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		Coloured pages / Pages de couleur
Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées
Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées
Cover title missing / Le titre de couverture manque		Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
 Coloured maps /		Pages detached / Pages détachées
Cartes géographiques en couleur	\checkmark	Showthrough / Transparence
Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)		Quality of print varies / Qualité inégale de l'impression
Coloured plates and/or illustrations / Planches et/ou illustrations en couleur		Includes supplementary materials /
Bound with other material / Relié avec d'autres documents		Comprend du matériel supplémentaire
Only edition available / Seule édition disponible		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que certaines pages blanches ajoutées lors d'une
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.		restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.

Additional comments / Commentaires supplémentaires: Continuous pagination.

THE

BRITISH AMERICAN JOURNAL.

ORIGINAL COMMUNICATIONS.

MEDICAL DEPARTMENT.

ART. XX—Case of severe obstruction of the bowels; concretion found in the appendix vermiformis. By J. A. GRANT, M.D., attending Physician, General Protestant Hospital, Ottawa.

October 23rd, 1860, 6 p.m. I was called upon to visit Mr. Isaac Proud, aged 32 years, of rather spare habit of body, and suffering from a painful affection of his bowels. The attack commenced the previous night and was attended by pain of a deep seated nature, more particularly confined to the cæcal region, and increased slightly by firm pressure. To relieve these urgent symptoms a strong aperient was taken which in a few hours produced a copious evacuation from the howels. Twelve hours afterwards I saw Mr. P. who became anxious owing to a severe return of the pain which continued with uninterrupted severity, associated with increased tenderness upon pressure, the tongue furred, the pulse 100 and full, skin hot, urine scanty and high coloured. The bowels not having been relieved for several hours, and the stomach having rejected both diet and medicine for the greater part of the day, I without any delay administered an aperient injection in warm gruel, and followed it shortly afterwards by Croton oil pills. Hot fomentations with turpentine were almost in constant use as applications to the abdominal parietes. These measures being persevered in for some hours without any relief, I abstracted twenty ounces of blood from the arm, and had recourse to a hip bath. During the following day leeches were applied over the abdomen at the seat of pain, and repeated injections of various descriptions administered, most reliance being placed on warm water sent copionsly into the colon by means of Dr. O'Brien's rectal tube. These efforts were only followed by temporary relief. During the afternoon of the 24th, finding Mr. P. much worse, vomiting

VOL. IL.

being almost constantly present when any fluid was taken into the stomach, and the various means proving ineffectual, Dr. Hill, one of our oldest and most respected physicians, was called in for consultation. Purgatives of various descriptions were administered without any good effect. This afternoon signs of collapse appeared and emesis became more frequent; the ejecta consisting of tenacious yellow-looking matters, more or less liquid, and having a most decided stercoraceous colour. A few of the dejections after the liquid passed into the bowels, were slightly tinged with feculent material, but in no instance sufficient to warrant a favourable prognosis.

25th, 3 p. m. At this period the stage of collapse was most marked, general reduction of temperature over the entire surface of the body, head and face cool, eyes dull, heavy, and sunken; cheeks pale, tongue and mouth reduced in temperature, extremities cold, abdomen rather tympanitic, cardiac impulse and volume of arterial pulsations very much lessened, still a degree of pain upon pressure and considerable restlessness. At the suggestion of some friends Drs. Sewell and Garvey were also consulted and perfectly agreed as to the issue of the case. Morphine in repeated doses was administered, and in conjunction, the electrical current passed over the abdominal walls, but all to no effect beyond moderating the pains, which gradually lessened as he approached the period of dissolution, remaining conscious to the last, and recognising with fond and endearing looks, the little family which crowded around his death bed. Sectio cadaveri 15 hours after death.

General peritonitis, about two pints of seropurulent fluid within the peritoneal cavity. Injection of membrane not very distinctly visible, owing to the exudation with which it was associated. The mixture of puriform and fibrinous matter most manifest between the convolutions of the intestines. A few adhesions, wanting in firmness, were observed connecting the visceral and parietal layers of peritoneum. Cæcum considerably distended and of a dark colour, apparently tending towards gangrene. Appendix eæci perfectly gangrenous, having within its tube a small friable concretion, near its junction with the bowels a most decided perforation was visible, with soft diffluent *edges*, which readily gave way under the pressure of the fingers.

Remarks.—Of the various diseases which come under the observation of the medical practitioner, there are few more difficult of diagnosis than those which frequently interrupt (and obscurely so) the functions of some one or other of the abdominal viscera, that which was originally functional becoming subsequently the prime acting agent in establishing undoubted organic change. The elaborate paper of Dr. Howard on the "Appendix Vermiformis" (Medical Chronicle, vol.v.) contains much valuable information concerning this process or appendix as it may be termed. Of its function, if it possesses any, little is said by physiological writers. In the human organization nothing is superfluous even in its most varied and minute anatomical peculiarities. Inflammation, the result of impaction of any foreign material within this tube, has been observed to prove rapidly fatal, and the peculiar train of symptoms with which it is associated, tends to substantiate the idea, that whatever position as an acting or non-acting appendage it occupies, in many instances death has readily been induced by even the slightest interference with its obscure position as concerns functional activity. The case in question is peculiar, as to the sudden constipation after so copious an evacuation the night previous. Impaction was evidently the primary source of irritation, which afforded, as is usual in such cases, at their origin, no prevention to the action of an aperient, but the local changes induced by twelve hours of acute inflammation extending circumferentially from the *appendix*, was the great barrier, against which the various remedial agents could not prevail. Taking into consideration the sudden accession of pain, confined to the excel region at its origin, followed shortly afterwards by the action of a purgative, subsequently the rapid constipation, associated with sharp laneinating pain radiating from the same point as a centre to the entire abdominal parietes, together with the great prostration of the vital powers, led me to suspect that some material had insinated itself into this tube and thus scaled the fate of one of our most enterprising and most energetic citizens.

Ottawa, March 26th, 1861.

ART. XXI.—Cases of Pneumonia, occurring in the Glasgow Royal Infirmary. Reported by FRANCIS WAYLAND CAMPBELL, M.D., M.R.S.E.

During my attendance on the practice of the Glasgow (Scotland) Royal Infirmary in the months of November and December, 1860, and January, 1861. Pneumonia appeared to be more than usually prevalent, a large number of eases, the most of them being severe ones, were admitted principally into the wards under the charge of Dr. Bell, the Professor of Clinical Medicine in the University of Glasgow. It will be noticed that in one of the cases, the only internal remedy used was Nitro Muriatic Acid-in the other two, Nitro Muriatic Acid and the Proto-iodid of Mercury. I may state, however, that I saw several other cases treated solely with the Nitro Muriatic Acid with the most favourable result. Dr. Bell had often noticed the beneficial effects which this remedy exercised over the enlarged liver of tropical countries; and as not unfrequently cases of Pneumonia came under his observation, where, owing to the disorganised condition of the lung from tubercle, &c. he considered mercury inadmissable-he was induced to try it, and the result was even beyond his highest anticipations. It acts, he considers, as an absorbent. Dr. Bell thinks it absurd to give tartarized Antimony in a hepatized lung. He prescribes the Proto-iodid of Mercury, in cases where he thinks this drug necessary, in preference to Calomel, for several reasons, among which are these: He thinks that it acts better and more quickly as an absorbent, and does not debilitate the patient so much. Besides he objects to the administration of opium in this disease, and it must be combined with Calomel to prevent its acting on the bowels, which is not the case with the Proto-iodid.

The notes are not as full as I would wish, owing to my frequently being in the Surgical wards of the Infirmary.

Thomas Smith, a mason, exposed to all kinds of weather, æt. 40; admitted on the 25th of December (Christmas Day), states that six weeks since was seized with a rigor, and soon after with a cough and shortness of breathing, and pain

in front of the chest. Says that his expectoration was white and frothy. He remained more or less in this condition till a week since, when these symptoms increased in severity, and he noticed his expectorations slightly tinged with blood. On examination of the chest, dulness exists over the entire of posterior aspect. Chiefly inferiorly, bronchitic and fine crepitation, friction sound, absence of the respiratory murmur, bronchial breathing, and broncophony are revealed by the stethoscope, expectoration quite rusty and very tenacious. Pulse 112, and with moderately full volume ; tongue furred, but moist ; bowels regular.

B Acid Nit Fort.

" Mur-dà gtt. xxv.

Inf. Cascarillæ 5 xxiv.

To have a wine-glassful three times a day.

Dec. 27. Has become very weak.

Feeble respiration, and somewhat hurried; skin cold, and covered with a clammy perspiration. Face somewhat livid. Pulse 130 and small. B. Spt. Hord. 5 j every six hours. To continue the Acid mixture.

Dec. 29th. Has rallied considerably. Omit Spt. Hord.

January 2, 1861.—In right side dulness nearly all gone; also broncophony. In left side dulness persists, bronchial breathing and broncophony extending over whole of lower and part of upper lobe.

Jan. 3. Considerable improvement in left lung. Percussion clearer, and crepitant redux rale heard in lower portion. To omit the Nitro Muriatic Mixture.

Jan. 9. Has continued to improve steadily, and now no abnormal sounds are heard over chest, except a slight prolongation of the expiratory murmur in the lower part of left lung. B. Ferri Pulv. Quevenne's gr. xxiv. Pulv. Nuc Vomicæ gr. xiv. Ext. Gentian q. s. M. Ft. pil. Mass., div. in pil. no xij. one every six hours.

The patient continued steadily to improve, and a few days afterwards was dismissed from the hospital.

Alson Stewart, a servant man, æt. 32, admitted December 29, 1860. About a week previously caught cold; had a rigor and soon after pain in chest, which still continues, with great shortness of breathing. Expectoration, scanty, viscid and rusty. Percussion of chest gives dulness in right infra-mammary region, and in posterior aspect of chest of the same side, its inferior half. In these there is absence of the respiratory murmur with fine crepitus. A good deal of Bronchitic crepitation in other aspects of the chest. Tongue coated with a white fur and moist; pulse 120. Was ordered to be dry cupped over those portions of the chest where dulness exists.

Dec. 31.-Condition about the same as noted yesterday. B Hyd. Proto-iodid. gr. vi. Ext. Hyoscyam., gr. xij. ft. pil. mass. div. in pil. No. xij. one three times a-day.

Jan. 2, 1861.—Has become very feeble and exhausted. To have four ounces of port wine; and a blister to be applied over posterior part of right lung. Jan. 5.—Has improved considerably since last report. Port wine to be omitted. Gums slightly touched by the mercury. Jan. 8.—Has continued to improve; still some dullness in right infra-mam-

mary region. Omit pills of Proto-iodid.

B Acid Nit. Fort.

" Mur. " gtt. xiv.

Infus-Cascarillæ, 3 xxiv.

A wine-glassful thrice daily.

Jan. 10.—Is still very weak, but there is great improvement in the state of lungs. To have six ounces of port wine.

Jan. 13.—The debility still persists, and some mucous reals heard, particularly in right lung. Omit the wine. R Spt. Hord. Zj every six hours.

Jan 21.—Omit Spt. Hord. Every trace of disease of the lungs gone, and gaining strength rapidly.

Jane Pearson, æt. 28, a domestic, admitted Dcc. 28, 1860. For several years past, during winter, has been liable, on the slightest exciting cause to have a cold which generally lasted till spring. About a fortnight ago while exposed to a draught cought cold as she expresses it, which gradually got worse; on admission there was severe oppression and pain in front of chest. Percussion gives some dullness in posterior and inferior aspect of both sides, where very fine crepitation is detected by the stethoscope, with increase in the vocal resonance; distinct friction-sound heard over pericardial region.

On percussion, the other portions of the chest are clear; sibilant ronchus heard; skin hot and dry; tongue coated and dry; Bowels regular; pulse 96 and strong.

Dec. 29. To be cupped on posterior and inferior aspect, to the extent of $\frac{2}{5}$ vj **R** Hyd .Proto-iodid, gr. vi. Ext. Hyoscyam. gr. xij. Ft. Pil. Mass. Div. in pil. no xij one three times a day.

Jan. 2, 1861. On posterior aspect of right side at lower part of inter-scapular space dry crepitant rale heard extensively. Expectoration copious, very tenacious, and rusty. Same medicines continued.

Jan. 3. Mercurial fœtor from gums quite distinct. Crepitant rale gone, also friction sound; omit pil. hyd. et P. Spt. Eth. Nit. Vin. ipecac Sol. morph, mu. aa $\frac{2}{5}$ ss. cap. 3 s every six hours.

