, and reviving old opinions, as is the spirit of the age we now live in, the ball of intellect is likely to be kept in active motion.

CLINICAL LECTURE.

(*From Medical Circular.*)

On varicose veins and their treatment, and some diseases of bone. By Frederick C. Skey, Esq., F.R.S., Surgeon to St Bartholomew's Hospital.

Gentlemen,—Among the diseases which occupy the attention of our Profession, I take it those are the most interesting which are the most

common. It is not a question whether a disease is aristocratic or democratic, but it is a question as to the frequency of its occurrence. The diseases of the venous system are a common class in the lower orders and in the lower extremities. This condition, known as varicose veins, arises from a want of power from the centre of the circulation. We all know the circulation is carried on mainly by the heart; it is propelled by the ventricle, and returns by the capillaries, by the *vis a tergo*. We also know that the venous system is much larger than the arterial, and so is the rapidity of the circulation slower through the venous system. In the frog you see the velocity of the arterial as contrasted with the slowness of the venous system. It is this condition of the venous system that leads to morbid changes. Veins going towards the heart become large, swollen, and contracted in form. Veins which, when favourably pursuing their course are of a length of six inches, have become contorted till they have become ten inches long. We have a mass of veins occurring in a given region in the lower extremities, twelve or eighteen inches in length, and increased in size as well as length. This condition, called varicose, is more especially common in the lower extremities; it is also met with in the upper extremities. A young man I knew had a varicose condition of all the veins of his body, and of the upper and lower limbs as well. I do not know what has come of him.

The evils attendant upon this condition of veins are considerable; in the first place they are very painful—they are almost incompatible with the ordinary conditions of the body. We have red patches on the skin, indicating a low state of the blood, becoming organised, and remaining permanent for years. This disease must have a cause; it is a want of vigour in the arterial system at large; you never see a man with varicose veins without a weak pulse. If you have a radical evil like this the symptoms occur from a weak condition of the heart. The first step towards a cure is to know its nature. I wish to draw your attention to the means of mitigating the evil locally, whether it may be universal or confined to one or two extremities. The treatment must be of a form which shall give tone and strength to the circulation. In the condition of the limb which you see frequently in our hospital practice, it is confined to the ramifications of the internal vena saphena; however extraordinary it may be it does not, as a common rule, extend above the knee. There is a freedom of the circulation above the knee, but above that again the circulation is interrupted, and you will find a large mass of veins—I suppose a continuation of the vena saphena—each of these as large as one's finger. A patient in the hospital was in this condition, and the evil was so great as to prevent him pursuing his ordinary avocations. This man came into hospital now four months ago, with enlarged veins and considerable pain below the knee; he was a gas worker, and could not attend to his work. He also exhibited above the knee one of these enlarged masses of veins which I have just described. I remember 30 years ago the treatment of varicose veins was rife in this town; they were tied with ligatures, divided, pressed, &c, but I know that the result of these experiments was invariably fatal from the

violence done to the veins from within. These experiments were abundant.

Up to fifteen years ago no progress was made towards a cure. I received from some gentlemen a statement about treatment with Vienna paste—two parts of potassa fusa and three of quicklime made into paste with spirits of wine. The mode of application is this:—the veins, the subject of experiment, are insulated by plaister,—a hole being cut in six thicknesses of plaister and laid over the vein you wish to destroy; you may apply this to as many surfaces as you like, all the worst points in fact. I have done this experiment in fifty, sixty, or seventy persons, and in the most of these below the knee and ankle. The merit of this paste is that it acts better than potassa fusa alone. If applied over the salient parts of the veins and removed in ten or twenty minutes, and carefully sponged away, you will find an eschar, attended by a rapid deposit of lymph around the vein, it consolidates the blood within the vein, which becomes blocked up. You will have some erythema, which remains two or three days and then disappears.

When I first used this I made the holes large, but I found by experience the smaller the holes were the better, as the cure was not so protracted. I think you might apply the paste over a surface not larger than a quarter or one-fifth of an inch to accomplish the destruction of a vein, which is all you want.

It will be naturally asked, have you ever seen any bad consequences from this? I reply, never; I have done it on rich and poor, gentle and simple, on a Governor of this hospital among others, and on all with the most perfect success.