Jan. 4. State of lungs improving, rusty sputa gone, still a little dullness. B. Acid. Nit. Fort., Acid Mur. Fort. gtt. xv. Inf. Cascarillæ 3 xxv a wine glassful thrice daily.

Jan. 8. Crepitation and dullness on percussion all gone.

Jan. 12. Complains of want of appetite and strength; was ordered a mixture of quinine and iron, with four ounces of sherry wine.

Jan. 23. Appetite and strength much improved. Complains of cardialgia. R Bismuth Sub Nit. 3 s. gum arabic 3 ss. div. in pul vi. Cap unum ter in die.

Jan. 26. Is getting quite robust, was to-day discharged quite well.

The diagnosis in this last case was Broncho-Pleur. Pneumonia.

Edinburgh, Scotland, March 7, 1861.

ART. XXII.—The Chemical Treatment of disease. By C. B. HALL, M. D., Toronto.

[Read before the Medico-Chirurgical Society of Toronto, March 12, 1861.]

MR. PRESIDENT,—The short time you can spare for an essay could be readily occupied in naming the different hypotheses advanced for the explanation of the modus operandi of medicines, all at variance with one another, all failing when put to the test of practice, and yet none without some grounds of physiological truth for their foundation.

I propose, therefore, that we leave as we find them, those sound principles of nosology that have stood already the experience of men of learning and thought, and devote a few minutes to the consideration of Liebig and Müller's opinion, that inflammation is an oxydized state of the proteine, and that all disease is the result of disarrangement of the affinities of particles, and see how far a chemical treatment may serve as an adjunct to a regular course of medicine. We do know of strange chemical changes constantly attending the animal economy. Thus in the normal state, the gastric juice, the almost first stage in nutrition, is acidulous, while the blood, the result of this digestion, is alkaline. Again we have the secretion from the liver, the largest secreting organ in the body, with an alkaline base, while the product of the no less important organ, the kidneys, is uric acid. We have also the oleaginous and albuminous secretions, the representatives of nitrogen and carbon, as we find others of oxygen and hydrogen, the two other elementary principles of all organic compounds. This in the healthy How innumerable the effects of their slightest variation in disease ! Not state. acknowledging the theory that this constitutes disease, but simply viewing them as co-incidents and their regulation as concomitants.

Take, for instance, the simplest form of congestion, or perhaps more properly, torpor of the liver, found in the moderate drinker, particularly the bcer-drinker, and more particularly when in moderation he has taken a little extra, with a few glasses of spirits, you find the tongue coated with heavy white fur, the gums pale and the fauces dry, the patient complains not so much of constipation of the bowels, as a difficulty in passing what he calls a gummy, sticky sort of substance, which clings to him with a tenacity almost immoveable, and of a dark green colour, with very little odour, and attended by smarting, but no pain. The remedy for this is blue pill and black-draught, or as an old friend of mine in the country takes, ten grains of submurias hyd. followed by salts and senna. Chemically this is an acidulous excess, both in stomach and liver, and ten grains of carbonate of soda to act on the stomach, and ten of bi. tart. potass. to neutralize the hepatic secretion, in a glass of cold water, will often effect a cure in a few hours.

One of the most troublesome attendants of bilious as well as infantile remittent fever is the constant passing of green bile with mucus, showing its irritating effect on the membrane, thus provoking the febrile action and otherwise retarding the cure. I do not mean to say that liq. potass. or any other preparation of that alkali will cure bilious fever, but there is no doubt their use will correct this abnormal secretion and thus effect one of the most important indications.

On the treatment of dysentery or diarrhœa, or whatever name you give to the various bowel complaints of children, you find a double action or one extreme

running into the other. If you are consulted in the early stage, you find the tongue slightly coated, but white, appearing as if the child had just taken a drink of milk. The stools green, somewhat painful, but not frequent, &c., &c. This is always treated with antacids, as hydi. c. creta, with creta cum opio comp. or carb. soda, so that I have no particular point to call your attention to. But what is far more likely, you do not see the case till various pills and potions have been administered by the too confident parents, suggested by the too knowing neighbours, whose children have been exactly the same, and cured by the far-famed remedy. You find the tongue coated in the centre with a dirty-white, inclining to brown, the tip and sides red, the fauces, gums, and lips of the same colour, a painful expression of countenance, with a whining feeble cry, constantly picking its lips or ends of its fingers; stools more frequent, of the colour of the coating of the tongue, more painful before each motion, and increasing in frequency, &c., &c., and you will invariably find an alkaline reaction, the stools often effervescing with nitric acid. Whatever cause of treatment you would each suggest, you will find its efficacy most wonderfully advanced by an acid accompaniment such as Tr. ferri. muriatis. Or still further, you may find the eyes sunken, with a dark areola; skin something of the colour of the tongue. flesh full but flabby and doughy, with other strumous indications. Here is an opportunity for a double chemical action. Feed the child on starch, and give diluted nitric acid. You will not only furnish the best nourishment, and counteract the excess of alkali in the system, but nitric acid converts the starch into oxalic, than which no remedy appears to have such specific power over the strumous diathesis.

Take another familiar example with chloroform, one in which you have no doubt been sorely tried, and wished, like the patient man of old, "your enemy would write a book" on it. A child at breast—the mother strong and healthy eats her meals with relish, has plenty of milk for the child, even more than it requires. This you find on standing in the glasses, rich, and covered with thick, almost buttery, cream. She tells you the child nurses freely and throws it up without any curdling. Bowels inactive for a few days, then three or four motions a day for a few more. Child pale and pulse feverish, and fretful, crying and whining constantly. Here is a case of infantile indigestion, tending to cachexia. You prescribe Infus. Cinchona or some tonic but without avail. Chemistry says, if you give that child sugar, it will convert the case of the milk into lactic acid, the natural gastric juice of the child, and experience confirms the magical effect.

A white tongue is not a characteristic of Pneumonia, (I mean a clean white like milk distinguished from the snow white of inflammation) but your experience will call to mind many cases of this formidable disease, with this anomalous attendant, and its no inconstant fellow symptoms of an acidulous action, the discharge of green bile,—The chemical treatment in this case, is to combine Liquor Potassæ or Bi. Tart. Potass; with your other remedies. Rheumatism has been so frequently associated with excess of acid, that

Rheumatism has been so frequently associated with excess of acid, that theorists have, for a few years past, laid down an alkaline course of treatment but that excess of acid in the acute or of alkali in the chronic, is symptomatic of the disease, I utterly deny. And here, in an opinion at variance with such a name as L. Golding Bird, let me ask you, if your own observations will not join me in the assertion, that there is a marked difference between Rheumatism in Europe and Rheumatism in Canada, particularly those of you, who have had an opportunity of seeing cases in the Hospitals of London, as well as this country—nothing struck me more forcibly Not to detain you with the question just now, I may allude to the well known fact that in England the Chronic form tends to Rheumatic Gout, while in this country it assumes the nature of Palsy. However, that the excretions in some cases, and often in certain stages of the same cases, will acknowledge the test of alkaline and acid excess respectively, I think I may safely state as proven; hence it is our duty to seek out the admonitions that chemistry suggests and govern ourselves accordingly.

The powerful antiseptic and disinfecting effects of Chlorine have been long known, but until the accidental discovery of the Chloride of Potassium, a few years ago, the different forms in which it was necessarily administered, contained objections commensurate with its advantages. This salt is free from any of the difficulties of former preparations—not so caustic for local use, as Chloride of Lime, and more effective than the Chloride of Sodium, it imparts its Chlorine readily and leaves the potass, a mild caustic and gentle stimulant as could be wished—and wherever it has been applied to fœtid and indolent ulcers, the whole array of yeast and charcoal and other carbonacious applications have fled before it in confusion. In that modern and most dreaded disease, Diphtheria, there appears to me no safety in any other remedy.

It is a malignant fever with putrid sore throat, the whole lining surface of the fauces and pharrinx, throwing off a false membrane, which again immediately forms attachments in places and thus hastens dissolution by a mechanical obstruction. Gentlemen, whose opinions I cannot but respect, still place their trust in the Nitras Argenti, but its application is very difficult, as it should touch *only* certain places, and its effect uncertain—while two or three free applications of the Chloride of potass with a sponge, will almost completely remove the local difficulty, and leave you a fair wind and an open sea. Thus we have viewed Chemistry only as an adjunct or a chief assistant at our labours, but as we rise in the scale of disease, and find, as we do so, our difficulty increase and our skill more at fault, we may be induced to look to this science as the polar star in our distress, and the guiding spirit to carry us through the storm. To include under oue general term, the different disorders of this kind, such as Albuminuria—Tuberculosis—Phthisis —& c—I will speak alone of Scrofula or general cachexia, and of course will not attempt any minutiæ of detail.

We find an excess of fluid over the solid part of the body as well as deficiency of fibrine or muscular fibre, and often total want of some important constituents of health such as phosphorus and sulphur. Or we have excess of hydrogen with loss of nitrogen. On the use and distribution of these two elements depend, almost solely, our hopes of cure; simply using carbonaceous and oxygenated substances as nourishment, to keep good the supply and preserve the waste, until we can effect a change in the other ingredients. That chemical changes do not take place with the same certainty, and regularity in the system, influenced by vitality, as in the Alembic and under our observation, I am willing to admit, but that these changes are more or less definitely and correctly effected while circulating in the blood, I think can be as clearly proven. As an instance, and it constitutes a most important part in our curative process, give for a few days, cod liver oil with phosphate of lime, you will detect the dumb-bell crystals of oxalate of lime in the urine—now this can only be effected by the change of carbonic acid, and carbonic oxyde into oxalic acid, which from its stronger affinity, sets free the phosphoric acid and unites with the lime. This change is wholly produced in some part of the transit through the circulation.

Raw beef pounded to shreds, has of late received the approval of the London and Continental Hospitals, as food in these cases, upon physiological reasons particularly, its ready transformation with little effort of nutrition to the much needed fibrin-but we also find that the pounding divests it of its cellular substance or cellulose, which is composed of hydrogen and oxygen in the exact proportions to form water. So the three, carbonic, oxalic, and tartaric acids, to which so much importance has been attached, contain, two of them none, and the other a very small proportion of hydrogen, which may materially check that ready solvent from carrying the most important solids out of the system. I cannot agree with the one-man power of Dr. Churchill about the use of Hypophosphites, but have no doubt of their most important efficacy when combined with cod liver oil so as to produce the chemical transposition before mentioned. The chemical indications of cure, therefore, consist in the proper regulations of hydrogen and nitrogen. The first by keeping from the system all such articles of diet as contain the elements of water, and using for medicines like chemical compounds, the few acids I have named. The second by conveying into the system, as much as possible of substances, rich in nitrogen-of these the principal are nitric acidnitrate and cyanide of potass, and the different preparations of ammonia, chief of which is the muriate—articles of diet confined to Caseine of milk, albumen of egg and fibrin from beef and mutton. Fruit, often highly recommended, derives its principal advantage from the

Fruit, often highly recommended, derives its principal advantage from the long mastication required, causing a greater quantity of atmospheric air to be conveyed to the stomach with the saliva.

REVIEW DEPARTMENT.

ART. XXIII.—Compendium of Human Histology. By C. MOREL, Professeur agrégée à la Faculté de Médecine de Strasbourg; illustrated by twenty-eight plates; translated and edited by W. H. Van Buren, M.D., Prof. of Gen. and Descrip. Anat. in the University of New-York, &c., New-York, Ballière Brothers. Montreal, Dawson and Son, 1861, 8vo. pp. 207.

Of the various subsidiary branches of Medical science, none is making at the present day greater advances towards perfection than Histology, which has for its object the study of the organic elements of the human body, in reference to their form and appearance, and the changes imprinted on them by disease. It constitutes the basis of Physiology and Pathology, and its importance to the physician and surgeon may be therefore estimated. In this branch of science few have labored harder, or devoted themselves with more untiring energy than Mr. Morel of Strasbourg, and Dr. Van Buren of New-York has performed an essential service to the student and the physician, but especially to the former, in translating and laying before them the truly valuable compendium before us.

We must confess that we know of no work on Histology which for conciseness, and adaptability to the instruction of the student in this important department of his acquired information, and which yet embodies every thing of moment, that can at all compare with the one before us. We therefore cordially commend it to them, satisfied that they will find their outlay in its purchase amply recompensed. It is printed and published in the well known style of Messrs. Ballière, Brothers, of New-York, of whose press we cannot but consider it one of the best productions.

ART. XXIV.—Lives of eminent American Physicians and Surgeons of the Nineteenth Century; Edited by SAMUEL D. GROSS, M.D., Prof. of Surgery in the Jefferson Medical College of Philadelphia. Philadelphia, Lindsay and Blakiston. Montreal, Dawson & Son, 1861, 8vo. pp. 836.

The volume now before us, owes its existence to the strong desire of the Editor, to fill up a hiatus in American Medical Biography, "to popularize the profession, and to place its services and its claims more conspicuously than has yet been done before the American people." With the exception of fugitive biographies which have from time to time appeared in Medical Journals, only two attempts of this character have previously been made, that of Dr. James Thacker published in Boston in 1828 in two volumes, and that of Dr. Stephen W. Williams an octavo of six hundred and fifty pages in 1845, and which was intended as a continuation of Mr. Thacker's work. This latter volume brings the Biographical record down to 1828, and Dr. Gross's volume most worthily continues it to the present period. This volume however is but the prelude to a subsequent one, a considerable quantity of the matter for which the Editor

has now on hand, but whose appearance is stated to be dependent upon the favourable reception which the present one encounters.

In preparing this volume for publication the Editor has been assisted by a large number of the most eminent Medical writers in the United States. Three of the biographies however are from the pen of the Editor, and two from that of Dr. Casper Morris, while the remaining twenty-eight are each by separate writers, among whom we notice the names of Dr. Samuel Jackson, Dr. John W. Francis, Dr. A. E. Hosack, Dr. J. A. Meigs, Dr. E. Hartshorne, Gilman, March, Flint, Hamilton, &c., the number of biographies being thirty-two and the number of authors twenty-eight. Thus ably seconded in his labour of love, the esteemed Editor has favoured us with a work, second to none of its kind, well executed in its design, and well worthy of perusal.

There is no more difficult task than to write a Biography. The biographer has to be just as well as generous, "to extenuate nothing," and "to set down naught in malice." In these respects these biographies exhibit their subjects with an evidently truthful pen, and are samples of what this kind of writing should be. Great care has evidently been bestowed upon them by their respective authors, and if the world at large is desirous of knowing what the life of a physician is and ought to be, we might well point to this volume as one capable of furnishing the fullest information.

We would most willingly have given extracts from some of the biographies did our space permit. In this respect we feel that we must sacrifice our strong inclination and refer our readers to the work itself. Besides we entertain an idea that we should be committing an invidious act, by making a selection from one or two to the exclusion of the rest. We feel it our wiser plan to refer to the volume itself; we will only remark that those whose lives are here detailed are the following men lately adorning the ranks of the profession; Rush, Warren, Wistar, Dorsey, Bard, McDowell, Brown, Godman, Mitchell, Hosack, James, Physick, Eberle, MacNeven, Thacker, McLellan, Randolph, Brigham, Lazenberg, Hartshorne, Morton, the three Becks, Dicke, Chapman, Horner, Swett, Bartlett, Stillé, Warren, and Frick, all of the present generation, with probably only one exception.

We should remark that it was the Editor's intention to have accompanied the memoirs with portraits of the different parties alluded to; the expense however, utterly precluded this. It is embellished nevertheless, with a very faithful steel engraving of the late Dr. Rush.

The volume reflects credit upon the establishment of Messrs. Lindsay and Blakiston from which it emanates.

ART. XXV.—A year book of Medicine, Surgery, and their allied Sciences, for 1859; edited by Drs. HARLEY, HANDFIELD JONES, HEWIT, ODLING, and Mr. HULKE, for the New Sydenham Society. London, 1860, 8vo. pp. 536.

This volume, in pursuance of a German and French custom, is intended to inaugurate a new phase in English Medical literature, that of giving a summary of the facts and opinions of the writers of papers on Medical subjects, rather than the papers themselves in which they are expressed, as occurs in Braithwaite's Retrospect or Ranking's Abstract. Viewed in this light which seems to us the one in which the volume should have been received, the severe criticisms which it has encountered very generally from the press, appear scarcely to have been deserved. It evidently pretends to no higher position than a mere record of the views and opinions of writers on Medical subjects generally, and is in fact little else than a Dictionary of the progress of medicine and its collateral branches during the twelve months preceding its issue. To the author and lecturer such a work must present claims of great value, as it not only enables him to see at a glance, who may have devoted his attention to the particular theme, but also in few words the nature of the writer's ideas, giving at the same time a full reference to the periodical where the original may be seen in its entirety.

ence to the periodical where the original may be seen in its entirety. While no criticisms are indulged in with regard to the papers which are noticed, the volume is divided into five departments, under the general superintendence of Dr. Harley. The first under the general title of Institutes of Medicine contains a resumée of all the principal papers on Anatomy, Physiology, Histology, and Animal Chemistry. This division is edited by Dr. Harley. The second division comprises Reports on Pathology, Therapeutics, Clinical medicine, and Psycheatry under the editorship of Dr. Jones; the third department has reference to the subjects of General, Aural, Opthalmic and Dental Surgery by Mr. Hulke; the fourth is devoted to Midwifery and the diseases of women and children edited by Dr. Hewitt; while the fifth and last, under the care of Dr. Odling embraces Reports on Legal Medicine and Sanitary science; and besides these, the volume concludes with a very minute index of contents, laboriously and carefully prepared, simplifying most materially reference to the matter contained in the preceding pages.

Under the heads thus enumerated the Editors have furnished us with a vast amount of most useful information, and yet although the work evinces a great amount of industry, there are yet not wanting some instances of carelessness. Thus in the Report on the "Muscular system," in the list of authors' names, we find the following on page 20. "LINHART.—Anatomie et topographie du pli de l'aine;" translated as "On the Anatomy of the Anus," whereas it should have been "On the Relative anatomy of the Inguinal Region. In fact but very few titles to French papers are correctly translated. And again instances are frequent, in which the author's name and the title of his paper are detailed at the commencement of the Report, while the Report itself is silent as to the tenor of the latter. We apprehend that if it were not worth while to specify the coinion of the author as contained in his paper, it were equally worthless to enumerate the latter with the others at the beginning of the Report.

Again instances are not wanting in which the views of authors have not been fairly represented. For example, although the title of Cohen's paper detailing his method of inducing premature labour is not given, because published at a period antecedent to that embraced in the volume, nevertheless on page 356 allusion is made to it in these terms: "Cohen's method of inducing premature labour consists in the injection of warm water *into the uterus.*" Now this description imparts no idea whatever of the nature of that gentleman's method, or at best but a wrong one. His method which is superseding all the others previously recommended, consists in the injection of water at the temperature of about 90° Fah. between the *membranes and the uterine wall*. Yet what reader could obtain this information from the text.

But although the volume is disfigured with these inacouracies and imperfections, which may be the result of the hasty manner in which the work was brought out, and the probable newness of this species of labour to English compilers, we are convinced that the Society has done well in the production of such a volume as this Year Book. It supplies a desideratum in our Medical Literature, and must become the more accurate and perfect as the Editors become the more accustomed to this kind of labour. We think it almost impossible to have condensed in the same space a greater amount of valuable reading matter. The members of the Society have unquestionably benefited by the industry of those gentlemen, who have devoted their time to the preparation of the volume, and they are entitled to its thanks for its general correctness.

We must reserve the notice of the other two volumes received at the same time to our succeeding number.

PERISCOPIC DEPARTMENT.

SURGERY.

REDUCTION OF DISLOCATION OF THE FEMUR BY THE REID METHOD.

WITH OBSERVATIONS UPON ITS UNIVERSAL APPLICATION TO ALL KINDS OF DISLOCATIONS OF THE HIP-JOINT, BY DR. JOHN SWINBURNE.

DR. SWINBURNE said that in reading the original article of Dr. Reid published in the "Transactions of the Medical Society of the State of New York, in 1852," and Dr. Markoe's cases of dislocation of the femur, published in "Braithwaite's Retrospect," he was impressed with the unvarying expression that little or no force was requisite to effect a reduction and that the position of the head of the thigh-bone did not alter the direction of the flexion rotary, or semicircular movement. Coupling these articles with his own experience and observation, in this mode of reduction, and noticing the relaxation of muscles each in their turn, while none of them were used as a fulcrum to the great detriment of the muscles, (and a decided disadvantage in the process of reduction,) he became satisfied that if few physicians had read attentively. or so, they had failed to appreciate the advantages, of full relaxation of the flexors, adductors, and rotators of the thigh and leg, which, if not all, is at least an important part in the reduction of a recent case of the femur. He then noticed the claims for this step in surgery in behalf of Dr. Nathan R. Smith and Dr. Reid, and proceeded to show that in his work, as edited by his son, Dr. Smith only claims that his method, was applicable where the dislocation was upon the dorsum ilii, while Dr. Reid's method was applicable to every form of dislocation of the bone.

Now contrast these instructions with Reid's method, which is "to place the patient on his back—table or otherwise convenient position, for the physician. Then seize the ankle with one hand, the knee with the other; then flex the leg upon the thigh, strongly abducting it, carrying it over the sound one and at the same time upward over the pelvis by a semicircular sweep, as high as the umbilicus; then abduct the knee gently; turn the toe outward, the heel inward, and the foot across the opposite and sound limb, making gentle oscillations of the thigh, when the head of the bone will slip into its socket with a slight jerk and an audible snap, and the whole limb will slide easily down into its natural position beside the other."

These manipulations and observations I shall divide into six parts :---

1st. The first consists in the flexion of the leg on the thigh.

2d. Semicircular sweep outward or inward.

3d. Flexion of the thigh upon the pelvis.

4th. Rotation, oscillations, or rocking motion of the limb.

5th. Inquiries as to where the true fulcrum is situated.

6th. To what forms of dislocation is it applicable?

In Division No. 1 according to Smith-

1st. You flex the leg on the thigh to make it a lever to operate with, while Reid does the same thing to relax the muscles of the leg and thigh.

2nd. Smith performs the semicircular sweep outward, while Reid makes it inward over the sound limb.

3d. Both operators freely flex the thigh on the pelvis. Smith performs the outward flexion by abduction, while Reid makes the inward by abduction, and does not abduct at all except slightly after free flexion is effected and the bone dislodged from its abnormal position.

4th. Both agree as to the utility of rotation and rocking of the limb.

5th. The fulcrum, according to Smith's notion, was the abductor muscles while Reid demonstrates the pelvis as the true fulcrum. With regard to power and resistance there can be no difference of opinion.

In Prof. Smith's manipulations-

Error No 1 is the misapprehension as to the true position of the fulcrum. Error No. 2, use of powerful abduction, first and last. Error No. 3, is the true reason for flexing the leg upon the thigh before flexing the thigh on the pelvis.

6th. Reid's method is applicable to all forms of dislocation of the hip-joint, while Smith only claims that his method can be applied to dislocation on dorsum ilii.

In reading Smith's memoir on this subject, and noticing the plan of manipulation, and contrasting it with his expressed views of the modus operaudi of the reduction, we will see that he was entirely mistaken in the position of the true fulcrum, as will be seen by the following quotations; also his continued in junction as to abduction :—

He says, "We use the bone as the lever, on the long arm of which we use our force. The abductor muscles, the fulcrum, and the head of the bone the resistance."

Now, this is inconsistent with his manipulations, which make the pelvis the fulcrum the same as in the Reid method, but the Dr. mistook the true fulcrum and hence the impression that the method was not applicable to all forms of dislocation.

Had Professor Smith studied the mode a little more carefully on the cadaver he might

have demonstrated the true fulcrum. The following quotation will show that he was still in much doubt as to the principle involved in this dislocation, when he says :

"There is no doubt a constant mechanical principle upon which the reduction is effected, in such cases and one which, perhaps, would succeed in nearly all cases, if we knew how to employ it understandingly and with precision and did not avail ourselves of it by mere haphazard—this frequent failure of art and success of accident satisfy me that there is some important principle relative to the mechanism of these dislocations (dorsum ilii) which is not yet understood ;" and, again, he says, "Accident ought not to accomplish the reduction of a bone with more ease than art. When it does, such an accident should be our instructor and teach us the mechanism by which it operated and this we should repeat in similar cases."

Again, he says, "There was a mode which would, perhaps, succeed in nearly all cases if we only knew how to employ it understandingly."

Truthfully acknowledging the incompleteness of this mode of procedure.

It would seem by the following quotations, that in his method the reduction was entirely effected by the abductor muscles becoming the fulcrum.