We are all the victims of our early prejudices; the antidote to this evil is the cultivation of one's own independence of mind, and not to yield to authority unless backed by reason. I was told I should kill the people, that *persons would have an attack of phlebitis, &c., but lately* I have shrank from applying the Vienna paste above the thigh. I have done it in two or three cases, but I now would hesitate to do so. The man I spoke of was peculiarly fitted for this treatment. He went out and told me he was well below the knee but suffered dreadfully above the knee. I applied four large eschars midway between the knee and groin. What followed? A large blush of erythema, extending one-third of the front of the thigh, the mass of veins was consolidated and hard from effused lymph; the day after the inflammation had gone, and now there is not a vestige of vein left. In another case I did it with the same result, the very shadow of the case I have just related. Therefore I see no reason why this condition should not be treated this way. I have never failed to apply the remedy, however large the veins, whether above or below the knee. Conjointly with this treatment is the necessity of such force being given to the circulation as to prevent that peculiar condition of the venous system which leads to this condition.

[Mr Skey here showed several specimens in illustration of this excellent plan of treatment.]

One case I knew where it took six months to heal up an eschar, but the man got cured. In one case only did I see the disease return. The

other day a patient showed himself, upon whom I had operated many years ago, now perfectly cured. My experience of sixty or seventy cases leads me to say it is perfectly safe treatment.

Now I want to bring before your notice some diseases of bone. A little boy was brought into hospital, three months ago, aged twelve years whose left leg, from the knee to the ankle, was large and swollen The statement he made was that he began to feel pain two years and a half ago in the leg. There was now no pain to speak of. He was put on hospital diet, and I gave iodide of potassium in large doses with bark, when I say large doses I mean the medicine is of no use without it is given in large doses. I will cure with ten grains what you cannot with five.

I was in the habit of ordering the iodide of potassium in the dose of five grains three times a-day. A gentleman wrote up to me from a town in Essex, stating his case. I said in reply, take ten grains of this medicine, and if not relieved take fifteen, and so on. He called upon me some years afterwards, and said he was very thankful for what I had done. He told me he had had in early life some venereal affection, which passed into his bones. He took iodide of potassium for some time in vain, but that when he took it as I had desired, he declared he had got quite well; he had taken it up to drachm doses.

From that time I began to give it in ten-grain doses. I gave the boy five grains without the least benefit, but whether it was the hospital diet, or bark, or iodide of potassium, I know not, an abscess appeared over the tibia, with an opening into the bone. The operation was done of breaking up the tiba above and below this, and all is now healing up. As to the result,—the peculiar feature is, you may have inflammation attacking the interior of a bone, that shall go on to the destruction of the bone without an external sign—so far except the outline of the bone. It is quite clear bone cannot live without healthy texture around it, it requires nourishment from its periosteum; if you cut off its vessels the periosteum will die—bone requires sufficient nourishment. I want to bring before you the cases in which the bone dies either from without or within. In the case I have mentioned, had the boy remained in his own residence, his case might have gone on for years. Now as the hole in that bone formed during the treatment, he will do well. There is no reason to suppose the bone will not re-form. The other case is where the bone becomes diseased from without; also in a boy aged fifteen, with an abscess of the left leg, in hospital two months ill only five days. Before admission he had twenty-five and fifteen leeches applied, total forty leeches. It (the leg) was enormously swelled on admission, and two pints of matter evacuated, which you will not be surprised at—forty leeches to a boy of fifteen! The bone was found bare, as matter had formed under the periosteum. The boy was fed up, I got the blood back he had lost, and he improved in health, but the bone was exposed three weeks, two inches below the tuberosity of the tibia and three inches above the ankle, of a white colour. Now I think I can compel the system to form granulations, and here a crop of immense granulations have

formed at the edges of the wound which have almost covered the bone.

The question is, can healthy granulations take up dead bone? I never saw it. What will they do with this bone? I do fear you will have a large exfoliation, and the granulations absorbed; they are out of place, an *error loci* they have no business there. We will, however, watch the result of this case, but I think there will be a large exfoliation sooner or later.

THERAPEUTICAL RECORD.