If this is true, we should not only have to overcome the resistance of the rotary muscles situated about the head of the bone, but also the friction of the pelvis as the head becomes firmly impacted against the ilium in attempts to abduct the limb—while on the contrary, adduction with the semi-circular sweep and flexion, lifts the head of the bone from the dorsum, streatches the capsular ligament and thereby allows the bone to fall or glide into its normal position.

If the hip is dislocated upward and backward, he says. "We grasp the knee and *powerfully* abduct the member: we put powerfully on the stretch, the adductor muscles—now the muscles drag the head of the bone directly toward the natural position. In abduction we regard the hand of the surgeon as the power. The tense adductor muscles furnish the fulcrum and the head of the bone the resistance. The hand of the surgeon acts upon the longest arm of a lever of the first kind, and therefore with great mechanical advantage in throwing the head of the bone toward theacetabulum."

Note his expression where he says, " the glutei muscles are most effectually relaxed; the adductor muscles are put powerfully on the stretch by the member being powerfully adducted."

Now, the reverse of this is true in the Reid method; the adductors and flexors of the thigh are relaxed while the glutei are made tense, and absolutely assist in the reduction by supporting the head of the bone and guiding it to the acetabulum.

On the contrary, forced abduction before flexion is sure to lacerate the adductor muscles. Reason—the farther the head of the bone is placed from the socket and particularly on the dorsum, the more obtuse will be the angle formed by the adductor muscles with the bone, and hence, of necessity, the more easily they will be torn.

On the other hand, lift the head of the bone from its confined position, and then the muscles will have full power to act with advantage.

Prof. Smith's general directions for reduction with the exception of adduction, were very correct, and with a little more knowledge of the laws governing this form of dislocation, would have made the plan of reduction complete; but his frank confession that it was applicable only to dislocation on the dorsum illi, and no other, coupled with a want of proper confidence in the knowledge of a proper plan, as expressed through the whole essay, and from a want of sufficient practical demonstrations of the principles involved, the plan was abandoned without being fully illustrated to the profession; hence, it was inferred that this plan was not practical; that it lacked the proper guides and rules of application.

In searching the journals I can find no record of reduction of hip joint dislocation by his method—manipulation—until the time of Reid—while since the publication of Reid's article, I find several cases reported, the reduction of which involved nearly the same principle, that is by flexing the leg on the thigh, and the thigh on the pelvis thereby making the pelvis the fulcrum.

It is not however my province to decide at this period whether Dr. Reid is or is not the first to describe and demonstrate a method by which the profession are to be guided in the reduction of dislocation of the femur. I only ask to be allowed to present all the evidence in the premises, in order that an intelligent profession shall judge, as I have done the facts and merits of the two modes of procedure; one (to me) seems a matter of science, simply following out the indications of nature and moving the limb in the direction which seems the most natural and easy.

Each motion will be examined in detail, and will be found consistent with science and nature, while on the contrary, the other seems a hap-hazard effort to force the head of the bone to assume its natural position by a kind of lever power making the adductors the fulcrum.

If any one is disposed to pursue this subject, as a matter of science, let him attempt to abduct his own thigh (either when straight or partially flexed) to any considerable degree. Note the pain which follows, and the impossibility of carrying the abduction to any great extent before the muscles seem as if about to be rent. Note the rigid condition of the abductors. Surely if the pain is great on attempting abduction in the normal condition of the limb, how much more tense the muscles, and painful would be the abductors would be nearly at right angles to the shaft, and made tense by its position making abduction more difficult and painful.

Place yourself in the recumbent position, go through with Reid's method, or, if you please, let your friend do it for you, and you will see that all of the motions are natural, that each set of muscles relax and contract in their turn, with no pain; while, follow the other plan of forced abduction and flexion, and you find they are attended with great pain.

I conceive that an intelligent profession will fully appreciate the difference on the one hand of strong abduction before flexing the limb on the body; and on the other of the important point in the reduction, (which needs to be followed like the demonstration, of a mathematical problem,) that Smith regarded the adductors as the fulcrum upon which the femur was to act as a lever, while really not the adductor muscles, but the pelvis forms the fulcrum.

In illustration of the method four cases were cited, in one of which the reduction was accomplished upon the first effort, and in a single minute.

Dr. Horr fully concurred regarding the efficacy of the Reid plan for reducing dislocation of the femur, but believed there existed a necessity for firmly fixing the pelvis; and by bringing the position of the bone first upon the dorsum ilii, wherever its abnormal position, it must be resolved into a dislocation upon the dorsum before its reduction. He had never seen the plan succeed by the first effort, unless the head of the bone was upon the dorsum ilii. If the pelvis be firmly fixed he thought there was but little necessity for abduction or rocking motion of the thigh, for the head of the bone would slip into the acetabulum.

Dr. SWINBURNE remarked that the anæsthesia of the muscles, according to Dr. Reid, destroyed the surgeon's aid and guide. The reports of the manipulations in Europe are not in accordance with the method laid down by Dr. Reid.

Dr. POMFERT related a case recently under his observation, where the Reid method had failed. The patient had been crushed in a clay bank and suffered injury of the spine. The pulleys were applied, and the dislocation reduced. Why had the Reid method failed? Perhaps, because the pelvis was not fixed, because in a post-mortem examination that followed the next day, the pelvis was separated from the dorsum ilii, and fractured through the acetabulum. Hence it was movable, and perhaps demonstrates the necessity of the pelvis being fixed in the act of reduction by this method.

UMBILICAL SCIRRHUS.

ESTIMATE OF CHLOROFORM.

By Professor PARAVICCINI.

PROFESSOR PARAVICCINI, giving an account of the events at the Military Hospital at Milan during the late Italian war, after describing the benefit derived from the use of chloroform, thus sums up his opinion as to the propriety of its employment :---1. Considering the matter in a general way, the benefit of anæsthetics is too great for its employment to be proscribed, to the damage of mankind at large, for the sake of the prevention of some distant danger which may occur to an individual. 2. While it is certain that chloroform has given rise to some deaths, it is no less so that many other cases would never have recovered without its aid. 3. Prior to the introduction of this agent many pusillanimous patients preferred certain death to the pain of the Surgeon's knife. 4. The cases were by no means rare in which persons, persuaded at last to submit to operations, succumbed either during their performance, or a few hours afterwards, the moral effort and the physical sufferings exhausting their nervous power. 5. If we are to proscribe a means which, in the vast majority of cases, is of incontestible and immense utility, because in certain very rare instances it may prove fatal, we shall be led to the most ridiculous conclusions, first among which is the proscription of Medicine itself, and still more of Surgery. 6. A simple venesection, executed according to the rules of art, has given rise to fatal phlebitis much oftener than chloroform has led to death; but who is there with common sense that would think of passing a general incrimination and prohibition of it ?- Annali Omodei, Vol. clxxii. p. 196.

ON UMBILICAL SCIRRHUS.

By M. NELATON.

A woman, aged 60, recently entered M. Nélaton's Clinique, and furnished him with an opportunity of describing an affection which, though undescribed in books, it is of importance to recognize in practice. Having a tolerably healthy appearance, she presented in the umbilical region, opposite the naval itself, a small globular and pretty regular tumour, having a diameter of about 21 centimètres, and surrounded by a circular furrow. The skin covering the tumour was violaceous and adherent, but the parts beyond the furrow were quite healthy. M. Nélaton indicated that the tumour was not superficial, as on cursory examination it seemed to be,-for in all similar cases he had found a pedicle stretching more or less deeply inwards. Originating in the cicatrical tissue, it is usually propagated along the umbilical fibrous tissue to the peritoneum. just as though it were a nail implanted in the substance of the abdominal wall, its globular, external part representing the head, while the point stretches towards the peritoneum. These tumours are scirrhous in their nature, but their entire removal endangers the peritoneum. In some subjects this tumour assumes another disposition, the pedicle, having reached the inner side of the abdominal wall, expanding and invading the subperitoneal and peritoneal tissues. There is, therefore, in such an expansion at each extremity of the stalk of the tumour, a subcutaneous and a subperitoneal expansionthe shape of the whole resembling that of a shirt-stud, the contracted portion of which would correspond to the navel. At first M. Nélaton believed that the woman presented an example of this variety of the tumour, as a deep-seated induration was perceptible. A more detailed examination proved that this was due to a voluminous fibrous tumour occupying the fundus of the uterus, the existence of which the patient was not aware of. M. Nélaton determined that he would undertake no operation in this case. In the first place, the complete removal of the pedicle of these tumours, owing to their close connection with the peritoneum, is a hazardous procedure ; and in all former attempts at

VOL. II.

ablation he has had to make the excision of the tumour amid the cancerous tissue itself. Next, experience has taught him that the progress of this description of cancer is extremely slow, it being essentially chronic, while it exerts no contaminating influence upon the neighbouring parts or upon the general economy. Another practical observation upon abstaining from interference was made by M. Nélaton in relation to the uterine tumour. As long as the woman continued to menstruate she had very frequently suffered from hæmorrhages, but these had ceased since the menopausis had taken place. She was thus rid of that which constitutes the chief danger of these fibrous bodies. It is, then, of importance to bear in mind that the cessation of the menses is accompanied by the cessation of the hæmorrhage, and even of the pains symptomatic of the presence of fibrous tumours of the uterus; but then it is to be also remembered that the menopausis does not take place until a much later period than is the case in women in good health.—*Gazette des Hôpitaux*, 1860, No. 74.

LACERATION OF THE LUNG WITHOUT INJURY TO THE RIBS.

Dr. Comolli Giovanni relates the case of a lad, fifteen years of age, over whose chest the wheel of a carriage had passed without fracturing any of the ribs. He died on the tenth day of pneumonia, notwithstanding energetic antiphlogistic treatment. At the autopsy no fracture could be detected, but air escaped on opening the thorax, which contained also much fluid. The left lung, filling only a fifth of the cavity, adhered to the parietes, and a laceration was found at the anterior edge of the middle and upper lobes, accompanied by a loss of substance, as well as by an aperture in the pleura. The laceration was about an inch in diameter, and was surrounded by a fragile tissue, infiltrated with pus.—Annali Omodei, Vol. clxxi. p. 14.

CHLORATE OF POTASSA IN GONORRHŒA.

Dr Irwin, U. S. A., stationed at Fort Buchanan, says :

"It may not be amiss to place on record my testimony in favour of the use of chlorate of potash as a therapeutic agent, which I have constantly used during the last two years in the treatment of gonorrhœa, both in my public and private practice, with the most gratifying results. I have found it to be such an admirable remedy that I seldom resort to any other in the treatment of urethral inflammation. My method of using it is as follows: one drachm of the salt dissolved in eight ounces of water, of which an injection is given every hour for twelve hours at the end of which the discharge will have become changed and diminished, allowing the remedy to be gradually discontinued until the second or third day, when the disease will be generally found to have ceased. So efficacious has this remedy proved in my practice, that I seldom deem it necessary to give any other medicine, save a Seidlitz draught or a dose of Epsom salts.—Medical and Surgical Reporter.

OIL OF SABINE IN GONORRHEAL OPHTHALMIA.

As the result of its trial in sixteen cases, Dr. Lunda strongly recommends the application of the oil of Sabine to the conjunctival surface of the upper eyelid as the best means of removing the diseased condition of this part resulting from gonorrheal ophthalmia, the acute inflammation having subsided. It causes great smarting and hyperæmia, but these soon pass off, and the rapidity of the cure obtained is great.— *Wien Wochenschrift*, Nos. 30 and 31.

LIGATURE OF THE SAC FOR THE RELIEF OF UMBILICAL HERNIA.

Since the time Borelli of Turin, reported upon, and extolled this mode of treatment, in opposition to the views of Pott, Sabatier, Scarpa, Boyer, and other eminent surgeons, the Italian surgeons have pursued this practice. Dr. Giuseppe Giorcelli of Pontertura, has had recourse to this method with the most complete success in two cases, in which compression and tonics thoroughly failed. In general, surgeons have relied mainly on compression and tonics, and have usually succeeded; but it must be admitted, that cases occasionally arise, in which these means are insufficient, and it is then that Borelli's method should be adopted. The success which has attended the published cases, are a strong encouragement for the adoption of the method.

Dr. Giorcelli's first case was that of a young female child, of 7 months, who had previously had, several attacks of enteritis. The umbilical hernia was produced by the cries caused by the intense suffering of the infant. The hernia gradually increased in size, and finally attained the dimensions of $2\frac{1}{2}$ inches in length, by $1\frac{1}{20}$ in breadth. The umbilical cicatrix was in the centre of the tumour, and it was wide enough to admit the end of the little finger. The emaciation of the infant and the continual intestinal inflammation, rendered compression intolerable, and ligation was practised. The inflammation which succeeded was very trifling. A second ligation was practised four days afterwards, and the wound became completely cicatrized in about fifteen days. The health of the child gradually improved.

The second case was that of a robust boy of 3 years of age, who had umbilical hernia since the age of four months. Compression had been tried for five months unsuccessfully-the hernia increased, and was attended occasionally by suffering which compelled him to walk bent, with his hand pressed on the tumour, which finally became large, hard, and painful. At last there supervened symptoms of strangulation, vomiting, intense thirst, fever, &c. In this condition of matters, Dr. Giorcelli thought it his duty to have recourse to the ligature. The tightening of the thread caused immediate pain, but it shortly ceased, the child fell asleep, and when awakened from his sleep, he could scarcely be kept in his bed. He returned to his amusements, complaining only of a sensation of heat in the umbilicus, and bending himself to prevent the friction of his dress. On the sixth day, a second ligature was applied, and on the tenth day a poultice, after which the tumour fell off dry and hard, leaving behind a healthy looking wound. On the seventeenth day after the operation, the cicatrization was complete. On the thirty-fifth day the hernial opening was completely closed, and the cure perfect. In cases in which compression fails, Borelli's method of ligation should be practised.-Translated from Journal de Bourdeaux by Ed. B. A. J.

OSSIFICATION OF THE HUMORS OF THE EYE.

By G. CECCABINI, M. D., New York.

The pathological affection I am about to speak of, although not very rare, still deserves I think, to be reported on account of the conditions under which it was present. The case was as follows: A young girl, 16 years old, born at New Hamburg, Dutchess County, N. Y. when two years old fell down, having a pair of scissors in her hand, one of the blades of which entered the right eye, seriously wounding it. I do not know the extent of the lesion, or what portions of the eye were affected by the wound. All the information I could get from her parents merely went to show, that after the accident the eye became very red, very much inflamed; very painful; that this condition continued several months; and that when the inflammation subsided the eye had diminished in size.

The data lead me to the opinion that the blade of the scissors in penetrating the eye had passed through the membranes and the humors *en masse*, and that the case was one of atrophy of the eye, the result of intense inflammation. I then saw the young patient, and the following was the result of my examination :

The eye was of an irregular form, flat from before, behind and about half its normal size. The conjunctiva was healthy; the cornea opaque, flattened and contracted; the sclerotica, diminished in volume was hard to the touch; iris discolored; pupil obliterated. Pressure upon the eye by the finger caused much suffering. Exposure to cold air produced inflammation, in the atrophied eye, which also affected the healthy eye.

The design of the parents in consulting me was to prepare the orbit for the application of an artificial eye. Under the conditions which I have just related, it was impossible for me to employ the usual process, and I therefore intimated to the parents the necessity of extracting the atrophied eye, in order to save the sight of the healthy organ, and I promised at the same time to perform the operation in such a manner that the application of an artificial eye would be easier, and without disturbance.

The 10th October last, assisted by my friends Drs. Meier and Lalane, I operated upon the young patient. After having placed her under the influence of chloroform, I performed the operation in the following manner:

The patient was lying upon her back, her head resting upon a firm pillow. I separated the eyelids with the elevators to their full extent, on account of the depression of the globe in the orbit. I then pierced the cornea through and through, a half line from the sclerotica, by means of a curved lance-shaped needle, furnished with a thread. Difficulties were encountered in this first movement, from the resistance of the cornea. When the thread had been drawn through the cornea, I twisted the ends together with my fingers, and waited a few moments before commencing the process necessary for the removal of the cornea, so as to permit the aqueous tumour to discharge itself slowly through the lips of the small incision made by the needle. At the end of a minute I passed the point of the staphylatome through the periphery of the cornea, and carried the blade of the instrument horizontally to the opposite point; giving to the instrument a to-and-fro movement, I detached the cornea thoroughly.

Not a drop of the vitreous humor, nor of blood, escaped from the opening. A stylet introduced into the interior of the eye, in search of the crystalline lens, revealed to me the fact that the place of the fluids of the organ was occupied by a hard and round body. Trials made with forceps for extracting this morbid product failed. I then made an incision on each side of the sclerotica, of a line in length, a little above the direction of the rectus externus and internus muscles, and was enabled by these two little incisions to extract the pathological product. The hamorrhage, which was very slight, was soon arrested by compresses of cold water.

Half an hour after the operation the young patient complained of a very severe pain about the orbit of the eye, which yielded to a few drops of Magendie's solution of morphine. The following days there was slight fever, and considerable swelling of the eyelids. Compresses of cold water, renewed from time to time comprised the only local treatment, and the patient was put upon low diet.

The seventh day after the operation she no longer suffered, and I permitted her to rise, and remain sitting in her room. The ocular stump diminished with the progress of the cicatrization, and took on a spherical form perfectly fitted to receive the artificial eye, and give to it the different movements.

In speaking of this simple operation, it is not my intention to advance it as a new one. Far from that. My own idea has been to prove by the aid of another case, that we should hesitate to remove the entire eye in staphyloma of the iris, or of the cornea, and that the method of M. Bonnet, of Lyons, should be reserved for those cases in which the eye is affected with cancer, or other malignant disease.

The pathological specimen which I now show you is, in my opinion, very important. It consists of an ossific deposit found upon the eye of a young girl, 16 years old. Examples of this affection are reported by Scarpa, Morgagni, Morand, Haller, Wardrop, Rognetta, Panizza, Desmarres, Peltier, and Cloquet. Not one of those physicians has observed the same morbid product in early life; all their examples which have been reported were found in patients over forty years old.

The most important point in this case is to ascertain in which tissue this ossification has taken place. The piece measures four lines in diameter, transversely, and three lines in depth, being about the size of a small cherry.

My own microscopic examination has not permitted me to decide which tissue was the point of departure for this product; whether the lens, its capsule, the choroid coat, or the retina. In consulting different authors, I have not met with an analogous case. Peltier is the only writer, who reports a case which has any analogy to the one. I submit to you, and he says that the substance was the result of the ossification of the whole of the contents of the eye.—American Medical Monthl.

PHYSIOLOGY.

SECRETION OF MILK FROM THE AXILLA.

Instances of the secretion of milk by various surfaces of the body, such as from the umbilicus, etc., have been made a good deal of by some physiologists fond of generalizations, as evidence of original identity in type of all secreting organs. We cannot but entertain some question, however, as to the real nature of the supposed milk in the out-of-the-way localities named, except in those cases where the lacteal fluid has made its inconvenient appearance in the armpit, for the true connexion here is conceivable, and made out, we think, in the facts of the following case from the Dub. Med. Press. Nov. 7, 1860, related by Dr. C. J. Hare. Mrs. M. S-, æt. 37, presented herself with a small swelling under the right arm, which for some time past had given out a white, milky-looking discharge, presenting exactly the same appearance as the milk from the breasts. She had been confined of her seventh child, had suckled all her children, and at no period of her former lactations, or at any other time, had she observed a swelling in the axilla. It was on the night of her confinement that she first observed it, and, when first noticed, she described it as being of the size of half a walnut. It did not increase much in bulk, but became harder, and caused some pain as low down as the elbow. It was not until the end of a month that it discharged a little fluid, which was then of a decidedly milky appearance; and as she was engaged in her domestic avocations, enough generally escaped to moisten the linen every day since that, and sometimes even more. On examining the axilla, I found an irregularly ovoid prominence about as large as a filbert, with a moderately defined outline, somewhat blended with the loose cellular tissue of the axilla. Its substance was firm, but not hard or resisting, as an enlarged gland in that situation usually is; for by moderate pressure its shape could be readily altered, though it instantly resumed its original form on the pressure being removed. The skin over the swelling presented no redness or any difference from the rest of the axilla; there was no trace of a nipple; and so exceedingly minute was the aperture through which the fluid escaped, that it was impossible to say at what point it made its appearance, until the surface had been wiped quite dry, and a fresh portion had been forced out by pressure. The fluid had all the usual appearance of normal human breast-milk, being a thin, bluish-white liquid, rather sticky when rubbed between the fingers. A small quantity collected in a test tube was found after a few hours, to form on its surface a layer of cream. A drop of the fluid being, as soon as collected, placed under the microscope, it was found to be rich in the variously-sized oil globules of milk: nothing resembling a pus globule was detected. I exhibited a specimen of the milk to the Pathological Society, so late as Sept. 14th, when the condition of affairs was apparently exactly the same as in May, and microscopical examination gave exactly the same results as before. The only question which presents itself is as to the source of the secretion—whether the milk was secreted by a portion of mammary gland situated in the axilla, or was conveyed to that part in some unusual manner from the breast. It is possible to conceive that a communication might have become established between a portion of the breast and some of the lymphatics, and thus a little milk might be conveyed to a lymphatic gland in the axilla; that the gland enlarging had given rise to the swelling felt, and ultimately allowed the milk to escape as described. But all the evidence is in favor of the small mass in the axilla being really a portion of true mammary substance situated there. The physical characters presented by the swelling, the absence of hardness, the elasticity, etc., were not those of an enlarged lymphatic gland; nor is it probable that such a gland would have continued so absolutely stationary for so many months, or the skin above it so free from redness, so mobile, and in such a healthy condition; and it is to be remarked that the increased flow from the axilla took place at the same time that milk was being *drawn* from the breasts."

A case is also recorded by Dr. J. Harris, in the Savannah Jour. of Med. Oct., 1860, of a negro woman, who, after the birth of her third and fourth children, experienced large swellings in the axilla, which continued without interference during lactation. The same swellings occurred after the birth of her sixth child, when they were tapped, and a pint of fluid evacuated, which, under the microscope, showed milk globules, very characteristic colostrum corpuscles, and no pus globules; and chemical examination proved the existence of all the constituents of colostrum and milk. As the mammary gland is conglomerate, with its parts united by cellular tissue, it is readily conceivable that one of the divisions, through some original defect in the "constitution," has seceded into the axilla, and set up separate sovereignty, rather than that such cases are proofs of secretion being essentially the same process wherever it occurs, so that the stomach can easily become a urinary bladder, and the umbilicus flow with milk and butter.— Am. Med. Times.

PRODUCTION OF SUGAR WITH RELATION TO THE RESORPTION OF FAT AND TO ANIMAL HEAT.

BY W. H. THOMSON, M. D.

At the meeting of the French Academy, Nov. 9th, 1860, a paper on this subject was read by M. Colin, in which he maintains, 1st. That the resorption or combustion of fat, the production of sugar, and the maintenance of animal heat, at its normal standard, are processes intimately connected with each other, and mutually interdependent. 22. That abstinence cannot be borne long by lean animals, for a very rapid lowering of temperature takes place in them, coincident with an almost complete disappearance of sugar in the liver, the blood, the lymph, and other fluids, which normally contain it. 3d. That in fat, or moderately fat, individuals, the tolerance of abstinence, other things being equal, is exactly proportioned to the quantity of fatty material stored in the tissues; so long as the animal has fat, life is maintained, the sugar is renewed in the liver and the nutritive fluids, and the system's temperature is not notably lowered. 4th. During hybernation the production of sugar preserves an activity parallel with the resorption of fat. 7th. In animals deprived of nourishment, the liver experiences the most notable changes, extending towards complete atrophy, the cells losing their fat, which is replaced by sugar.—(Gaz. des Hôpitaux, Nov. 13th, 1860.)

We do not think that fat is only fuel, but, on the contrary, that it is as necessary and as much a primary element in nutrition as albumen itself; for it is to be found in all growing cells, or parts, as in the embryo, which are undergoing rapid development. The results from experiments of depriving animals of the cleaginous elements of food are evidence of this, while the beneficial effects of oils in the chief diseases of nutrition seem to be owing to their acting as restoratives by supplying an element lacking in the process of tissue-making. Lewes goes so far as to suggest that the main office of the spermatozoa is the requisite supply they afford to the ova of fat to start them in their course of evolutions! These diverse facts seem to indicate that fat exists in the economy under two widely different conditions, with very important distinctions between them in properties, uses, and destiny, the first belonging to the ascending scale of elements, as it enters largely into the composition of the most elaborate and highest products—e.g. nerve vesicle or spermatozoon; while the second is a retrograde body, or even a degeneration from albumen (Addison), and capable of nothing better than combustion. One of the conclusions from this view would be, that according as an artificial oil approaches in its characters the one or the other fat in the system, will it be of use in the treatment of the disease of nutrition.—Am. Med. Times.