(*British and Foreign Medico Chirurgical Review.*)

Ferrocyanid Potassium and Urea.—This compound has been proposed as a substitute for quinine, in the treatment of some periodical diseases. It is considered applicable to those fevers, neuralgia, &c., in which the intermittence is idiopathic, and not the result of marsh miasm. Its bitterness requires that it should be given in pills. Ten to fifteen pills of fifteen centigrammes have been given in the course of the day.

Hæmorrhoids.—In some cases recently treated the actual cautery has seemed to possess advantages over the ligature and excision. It is often followed by vesical tenesmus and sometimes of retention of urine. These effects are relievable by a tepid bath. Contraction of the rectum has never resulted from the operation.

Hæmoptysis.—M. Aran recommends the application of ligatures to the limbs and ice to the chest as means of arresting the bleeding temporarily, of internal remedies which should succeed a combination of nitre and of digitalis as the most powerful sedative to the circulatory system.

Chronic Catarrh.—The inhalation of the vapor of sal ammoniac has been used. Employed two or three times a day, it has cured obstinate cases in a few days, and has on no occasion turned out useless. The salt may be volatilized in a small crucible, heated by a spirit lamp. The patient sitting before it, inhales the fumes and the air of the apartment becomes impregnated. The vapor is also recommended in syndesmitis and strumous ophthalmia.

Paraplegia—Dr. H. Bennett has given phosphuretted oil (gr. iv. of phosphorus to ℥ i of olive oil) in cases depending upon diseases of the spinal cord, without improvement resulting in any one of them.

Pericarditis with Effusion,—M. Aran has related a case which demonstrates that the pericardium may be injected with iodine for the cure of effusions as well as other closed sacs. The injection consisted of 50 grammes of water, 15 grammes of tinct iodine, and 1 gramme of iodid potass. It produced no pain, and a few grammes were allowed to run out before the wound was closed. Re-accumulation coming on, a second operation was performed. In the end recovery ensued.

Photophobia.—M. Van Holsbeck recommends as completely successful the external application of tinct of iodine, especially in that form which accompanies strumous ophthalmia and chronic granular conjunctivitis. He paints the orbicular and supercilinary regions once or twice a day, according to the severity of the case. A single application usually suffices to remove the symptoms in 24 hours.

Rheumatism.—Dr. Alies relates several cases of rheumatic affections in which he has rapidly effected a cure by the use of veratine, in doses of 5 milligrammes, every 5 or 6 hours.

The Medical Chronicle.

LICET OMNIBUS, LICET NOBIS DIGNITATEM ARTIS MEDICÆ TUERI.

THE LATE CASE OF POISONING BY CROTON OIL.

The extreme, and, in our view, unjust severity of the sentence passed on Gallagher, lately tried before the Court of Queen's Bench, for a so-called attempt at poisoning with croton oil, entitles the case to a short notice at our hands. Michael Gallagher, say the reports in the public press, a private of the 39th Regiment was indicted for having, on the 2nd September last, feloniously caused to be taken, by one Margaret Curran, a drachm of croton oil, with intent to murder her. The prisoner pleaded not guilty. From the evidence taken, it would appear that Gallagher, while a servant with Captain Benson, became enamoured of one Margaret Curran, a fellow-servant, and, as she expressed it, "was very often humbugging her about love matters." The tender feeling not being reciprocated by Margaret, in consequence of her affections having been already engaged "by a young man who was gone to Toronto," Gallagher, as a matter of course, became the subject of all those soul-harrowings so pathetically described by poets as peculiar to the experiences of rejected suitors. He now told her, as hundreds of other love-sick swains have told their hard-hearted dulcineas before, that he "would hang for her, rather than that any one else should have her." He said this but once, and they remained on friendly terms until he left the situation, on or about the 2nd September. Shortly after leaving the place he met her, and promised to send her a bottle of beer. True to his promise, the beer was sent on the evening of the same day, by means of a little girl named Ellen Fitzgerald. Out of this bottle Margaret Curran drank a cup full, her fellow-servant, Ellen Hughes,

taking at the same time a cup half full. The latter says:—"I felt my mouth burning immediately after, and said to Marguret it was nasty stuff; I then went to the cupboard and took some sugar, for the stuff burned me; I then ran up stairs, and threw the stuff off and came down again, when Marguret looked very pale. I asked her what was the matter with her; she said she was very ill. I then retched again; Margaret asked if she would tell the Mistress; I said no, I shall soon get better; I felt a sensation as if I were going to die."