MATERIA MEDICA.

EMULSION OF COAL TAR.

Dr. Démeaux of Puy l'Eveque, has addressed a note to the Academy of Sciences of Paris, on the emulsion of coal tar as a medicinal and hygienic application.

The facility of its preparation, its cheapness, the quantity of coal tar which it contains, and the great solubility of the preparation in water, recommend it highly. It is thus prepared :---

N. Coal Tar.

Soap.

Alcohol, of each equal weights.

Heat in a sand bath until perfect solution is effected.

On cooling, a perfect soap is formed, very soluble in water, and forming with it a stable emulsion.

This preparation is susceptible of several useful applications either in hospitals, or dissecting rooms, or as a disinfectant and decorant.

Coal tar mixed with soap and alcohol, in soluble proportions, becomes one of the most useful articles of the Materia Medica. The mixture can be used in different degrees of solution. Its great solubility in hot or cold water prevents it staining the skin, cloths, or the clothes.

It may be employed in form of baths, and will be found to produce the best effects in some skin diseases. It may be also used as a lotion or fomentation, as a modifier of deranged cutaneous action, or as a topical disinfectant. It is serviceable also in destroying the odours of fætid excretions or dejections.—*Translated and abridged from Journal de Bourdeaux*, by Ed. B. A. J.

LAVENDER VINEGAR.

Lavender flowers					
Dilute acetic acid	۳ • • • • • • • • • • • • • • • • • •		• • • •	Ój	
Macerate for two weeks, stra	in and filter.— The Dr	uggist.			,

CARTWRIGHT	S DENTIFRICE		 · • •
Precipitated Chalk	, <u>199</u> 80 27 - 27	•••••	 ç €(+,) + j.
Powdered Orris root	**************************************	1919) - 194 1919 - 194	 j.
Powdered Castile soap	****		 83.
MixIbid.	~ 4	· · · .	

TO COVER PILLS WITH SUGAR.

"The pills are put into a hemispherical metallic pan, which is slightly warmed, and a small quantity of a solution of one part of gum; two parts of water are added, so as to moisten the surface of the pills; some powdered sugar is then sprinkled over them, and by moving the pan they are thus covered with a coating of sugar. They are subsequently placed on a sieve, and exposed in a warm room till they become dry. If a thicker coating is required, the process is repeated.—*Chemist and Druggist*.

WAFER ENVELOPES.

The wafer is a preparation rarely used in this country, but much employed abroad for enveloping doses of medicine, especially in the form of pewder. We have met with no recipe for this preparation in any of the works on pharmacy, and have heretofore obtained only those imported from France.

In the absence of any directions in the books, we have adopted the following process with complete success:--

Two sad-irons are warmed to a temperature at which they may be touched without burning the fingers, not so hot as to occasion a globule of water to run off when thrown on the level surface. One of the irons is maintained at a slightly increased temperature by inverting it over the gas furnace; a very little oil of almonds or butter, or a fragment of cotton cloth, is now rubbed over the surface of each iron. A portion of the finest wheaten flour, mixed with water into a smooth batter or thin paste is now poured on the inverted iron, and the other iron is immediately pressed firmly upon it. After a minute or two the wafer is removed and trimmed into shape. The French wafers are cut into circular discs of about 3½ inches diameter, which appears to be done by the use of annular steel punches. We think the square wafer possesses some advantage for enveloping powders and pills, by folding the corners into the center. In using the wafer, it is to be moistened by dipping into a tumbler of water, laid on the palm of the hand, the powder or pill dropped in the centre, the edges folded over it, when it may be swallowed like an oyster, without tasting its contents.—*Chemist and Druggist*.

SUPPOSITORIES.

• ±1.

"Machine-made Suppositories," of elegant quality and finish, made of cocoa butter, with a variety of medicinal ingredients, have lately been introduced in this city (Philadelphia,) and have led to enquiries among our pharmaceutists as to the best arrangements for producing them.

To what has been already published by A. B. Taylor, in the American Journal of Pharmacy, and in Parrish's work, we may add a few practical suggestions, the result of recent experience in this manipulation. The consistence of cocca butter alone is not well adapted to the preparation of an elegant and firm suppository. It is a good basis when combined with a harder and rather less fusible material. We have found wax, in the proportion of one part to five of the cocca butter, to answer a very good purpose.

A piece of very stout glazed paper is cut up into oblong pieces, 2½ inches long by 1½ wide, and rolled into a cone, which should be 1½ inches long and half an inch at the base; the free end of the paper is secured by a tip of sealing wax, and at the extreme point of the cone an eighth of an inch is clipped off, and the opening sealed up. The object is next to arrange these cones with the open end in a proper position to be filled with ingredients; this is conveniently done in a shallow vessel of flaxseed—sand is objectionable from its liability, if accidentally thrown into the cone, to produce irritation when the suppository is applied. The butter of cocca and wax should be melted by a gentle heat, and then the active ingredients added and constantly stirred until it begins to chill, then poured into the paper cones and set aside to harden. The paper should not be removed from the suppository until it has become thoroughly hardened, and by this means it will acquire a clear, polished surface. The time required to prepare a dozen'or more suppositories is from half an hour to an hour; the physician should be reminded in advance that they cannot be furnished without some little delay.—*Chemist and Druggist*.

CHEMISTRY.

PHOSPHORUS IN THE AIR.—M. Burral has communicated to the Academy of Sciences at Paris, an important discovery he has made, viz., that rain-water contains a notable quantity of phosphoric acid, probably in the form of phosphate of lime carried by the wind as dust, or a phosphoretted hydrogen from the putrefaction of animal matters. He computes that 440 gallons of rain-water contain from 13 to 15 grains of phosphorus, and that the atmosphere delivers annually to the soil 2,400 grains per acre.

A New METAL.—Von Kobell announces the discovery of a new metallic acid in various minerals—tantalite, euxenite, pyrochlore, &c., to which he has given the name of *dianic* acid—the metal being called *dianium*. It belongs to the same group as *tantalic* and *niobic* acids; Terreil has also rendered it probable that *vanadium* is not so rare a metal as is generally supposed, as he has confirmed its presence in many clays.

NEW FUSIBLE ALLOY.—Dr. Wood has patented an alloy composed of *cadmium*, one to two parts; *bismuth*, seven to eight parts; *tin*, two parts; *lead*, four parts, which fuses at more than 40° F. lower than *Rose's* or *Newton's* fusible metal, viz., between 150° and 160° F.; he draws particular attention to the singular property of *cadmium* in promoting the fusibility of certain metals, which must soon find some useful applications.

PRODUCTION OF INTENSE COLD.—Messieurs Loir and Drion have described a method by which many of the gases may be liquified in considerable quantities. It depends on the cold produced by the evaporation of volatile liquids; e. g. by blowing a current of dry air through several tubes into about seven ounces of *ether*, a temperature of -34° F. can be obtained, by which sulphurous acid gas may be liquified; if, now, this liquid sulphurous acid be substituted for ether, a minimum temperature of -50° F. may be obtained; and when liquid ammonia is used as the cooling agent, the thermometer sinks to—87 F. By this temperature, the authors are able to liquify carbonic acid gas under the atmospheric pressure.

IODINE IN RAIN-WATER.—M. Chatin informs the Academy of Sciences of Paris that he has found *iodine* in the rain-water of Paris, and also in that of Pisa, Florence, and Lucia; and that although he had not succeeded in obtaining that element in its natural state from these waters, he had extracted it from two aquatic plants, viz., the *nasturtium* officinale and the ceratophyllum demersum, a fact which showed that the water in which they grew must have contained some.

PREPARATION OF CARBONIC ACID ON THE LARGE SCALE.—Messieurs Meschelynck and Lionnet have devised the following very simple and cheap method :—refractory earthen retorts, filled with chalk, are heated to dull redness in a reverberatory furnace; currents of steam are then passed through the retorts, when large quantities of carbonic acid are immediately evolved.—Chemist and Druggist.

SILVERING GLASS AND PORCELAIN.

Mr. E. R. H. Unger, in a letter to the editor of the *Chemical News*, states :—In making various experiments the other day with nitrate of silver, I happened to add to a small quantity of a strong solution of that compound an equally small quantity of a thick alcoholic solution of tannin. The quantity, though small, was exposed with a comparatively large surface to the atmosphere, by making use of a flat-bottomed evaporating dish.

About an hour afterwards I happened to direct my attention to this dish; and found to my great surprise that the surface in the dish was coated with a thin, brilliant, uniform layer of metallic silver. I directly repeated the experiment, and met with the same result again and again. I next proceeded to evaporate the liquid to dryness by placing the dish on the surface of warm sand. As soon as it was completely dry, the coating was found to be so fast on the porcelain that it required the point of a sharp penknife to scrape it off.

From these experiments I would venture to conclude that porcelain, and any other stony and smooth surface, might be plated with silver, and if so it might be useful in many of the arts.

I would add, in conclusion, that I also succeeded in producing a metallic brilliant coating from a saturated solution of sulphate of copper by the same solution of tannin. May I ask of you the favour of granting these lines a space in your valuable columns, so as to induce practical chemists and others further to investigate the subject.— *Pharmaceutical Journal, July.*

MIDWIFERY.

AFFECTIONS OF THE FEMALE BREAST.

For abrasions of the nipple, M. Legroux recommends the following :
В. Cerat. Alb ξ ij.
Ol. Amyg. Dulc 3 j.
Mel. Despumat 3 ss. M.
Dissolve with gentle heat, and add
Bals. Canad 3 ijss.
Apply each time of nursing. For ulcerations, he advises:
B. Sodæ Subborat 3 ss.
Glycerin 3 ij.
Aq. Rosarf Z jss. M.
Use as a wasch to the part. Also:
B. Sodæ Subborat 3 ij.
Cretæ Præp 3 ss
Spt. Vinif z iij.
Aq. Rosarf z iij.
Mix and dissolve. This may be used when the ulcer becomes indolent.
-Jour. of Mat. Med.

RUPTURE OF THE UTERUS DURING LABOR.

(Read before the Norfolk District Medical Society January, 1861, and communicated for the Boston Medical and Surgical Journal.)

BY J. H. WARREN. M. D., DORCHESTER.

Mrs. Colley, aged about forty years, Irish, of sanguine temperament, was attacked, in her second labour, at 2, A. M., Dec. 7th, 1860, with very severe pains which continued until the 9th, when I was called very early in the morning Upon inquiry, I found that the rupture of the membranes had taken place soon after the commencement of the labour pains. The quantity of liquor amnil was very large, judging by the amount upon the bed clothing and floor. Upon examination, I found a natural head presentation. About 10 A. M., as the pains diminished and the patient was inclined to doze, I left her to make other calls. At 3, P. M., I again visited her, and found her in very severe pain, and was told that she vomited just before I came in. The pains continued to increase in severity up to 6, P. M., without any advancement of the child, and on the access of a very violent pain, accompanied with vomiting, she said she felt something "give way." The pains greatly diminished, and gradually ceased; but the vomiting Dr. Cushing was called. We decided to turn and deliver by the feet, which was readily done. Owing to a malformation of the pelvis, we had recourse to craniotomy and delivery was accomplished but not until the size of the head was diminished to that of the fist.

The antero-posterior diameter of the pelvis was $2\frac{1}{2}$ inches; lateral transverse, $3\frac{2}{4}$ inches. This malformation of the pelvis was still further augmented by the linea ileopectinea in transversing the pubes forming a very shary prominence. After delivery, the patient seemed much exhausted, with nausea and vomiting of a substance like dark coffee-grounds. To produce uterine contraction, the hand was introduced, and a rent was found sufficient to allow the passage of the hand through the opening, so that the fingers were very easily felt through the abdominal parietes. The rupture was in the anterior portion of the uterine neck and os and rather obliquely upon the left side.

Treatment.—Sol. sulph. morphia was ordered to be taken freely. When we left the patient the pulse was about 50 per minute, with much exhaustion and cold extremities, and little hopes were entertained of her recovery.

Dec. 10.—I found the pulse 70: the countenance had a cadaverous expression. The abdomen was as large as before the delivery. She continued to vomit a black fluid. The morphia was continued and the following external application was made to the bowels; B. Tr. opii, $\frac{2}{5}$ ij; Tr. saponis c., $\frac{2}{5}$ i; ol. terebinth., $\frac{2}{5}$ ij; ol. camphorat., $\frac{2}{5}$ i; aquæ Cologni, $\frac{2}{5}$ iv. M.

11th.—Countenance much flushed; pulse 98. Acute metritis has set in, with its customary amount of fever. A hard mass, giving a gelatinous impression to the hand, as of coagulated blood was felt in the epigastric region. Vomiting of the same dark fluid. intermixed with purulent-looking bodies.

12th.—She still has pain in uterus and abdomen ; pulse 110, thread-like, or the peculiar pulse which generally accompanies peritonitis. Vomiting continues. The bowels move freely—the evacuations of a dark bilious character.

13th.—Pulse 90; fever and inflammation somewhat abated in severity. Same treatment continued. Has vomited twice since my visit yesterday.

14th.—Pulse 88, more regular; tongue still coated with a light brown coat. Ordered castor oil, one ounce.

15th.—Pulse 85; less fever and inflammation; the hard mass in the epigastric region diminishing; has slight discharges from the vagina, containing some pus. Oil operated.

15th—She is in a moist prespiration; pulse 80. Continue the bandage, with a napkin wet in external application.

17th.—Continues to improve; pulse 73, natural. Asks for something to eat; toastwater and gruel given.

19th.-Much improved ; sits up ten minutes in bed.

23d .- Sits up thirty minutes in bed. Takes beaf-tea, toasted bread and tea.

28th .- Up in chair. Good appetite ; takes broths and porter or ale.

30th .- Feels well, she says, except a slight cough.

Thirteen months previous to this confinement, I attended her with the first child, which was delivered by turning and craniotomy. This case will illustrate how much nature is capable of doing in the process of recovery, with the aid of little medicine. Accidents of this kind seldom do well, but cases are on record of patients recovering from them and subsequently giving birth to living children; they are very rare how-ever.—Boston Med. Jour.

MEDICAL JURISPRUDENCE.

ATTEMPT AT SUICIDE BY SWALLOWING CHLOROFORM.

By C. T. Turnell, M. D. New York.

1. B. B. . .

JULIA WILSON, aged eighteen, attempted suicide on Tuesday evening, December 4, 1860, by swallowing one ounce of chloroform. She sent the servant girl to the nearest

apothecary, with directions to procure one ounce of the material. No questions were asked by the dispenser, and a vial marked "chloroform," was handed by him to the purchaser. On returning home, the girl gave the vial to Miss W., who closed the parlor door, and then swallowed the contents of the bottle. She walked the length of the parlor twice, placed the empty phial on the mantel-piece, and then fell heavily on the floor. The noise occasioned by the fall soon brought several members of the family to her assistance. I was sent for immediately, and arrived at the house about twenty minutes after the drug had been taken. She was at this time lying on the sofa, complaining of a burning sensation at the stomach. The pulse was feeble and quick, the countenance pallid, and the extremities cold. She refused to take any medicine, but, with the assistance of those around her. I succeeded in forcing down the throat one ounce of powdered ipecac, mixed with a little warm water. In a few minutes she commenced vomiting, the odor of chloroform being distinctly detected in the materials ejected from the stomach. She, however, became gradually comatose, with stortorous breathing, pulse feeble and rapid, pupils contracted and insensible to light. The finger rubbed over the conjunctiva gave no evidence of sensibility. It was now forty minutes from the time that the poison had been taken. Mustard applications were freely applied to the extremities, cold water dashed on the face, and flagellation kept up at short intervals. She remained in this condition about half an hour, when consciousness became gradually restored. As this took place, she passed through the different stages usually observed in persons who take chloroform by inhalation. At 11 o'clock P.M., just three hours from the time the anæsthetic was taken, she was in her usual health, having entirely recovered from its effects. Taylor, in his Medical Jurisprudence, relates a case where one drachm taken into the stomach, caused death. Another, where four ounces were taken, and the man recovered in five days. In the case of Miss W., the quantity taken, it will be recollected, was one ounce. She supposed that in order to cause death, the chloroform must be taken into the stomach, like laudanum.—Am. Med. Times.

MISCELLANEOUS.

ON ATMOSPHERIC CORPUSCLES.

BY M. F. POUCHET.

I HAVE thought for a long time that the study of the bodies conveyed by the air into the respiratory passages of animals would offer interesting physiological results, and throw considerable light upon the subject of atmospheric micrography. Nor have I been deceived in this. In fact, in almost every class of animals, the examination of the respiratory apparatus clearly reveals the various modifications of the medium inhabited by them. But it seemed to me that the most important notions, on this subject would be presented in those animals in which the air penetrates most deeply into the organism. Birds, consequently, have become the objects of particular attention, seeing that in them the air, after traversing the lungs, pervades not only the different cavities of the trunk, but reaches also the interior of the osseous system. In these animals I have devoted particular attention to the examination of the bones which contain most air, and chiefly to the humerus. And as in these situations the corpuscles, once introduced, escape only with great difficulty, owing to the immobility of the walls and the irregularities of their anfractuosities, we there find ample vestiges of all the matters conveyed by the air into the respiratory organs.

The examination of animals living in midst of towns, and in the interior of our dwellings, will excite surprise by the enormous quantity of starch-grains contained in their respiratory organs. In birds, corpuscles of this nature will be discovered in

172

great abundance, even in the interior of the bones, and together with them will be observed, in profusion, particles of sooty matter, and filaments derived from the various fabrics of which our clothes are made. But the further the creature lives from towns, the more remote and wild its habitation, the more rare also become, all these corpuscles in the inspired air. Under these circumstances, scarcely any traces of the sort can be observed. Frequently even not a single particle of the kind in question will be observed, in animals or birds living altogether, in the midst of forests; in these animals, on the other hand, the whole respiratory apparatus is filled with abundant débris of plants,—epidermis, chlorophyll, &c.

The amylaceous particles disseminated either in the atmosphere or in the interior of animals present two conditions—they are either of the normal state or cooked. In the majority of cases, the starch is found in the former condition; but nevertheless, we frequently meet, in the atmosphere, and in all the cavities of animals, into which the air enters, with starch-grains either simply swelled or entirely burst, by the action of heat. The latter certainly proceed only from minute particles of bread carried about by the movements of the atmosphere. The panified starch is readily recognized by its enormous size and ruptured condition, and by the action of iodine, which does not produce in it the same bright colour as it does in ordinary starch-grains.

The birds which inhabit the interior or live in the close vicinity of towns do not obtain this abundance of amylaceous particles simply from the air they inspire; they derive besides this source, an abundant supply from the foliage of the trees amidst which they pass part of their lives. In fact, on examining the surface of the leaves of trees in the neighbourhood of cities, when they have not been washed for some days by rain, abundance of specimens of every sort of corpuscles carried in the atmosphere will be found on them, and, universally, a considerable quantity of starch-grains, together with sooty and silicious particles. On a single leaf of a horse-chesnut growing in the garden of Ecole de Médicine at Rouen, I have counted about thirty grains of wheat-starch either in the natural or panified condition.

The search for atmospheric corpuscles, in the respiratory passages is easily made. It consists simply in the passing of a stream of water through these passages, and the collection and examination of the fluid. For this purpose I inject the trachea by means of a syringe, and when the lungs are distended with water, make incisions into them, and carefully collect all the fluid that escapes, repeating the injection several times.

In birds I inject the trachea, and when the water has traversed the lungs and filled all the air-cavities of the body, I open the thoracic cavity, and collect the liquid, which escapes in a jet. In all the experiments the fluid is received in conical vessels with a narrow bottom, and when sufficient time has elapsed, to allow all the corpuscles to subside these are removed by means of a very slender pipette, and submitted to microscopic examination. The atmospheric corpuscles may be collected from the hollow bones by the same mode of procedure. To effect this, I insert the tube of a syringe into the orifice by which the air penetrates into the cavity, and then make a section of the bone at the opposite end. The water injected, at first gently and afterwards with great force, in order to carry along with it the smallest corpuscles, is received in champagne-glasses and examined. Studied in this way, the respiratory organs afford a faithfuj idea of the life of the animals. Not only does the examination reveal to us what sites of habitation the animals prefer, and their kind of food, but even, when they are domesticated, the profession followed by their owners.

I have found in the air passages of man the same atmospheric corpuscles as are met with in animals. In the bodies of two persons, who died in one of our hospitals, a man and a woman, whose lungs I injected, I found a large quantity of wheat-starch, either normal or panified; particles of silex and of glass; fragments of dye wood of a beautiful red colour; fragments of dress, lastly, a larva of a microscopic arachnidean, still living.

It was rational to conclude that, at certain times the expectoration should contain cor-

puscles, similar to those I have described in the lungs. And this is actually the case; I have here met with normal and panified starch-grains, particles of soot, the débris of plants, filaments of wool or cotton of various colours, particles of silex, &c.

A fowl, brought up in a paved court at Rouen, afforded in its respiratory sacculi an enormous quantity of wheat starch, normal and panified. Besides which they contained numerous filaments of cotton and of linen, and an abundance of sooty particles; there were but very few silicious grains, a circumstance probably owing to the -habitation in which the bird had existed. The humerus of this bird also contained much starch, particles of soot, a considerable number of cotton and linen filaments and even some grains of potato-starch and of glass.

Thinking that in animals living in localities where starchy matters formed an object of trade, the abundance of amylaceous particles would be still greater, I procured two young chickens which had been kept for two months by a baker. My surmise was not unfounded. The whole of the respiratory organs in these chickens, notwithstanding their youth, contained an amount of starch surpassing that which I had found in the fowl.

A pigeon taken from a dovecot in the middle of the town presented, in its respiratory passages, besides particles of silex and soot, the débris of stuffs of various colours and grains of potato-starch, together with considerable amount of wheat-starch of all sizes, and above all, an enormous quantity of lentil-starch. Even the *humeri* contained so much of the latter that from eight to ten grains were found in every case. I was unable to explain the presence of such abundance of lentil starch in a bird which always swallows seed without bruising it. But I very soon discovered the source on examining the floor of the dovecot. This was completely covered with the dung of the pigeons, containing an enormous quantity of this sort of starch, which had passed through the intestines unaltered. In flying about in their dwelling, the birds diffused this in the air, and it thus gained an entrance into their respiratory organs.

The examination of a bird which is ordinarily kept only in wealthy establishments, affords another proof of what has been said. In fact, the numerous vestiges of magnificent stuffs exhibited in its respiratoy organs manifestly recalled the luxurious dresses or works of those amongst whom it had lived. This bird was a peacock. Unfortunately I had at my disposal only its *humeri*; but having injected them, I was really struck with the abundance of, and the splendid colours presented by, all the fragments of stuffs contained in these bones. I found besides a considerable quantity of wheatstarch, numerous filaments of wool and of silk of the most magnificent blue, of a beautiful rose, and bright green.

The lungs of a mouse also afforded starch, silex, and soot, but in far less quantity and in far smaller fragments, than in birds.

But if our attention be directed to wild birds, residing at a distance from cities we observe a totally different thing.

A grey falcon (*Falco cinéreus*, Mont.)killed in a large forest two leagues from any habitation, did not afford the least trace of starch, either in its air-passages or within the bones. There were met with only a few particles of soot and silex; and not a single filament of any kind of tissue was recognized. But, on the contrary, all the air-passages were filled with an abundance of the detritus of plants and débris of insects.

In another wild bird (*Picus viridis*, Linn.) I found in the air-passages only an insignificant quantity of starch, and very little soot and silex.

In some frogs taken in the basins of the Jardin des Plantes, at Rouen, which is situated close to numerous factories, and in a populous quarter, the lungs have always af forded a notable quantity of starch an abundance of particles of charcoal and coal-soot to_ gether with numerous fragments of silex and vegitable debris. Besides these, filaments of cotton, raw or manufactured, were extremely abundant. The respiratory organs of these animals also contained Naviculæ, diatoms, papilionaceous scales, the stems of mucedinous fungi, and fragments of confervæ. If, again, we explore the respiratory passages of some animals, which although living in a state of liberty, are in the habit of frequenting our dwellings we find in them evident vestiges of their double existence, wild and domestic.

A jackdaw afforded a striking instance of this. Its respiratory organs contained a very considerable quantity of wheat-starch; what was very remarkable, an enormous number of sooty particles—a circumstance which is accounted for by the almost habitual abode of this bird on the lofty buildings of towns. There were found also, in its airsacs numerous filaments of cotton and abundant debris of plants.