Dr. Woodman, Surgeon of the 39th Regt., was in immediate attendance, and having administered to each a mustard emetic, butter, and arrow-root and water, they were in a short time relieved from all their urgent symptoms. "I was shewn a bottle," he says, "and found it about half full of beer; I found some oil; this oil I afterwards found to be croton oil; I took the bottle away and had it examined by Mr. Hunt. I would swear that the oil which I obtained from the beer was croton oil."

Judge Aylwin, in summing up, told the jurors, among other things, that, "with reference to the crime of poisoning, there was this to distinguish it from other modes of producing death, that the act could never be explained consistently with innocent intentions. A man might flourish a stick, or fire a gun without intending to cause death; but he who used poison must do so knowing well that it was dangerous to life, if administered in sufficient quantities. He mentioned this, because besides the two facts that the poison had been taken by the deceased, and administered by the prisoner, there remained this third point to be made out in order to establish the crime—that the poison was administered with intent to murder. When the law said that the intent characterized the act, jurors were not called on by that to dive into men's thoughts, and say that a prisoner's thought was to commit murder. That was impossible. The jury must judge that the man intended that which was the necessary consequences of his act; and here there could be no doubt on that score, for on account of the reason already given, the administration of poison necessarily indicated the intent to kill. But for the speedy intervention of the surgeon, judging from the natural effects of the oil, death must have followed."

While we admit all that the learned Judge has laid down in the premises concerning the crime of poisoning, and the duty of jurors in determining the intent of a prisoner, "by judging that the man intended, that which was the necessary consequences of his act," we decidedly differ from him, that there could be no doubt on that score in this case. In our opinion, two very important questions which were not touched

on by the defence, and which his Honor took for granted, remains to be proved, before we can, with common justice, say that Gallagher, in administering croton oil to the girls, intended to commit the crime of homicide. 1st. Is croton oil a poison, and if so, in what dose? 2nd. Is croton oil popularly known and regarded as a poison? That both the seeds and oil expressed from the seeds of the croton tiglium are poisonous in large doses, is admitted by all toxicologists; but this opinion would appear to have been formed, rather from the energetic effects of small doses, than from any direct evidence as to the fatal effects of large ones. And that this is not always a safe criterion, is sufficiently evidenced by the action of other medicines—tartar emetic, for example, which in doses of one or two grains produces nausea, vomiting, and purging; but may be given to the extent of several drachms during twenty-four hours without producing injurious consequences. Two cases, in which large doses of croton oil have been taken, are on record. One is to be found in nearly every recent work on materia medica and Medical Jurisprudence. It is as follows: a young man, living in Paris, aged 25, affected with *severe typhoid fever* swallowed by mistake *two and a half drachms* of croton oil, and death ensued, as a *consequence, four hours after the oil had been taken.* What was exceedingly singular no lesion was found in the gastric membrane, and the intestines presented merely the ulcerations which are characteristic of typhoid fever. Taking into consideration the debilitated condition of a person suffering from typhoid fever, it is not to be surprised that the oil caused death. This result would have been equally produced by the depressing effects of any other powerful cathartic. The second case has been placed on record by Dr. Cowan, and was not fatal. A *teaspoonful* was administered by mistake to a child *four years old,* who had previously eaten a hearty meal of bread and milk. In five minutes the child was seized with violent vomiting and purging, soon followed by alarming prostration. Under the use of warm fomentations, and free libations of milk and mucilage the child was convalescent in two days. Dr. Cowan has known similar symptoms follow the administration of half a drop to an adult. Here, then, *an entire drachm* was swallowed by a child in perfect health, and yet death did not result. Who then can state positively that croton oil is a fatal poison in drachm doses? the very quantity put by Gallagher in the bottle of beer. Add to this, that all writers admit its effects to be very variable; some persons taking as many as ten drops, without having the bowels affected in the slightest degree, and who will not agree that the prisoner ought to have had the benefit of the very evident doubt that exists as to croton oil being

poisonous, even in doses as large as a drachm. The language of Judge Aylwin, that death *must* have resulted, judging from the natural effects of the oil, but for the intervention of the surgeon, is, in the present state of our knowledge regarding its physiological action, altogether too decided, if not quite unwarranted.

We come now to the second question, which is by far the more important one of the two, inasmuch as its solution tends either to fix the guilt of the prisoner or free him from the imputation of homicidal intention. For, if croton oil be popularly known and looked upon as a poison, then the conclusions which his Honor arrives at, on the assumption that such is the fact, are perfectly justifiable; but, if the contrary be true, and the assumption is erroneous, then are his conclusions completely invalidated. It is, we think, sufficiently obvious, that Gallagher cannot be treated as a man who has studied and made himself familiar with the operation of poisons and medicinal substances, but as one of the general population, who entertains, in common with his fellows, certain determinate notions regarding the effects of these substances, and when he employs them, does so in consonance with these ideas. Now, although it is extremely difficult for the scientific man to give a definite opinion of what a poison really is, to the popular mind nothing is easier. "A poison is something that kills"—something that has a property *sui generis* inimical to life. Such is the notion of the mass. They know comparatively little of the distinctions to be drawn between one poison and another, or the degrees of action of the same poison. The irritant, narcotic, and narcotico-irritant, are one and the same to them; they are *poisons*, therefore they destroy life. The same simple notions are held by the vulgar regarding other medicinal substances. A purgative is a substance which, when taken, produces purging; an emetic causes vomiting, and so on; and one would scarcely be credited if he said that any substance, known as a purgative or emetic was a poison. Ask any one of this class what opium, arsenic, Prussic acid, or strychnia are, and he will immediately answer—"Poisons." Ask him what jalap or aloes are, and he will say as promptly—"purges." Tell him, if you wish to excite his risibility, that jalap is a poison; and yet a greater number of cases of poisoning have occurred from the exhaustion produced by the excessive purgative action of aloes and jalap than has ever occurred from that of croton oil. The great question is, then,—what is the popular idea of croton oil? The only way to arrive at a positively correct answer would be to propose the question to some thousands of the community indiscriminately; and, were this done, we are certain that not one who has heard of the medicine, independently of

this trial, but would answer,—that it was a "purge." Gallagher, therefore, if what we have laid down be correct, considered croton oil not as a poison but as a purgative, and in consonance with this idea, mixed it with the beer administered to Margaret Curran, for the purpose of giving her a thorough purging, and nothing more; "intending," in juridical phraseology, "that which was the necessary consequences of his act." A singular way certainly to be revenged on a female for not returning his affection, but one which would be apt to present itself to the mind of a course uneducated person; as such tricks are very common among his class; the purgative substance heretofore being, however, jalap instead of croton oil.

We were anxious to say more on this subject but a message from the printers says—"no more copy wanted." We will therefore give, if we think it worth while, some further remarks on the subject in our next number.

That Gallagher is deserving of severe punishment for his act, we freely admit, but that he should be condemned to death, or probably spend the remainder of his life in penitentiary, is, we consider, exceedingly cruel treatment.

ECTROTIC TREATMENT OF SMALL POX.

In our last number we published an article from the pen of Dr. Von Iffland, in which he recommends in the highest terms, a solution of nitrate of silver, of one drachm to the ounce of water, as an ectrotic remedy in this truly loathsome disease. The Dr. lays no claim to originality in the treatment, but states that he was induced to try it on the suggestion of Dr. Douglas, "to whom, it would appear, it had also been suggested." Now, as nothing delights us more than to give honor to whom honor is due we are happy in being able to inform our readers, and we know the information will please our friend Dr. Von Iffland, that the original suggester is Dr. Rowand of Quebec, who is solely entitled to the credit of having initiated an abortive treatment of small pox, which, from all accounts, is far superior to that of the application of tincture of iodine. In our next number an article will appear from Dr. Rowand, establishing his claim to the origination of this treatment, with details of cases treated, the local and general effects of the remedy, and such other information regarding it as he may think interesting to the profession.

LONDON CORRESPONDENCE.—No. 7.

London, Sept. 17, 1856.

Knowing very well how much the government of the profession in this country interests that body in the Canadas, I have been vainly waiting for some satisfactory intelligence to communicate on the subject of Medical Reform, and delayed writing from time to time in consequence. Matters are still in *statu quo*, and the medical privileges of the Archbishop of Canterbury rest undisturbed. Hope, however, is strong, and thousands of intelligent men, whose organ of hopefulness is large, are hoping that at last something is to be done. Until that time arrives I shall keep silent about Reform.

London is very quiet at this moment; it is the dull season of the year; everybody who can muster the means has gone out of town; those who cannot, hide themselves, and are presumed to be out of town. Nothing is to be seen, therefore, at any of the hospitals, worth speaking of, during the latter part of August, and all September. Now that the war is *temporarily* over, the demand for surgeons has ceased, and the hospitals do not expect more than an average number of pupils this coming session. I use the word temporarily, because very little discrimination and prophetic foresight is necessary to see that two years will scarcely elapse before the whole continent of Europe will burst out into a blaze, and to expect this country to remain neuter will be out of the question. Let this be a hint in time to some of the Canadian Students, who may wish to distinguish themselves, and obtain a reward, in the shape of one or more medals or crosses. It is rumoured that the Government intends to establish a great Central Military Hospital in London to replace that at Chatham, which is to be broken up. All the invalids who arrive at Portsmouth or some other seaport, from foreign stations, have to come up to London before they go down to Fort Pitt, and as this is productive of great inconvenience, an effort will be made to adopt a new system, by adding another to the many great hospitals already existing in this metropolis.

Feeling, in common with so many of my confreres, the incessant wear and tear of mind and body, I am at present luxuriating at Shoeburyness (although my letter is dated from London), through the kindness of a military friend, who has given me a share of his quarters and a seat at the Mess. This is the only station in England at which the Artillery are taught practical gunnery, and it is here that all the novelties in this particular branch of the service are tried before adoption and approval. Horsfalls monster wrought iron gun—a real great big gun that would hold a dozen children—has been already tried and approved of; a description and sketch of it appeared in the *Illustrated News* of the 6th inst., it propels a shot weighing 336 pounds an immense distance. There is a cannon I have just seen fired several times, at intervals of 10 minutes, with 12 shot each time, which was sent over by some American who declared it could not be burst. An effort is made to accomplish this daily, and several little fissures, perceptible only with a glass, were pointed out to me yesterday, but the metal is so tough and unyielding, that it will be some time before its destruction can be ac-

complished. Not unfrequently, very serious accidents occur from these experiments, and pieces often come uncomfortably close, more especially if bursting prematurely. A large rifle mortar with a spiral bore, has been recently tried, it propels a conical shell weighing 270 pounds, with spiral ridges to correspond to the grooves of the mortar. When fired, the shell several times has burst the moment it escaped at the muzzle. The gun, therefore, is a complete failure.

Shoeburyness before the war was always an insignificant station, but now it is becoming a place of some importance. A hospital is being built, additional barracks and magazines are rising, and the force kept here will be increased. The commandant, Colonel Michell, I have no doubt, will be recollected by a great many Canadian friends, as he was many years stationed in Canada. I am at this moment looking out on the broad expanse of the German Ocean, a great many vessels are seen in the offing; looking southerly the Isle of Sheppey can be distinctly seen, and towards the western end, Sheerness. The Isle of Sheppey, it is my intention to spend a little time at, on another occasion, where I hope to gather a large number of the London clay fossils. One's appetite gets sensibly sharpened by the sea air, and the change from the atmosphere of London to the sea coast, is particularly invigorating and refreshing.

It has been a source of pleasure to me, on many previous occasions, to speak of honours conferred upon Canadian Physicians. This agreeable task it is again my province to perform. I feel sure it will gratify the numerous friends of Dr. Von Iffland of Quebec, to learn that he was elected a corresponding member of the Epidemiological Society of London, on the 7th July last. His services in the cause of science have been fully recognised by that influential body, which numbers some of the first in the land among its members, and we may look for communications from his able pen, which, I have no doubt, will appear in the Transactions of the Society. Speaking of the Transactions, I will mention, *en passant*, that the forthcoming volume of the Pathological Society is expected to outdo any of its predecessors, and will contain a large number of original researches and a great many drawings, coloured and plain. Contrasting this volume which is issued to Fellows for an annual subscription of a guinea, with the one emanating from the Medico Chirurgical Society for a subscription of three guineas annually, the comparison is very much in favor of the former. This is a reason why the number of fellows of the Pathological is so large, and this enables the society to publish such excellent volumes.

The chapter of accidents this year in London, appears to beat hollow, anything of the kind that has been known for many years past, and a great many sad occurrences are due solely to carelessness. To give but a single terrible example—a poor carman, the other day was about to load a van with bags of sugar at the St. Katherine's Dock. His vehicle was placed under one of the loop-holes in front of the building to receive the sugar, each bag of which weighed 3 cwt. Two of the bags were suspended, and while in the act of lowering them, the rope suddenly became liberated, when they both fell with fearful violence

upon the poor man, and crushed him in a most shocking manner. The abdominal and thoracic viscera were completely forced out, the heart lying exposed on the outer surface of the abdomen. Yet, in this condition, when the poor fellow was extricated he uttered, the words "good bye," and immediately expired. Horrible mutilations are quite common on railways, but a form of accident like this, forcing out the viscera, we do not hear of every day, and produces quite a sensation.

There have been several alterations in the staff of the Hospitals, within the past two months, but as these are generally given in the Medical Journals, I shall not recapitulate them. G.

HOSPITAL REPORTS.

MONTREAL GENERAL HOSPITAL.

(Reported by Mr. R. Anderson.)

Peter Summer, middle age, admitted on the 27th July, 1856, empyema of the left side; under Dr. Reddy, subsequently under Dr. Wright.

When admitted a splashing sound was distinctly heard on succussion; left side enlarged and dull on percussion; obscure breathing as high as the second rib; and a deficiency of expansile movement. The disease seemed to have originated in an attack of pleuro-pneumonia, which he experienced two years before; since then he felt a peculiar sensation of weight and uneasiness in that side. On the 4th of July he first began to be aware of this collection in the chest; and had often heard the splashing, before making application for admission to the hospital. He was subject to paroxysms of coughing; with profuse expectoration, which occurred about once a week. On the 15th of August the chest was measured by Dr. Wright, and it was found that the affected side was nearly an inch greater in circumference than the opposite.

Under a mixture of Donovan's solution and iodide of potassium, the cough became less troublesome, and expectoration diminished. Aegophony was now heard. Pulse 95. He complained of great pain; sometimes in the side, at others in the lumbar region, increased on pressure. The expansile movement of the chest became more marked, and respiration more distinct, and almost normal over a larger extent of surface, (all round the nipple); and he began to get more rest at night.

This continued up to the 27th, when he complained of an attack of indigestion, with great abdominal uneasiness, which was attributed to the effects of the medicine. Under the following draught he completely recovered from these symptoms. ℞ tr. sennæ ℥ss, spt. ammoniæ arom, ℥ss, hyoscy. aa ℥j. ft. haust.

On the 30th we again tried succussion, but no sound could be heard. The side had increased in size half an inch, with œdema of the integument over the left mamma. A drachm of the following liniament was rubbed in four times a day.

℞ lin. sapon: co. ℥iss. tr. digitalis, tr. iodinii aa ℥ss. M. ft. lin.

About the beginning of September he became confused in his intel-

lect. Used to get out of bed and ramble about, complaining of great hunger. Some little effusion into the peritoneal cavity was now perceived, with diuresis; water limpid, pale yellow colour. His mixture was omitted and the following given:

℞ pot. acet, sol. morphia aa 3ij., liq. am. acet. aa, spt. junip. co. ℥ij. *M.* ft. mist. 3i., four times a day.

He now began to perspire profusely.

On the 5th of September we again measured the chest, and found no increase in size. Great protrusion of the mamma. Dullness on percussion. Respiration heard only as low as the second rib, inaudible at the fourth. He complained of some dyspeptic symptoms which were soon relieved by a slight aperient; and as he was becoming very much emaciated and weak, he was ordered a nourishing diet, and 6 oz. of wine daily.

On the 11th the side had increased another half inch. There was great displacement of the heart; the impulse being felt at the right side of right mammary region. He now began to be more oppressed in breathing. Always lay on the affected side. A blister was applied to the side, and afterwards dressed with strong mercurial ointment, which relieved him.

On the 15th he was in a state of dementia. Had lost his appetite. Chest increased another half inch, and a tonic mixture was prescribed.

R quinœ sulph. ℈j., spt. ætheris sulph. co. 3vi, acidi sulph. arom. 3ij. tr. cascarillæ ℥j., aquæ ℥vj., *M.* ft. mist. cap. ℥ss, four times a day.

On the 18th Dr. Wright performed paracentesis thoracis, and 5½ pints of pus were withdrawn; after which he felt lighter; but his breathing was very little relieved. Shooting pains were felt in the side resembling those of his first attack The pulse, which had steadily increased, was, before the operation 128, now fell to 66, and he complained of great weakness. Calomel and opium were now prescribed, and continued a few days. On the 23d the expectoration had increased. The affected side now measured two inches less than before the operation, but still an inch more than the sound side. Slept little and restless, with constant moaning in his sleep. Diarrhœa now came on, and gr. ss of opium was administered three times a day. Two or three days after the operation, said he felt stronger, but he soon began to sink. The opium and wine were increased, and opiate injections were administered four times a day. The pulse again increased in frequency since the operation; and on the 29th was 100, but weak and irregular. He continued to moan in his sleep, and complained of a pain in his bowels. Was very low and emaciated, and partly unconscious. He died on the night of the 29th.

At the post mortem examination, the thorax contained 1½ gallons of pus. The lung was bound down to the spinal column by a thick, dense, secreting, false membrane, which lined the whole of the cavity. The intercostal muscles of the fifth, sixth, seventh, and eighth ribs were completely disorganized, perforated and hanging in shreds. The pus had burrowed between the ribs and pectoral muscles; and on moving the body flowed out of the mouth and nose.

Novel Cure for Warts.—(Reported by Mr. R. N. Shaver.)

Wm. Compsty, a sailor, was admitted into the Montreal General

Hospital, July 23d, 1856, suffering from phymosis and several warty excrescences on the glans penis. There was considerable thickening or hypertrophy of the prepuce. The ordinary measures were tried, to remove these symptoms, but with little or no success. It was finally determined that an operation of circumcision, was requisite, which took place on Aug. ———being performed by Dr. Wright. After excision of a ring of preputial skin and mucous membrane, a great number of vegetations were noticed around the corona glandis, and on the inside of the skin of the penis, near the cut surface, presenting a cauliflower appearance. They were so numerous and closely packed together, that it was not deemed advisable to extend the operation by proceeding to their entire extirpation.

A few days afterwards it occurred to Dr. W. to try the effect of a new plan he had devised for treating warts, and which, upon being practised, proved eminently successful. Accordingly, several of the more isolated warts were selected; a thread saturated with liquefied chlorid zinc was passed by a needle through the basis of each, in two or three different directions, and made to cross each other diagonally; these were then allowed to remain at rest, undisturbed for two or three days; in the meanwhile the warts grew dry and dark, at the end of that time the threads were pulled out, and shortly afterwards the warts tumbled off, leaving a clean healed surface underneath. The same method was tried in another case, a large wart on the hand, and found equally effective.

In the above case the remaining warts being so closely aggregated, the above method could not be applied, they were treated with creasote, under which application they became absorbed.

RETURN of Sick in the Marine and Emigrant Hospital, Quebec, from the 4th September, to the 1st October, 1856.

	Men.	Women.	Children.	Total.
Remained,	41	10	0	51
Since admitted,	74	10	0	84
	115	20	0	135
Discharged,	66	7	0	73
Died,	0	0	0	0
Remaining,	49	13	0	62
	115	20	0	135

Fever,	9	Abscess,	3	Hemiplegia,	1
Inflam. of Lungs,	4	Ulcers,	3	Myelitis,	1
Do. of Liver,	1	Wounds,	2	Phymosis,	1
Do. of bowels.	2	Contusions,	5	Erysipelas,	1
Rheumatism,	8	Pregnancy,	3	Subluxatio,	1
Dysentery,	3	Lupus,	1	Feb. Intermittens,	1
Diseases of Skin,	1	Abortus,	1	Hernia,	1
Inflam. of testicle.	2	Cancer, Mammæ.	1	Epilepsia	1
Syphilis,	9	Oppthalmia,	1	Destitution,	
Fractures,	5				