In all my observations, which, without exaggeration, might be counted by hundreds, I have never met with either a single spore or a single ovum of a microzoon, nor with any encysted animalcule. Moreover, in all these minute researches I have always been able to detect starch-grains wherever they existed. Is it possible that the atmospheric spores and ova alone should have escaped detection? The ova of certain Paramæcia, being, .0420 mm. in diameter, and consequently surpassing considerably in bulk the largest grains of wheat starch, whose diameter does not exceed .0336 mm., if they really existed in the atmosphere in sufficient quantity to explain the generation of Infusoria whose apparition astonishes and stupifies us, should have been immediately discovered in the same situations, and far more easily, even, than the starch-grains, seeing that they ought to exist in much greater numbers. To a negation, of this kind, in the actual state of science, but one answer is possible—show these ova.—Comptes Rendues, 1, 1860.—Quarterly Journal of Microscopical Science.

ARSENIC IN A DRINKING WATER.

BY ARTHUR H. CHURCH, F. C. S.

From the northern and western sides of Black Combe, a mountaiu in the southern part of Cumberland, situated near the sea, numerous streams or *becks* originate; I believe that one only of these exhibits any marked peculiarity. Whitbeck, such is the name of this stream, is fed by several small springs, and it was from the source of the most southerly of these where it rises from the ground, and at an elevation of about 900 feet from the sea, that I obtained a specimen of the water for examination. On the 29th of June in the present year, the water at the time of collection, had a temperature of 8° 5' C., the air being 10° 6'. The reaction of the water, as it issues from the earth, was faintly but unmistakeably alkaline : on testing the water after ebullition the effect was more decided. The water from many other sources in the neighbourhood of Whitbeck, where decomposing granite is of common occurrence, has an alkaline reaction. A large and deep pool in the course of Whitbeck towards the sea shows the colour of the writer to be a rich clear greenish blue.

The water, on examination, gave distinct indications of the presence of arsenic. This element, which here probably exists as an alkaline arsenite, occurs not as a mere trace, but in determinable quantity. I have not yet ascertained the amount present, but hope to do so shortly, when I have obtained specimens, of the water collected at different seasons of the year. I have satisfied myself, however, that in some seasons of the year the quantity present approaches a good fraction of a grain of arsenic (metallic) in each gallon of water. At the same time I am desirous of furnishing complete analysis of some interesting minerals obtained from the vicinity of the spring. For on ascending the gulley, a few yards above the source of Whitbeck, we arrive at the entrance to a mine, which some years ago, was worked for cobalt and copper, and is now again being searched. Here I obtained very rich and massive silver-white arsenical cobalt ore, and also copper pyrites. The neighbourhood for some miles is in fact, rich in minerals. Dr. Fidler, writes: "Almost immediately behind Whitehaven Parsonage a sulphur vein crops out, a continuation of the same vein that is being worked at Uuder Hill, but whether it exists in any quantity I do not know. There she three or four copper veins in a ravine behind Whitehaven Mill, one of which has been tried some twelve or fifteen fathoms below the surface." Baryta, also, has been found, I am told, above the source of Whitbeck, in the mine above mentioned.

It will be seen that the arsenic in the water of Whitbeck is thus most probably derived from the veins of arsenical cobalt ore through which it percolates.

The arsenical water is habitually used for every purpose by the inhabitants of the little village of Whitbeck, and, as far as I can learn with beneficial rather than injurious results. But it is remarkable that Whitbeck, though in every respect suitable for trout, is the only stream is the neighbourhood from which that fish is absent; eels, however, have been found in it. Ducks will not live if confined to this arsenical water. When the railway was being carried past Whitbeck, the first use of water quickly produced the usual marked effect on the throats both of the men and horses employed on the works. The soreness of the mouth from which they at first suffered, soon, however disappeared, and in the horses gave place to that sleekness of coat assigned as one of the effects produced by the administration of arsenic. It is a question how far the rosy looks of the Whitbeck children, and the old age which a large proportion of the inhabitants of the village attain, are to be attributed to the arsenic present in the water they drink.— *Chemical News, London.*

NOTE ON SOME VEGETABLE COLOURING MATTERS.

BY M. FILHOL.

Chemists and botanists have repeatedly investigated the nature of the matters which give to the corollas of flowers their brilliant and varied tints. Robert Boyle, Humboldt, Marquart, Berzelius, Macaire, Pruisep, Schübler and Franck, De Candolle, M. Caventou, Robiquet and Chevreuil, M. Hope, M. Hugo, Mohl, Mulder, M. Morot, MM. Frèmy, and Cloez, have successively published on this subject works of the highest interest.

It would take too long to recall here the part which each of the above-named distinguished men has taken in the development of this department of science. I shall content, myself by saying, that notwithstanding the high value, of the researches which they have severally made, some points in the history of vegetable colouring matters still remain obscure and demand new investigations. I will; in a very short summary, make known the facts which I have observed, and in order to render them clearer, I will devote a special article, to each kind of colouring matter.

White Flowers.—There are no flowers of a pure white existing. The celebrated painter Redout, noticed this a long time since. Flowers which appear to us white have nearly always a light-yellow, rose-coloured or blue tint. All these flowers become of a fine yellow when dipped in ammonia. Acids restore their primitive colour. Ether removes from white flowers a substance which possesses the following properties :--

It is solid; of a clear yellow colour; soluble in water, in alcohol, and in ether; it is uncrystallizable; pure chlorohydric acid communicates a pure deep yellow very vivid colour to it, which disappears upon the addition of water. Alkalies also colour it yellow. This matter furnishes very beautiful lake colours with metallic oxides, and can be used for dyeing fabrics of a bright and very durable yellow. Its presence in flowers has been noticed by several authors, and especially by M. Hope, who has given it the name of *xanthogene*. No one had isolated it and pointed out its remarkable analogy, with *luteoline*.

Red, Rose-coloured, and Blue Flowers.—All chemists agree in admitting that red, rose-coloured, or blue flowers owe their colour to the same proximate principle, which will be blue in flowers with a neutral juice, and red, or rose-coloured in those where the juice is acid. This proximate principle has received several names, which I shall not repeat here. MM. Frémy, and Cloez, have called it *cyanine*. Cyanine is solid, uncrystallizable, and analogous to an attractive matter; it is soluble in water and in alcohol and insoluble in ether; alkalies communicate to it a green tint. According to M. Morot, it contains nitrogen, as one of its constituents.

The result of my researches is, that cyanine becomes blue, and not green, under the action of alkalies, and that the green tint which we observe when we treat a red or blue flower by a salt with an alkaline reaction is owing to the xanthogene, which is found with cyanine, in nearly all flowers becoming yellow at the moment that the latter becomes blue.

The mixture of yellow and blue forms the green. Cyanine does not contain nitrogen as supposed by M. Morot; it is identical with the matter which M. Glénard bas described under the name of *ænocyanine* and which he had obtained from wine. I shall show further on that it exists with other colouring matters which are found both in the flowers and fruits.

Some red flowers do not contain, xanthogene, thus these become of a pure blue or beautiful violet colour in contact with ammonia. I shall quote, among others, those of the red corn poppy.

Cyanine often exists in the young shoots of plants, and it is there sometimes accompanied by matters which are more especially found in flowers. It is thus that the young shoots of the roses of Bengal, which are coloured red, are odoriferous and sugary like the flowers themselves. The sugar and the volatile oil which gives the odour, disappear along with the cyanine in the progress of vegetation.

Some plants with red or rose-coloured flowers do not contain cyanine. I will cite the aloes, the flowers of which contain a colouring matter very analogous to *carthamine* and perhaps identical with it.

Yellow Flowers.—Chemists who have investigated yellow flowers have discovered in them two distinct substances, which they have designated under the respective names of xanthine and xantheme. These have been examined by MM. Frémy and Cloez; I shall refer to their Memoir for details as to their properties, and I shall only describe here my own observations. The result of my researches is, that xanthine assumes under the influence of concentrated chlorohydric acid a green colour resembling that of chlorophyll. This colour changes to a nearly pure blue, when we add to the solution some drops of nitric acid. When this liquor is agitated with ether, we divide it into two parts—one a yellow matter soluble in ether, and another of a pure blue colour which remains in the alcoholic liquor.

Xanthine is found abundantly in some fruits, and especially in those of the Cucurbitaceous family.

Some yellow flowers contain a colouring principle which is neither xanthine nor xantheme. This is found in a pure state in the flowers of *Crocus luteus*, we find it also in the stigmas of the officinal saffron, where it is associated with some other colouring matters. It consists also in the stigmas of *Crocus multifidus*; lastly I have found it at the base of the ovary of the plant known under the name of *Fabina*. I shall designate it *crocoxanthine*, a name which recalls its existence in all the species of the genus Crocus.

This matter is solid, uncrystallizable of a beautiful golden yellow colour; it is neither altered by acids nor bases, by which it is distinguished from xanthine, xantheme, and xanthogene. Crocoxanthine is soluble in water and alcohol, and insoluble in ether; it produces with some metallic oxides beautiful lake colours; it can be fixed upon fabrics; its dyeing power is remarkable.

Green colouring matter of Leaves.—If we compare the properties of xanthine which I have noticed above along with those that M. Frémy has recently attributed to chlorophyll, we are struck with the extreme analogy which these two colouring matters present, and are hence led to think that the blue colouring matter which M. Frémy believes he has isolated from chlorophyll does not pre-exist there, but that it has been produced by the alteration of the primitive colouring matter. The following facts show that such is probable :---

When we add to an alcoholic solution of chlorophyll some drops of chlorohydric acid, it loses its beautiful green colour and becomes yellowish brown. If we then add to it an excess of acid, the green colour reappears but with a blue tint different from the primitive colour. If we add to the liquid some drops of nitric acid it becomes of a nearly pure blue colour. The same changes take place with it, therefore, as with xanthine.

Preservation of Fresh Flowers.—We may preserve many flowers for a long time in a fresh state by enclosing them in sealed tubes. At the end of some days all the oxygen of the air confined in the tube will have disappeared and become replaced by carbonic acid.

If we introduce into the tubes a little quick lime, it removes from the flowers some of their humidity, which facilitates their preservation. Lime also takes up the carbonic acid, and the plant becomes placed in pure nitrogen.

All flowers are not alike preserved by this process; yellow flowers are those which are altered the least.

It would be very easy for botanists to forward thus fresh flowers upon which they verify characters difficult to observe upon dried specimens.

I have placed before the Academy some flowers which have been preserved several months and of which the colours are not sensibly altered.—Jour. de Phar. et deChimie.

INSECTICIDES.

I have directed chamomile powder—that is to say, the flowers carefully dried in an oven, then powdered, to be dusted on the parts, in four cases, two of them children, infested by lice. I directed brown soap and warm water, liberally employed, twice daily, then the chamomile powder, previously confined in a muslin bag, to be well dusted in. The result in every case, and within a very brief period, was the destruction of these hideous parasites.—Dr. McCormack, Dublin Med. Press.

Discussion on safety bottles .- At the Pharmaceutical Society, December 2nd 1860, Mr. Schweitzer read a paper in which he described the narrow-necked bottles which have been previously mentioned in the Lancet, introduced for prevention of accidental An improved model was described, intended especially for the use of poisoning. chemists and surgeons who dispensed their own medicines. A lively discussion ensued. Mr. Squire thought there would be some difficulty as to determining which were poisons, and observed that an inconvenient number of bottles would be required. Mr. Waugh was in favour of a distinct white and black label. He said that if it were compulsory to put poisons in such bottles, the public might come to think that any fluid which ran out freely, whiskey for instance, might be drunk ad libitum. If not compulsory, it would be long in reaching distant parts, so that nurses in going down from London might make mistakes from this very cause. Again nurses were very often very tired at night, and occasionally resorted to artificial stimulants; and he suspected that Mrs. Gamp would hardly know whether she was pouring from a square bottle or a round one. Considering how fond the British public were of taking physic in all shapes and of all kinds, it was to him a standing miracle that so few accidents took place, the danger was therefore a bugbear, a myth. Mr. Squire said there was no recognised maximum dose for any thing, and with many things it would be a matter of option whether it were placed in a poison bottle or not. Really, if people, in dealing with medicines would not give themselves the trouble of reading the lable they ought to be poisoned. He believed that to trust to the shape of the bottle was to trust to a broken staff that could afford no support or protection. Mr. Hazelden said that there could be no doubt as to the utility of the small bottles for Laudanum, which, if sent out in that way, could never be taken in a hurry, and swallowed for some thing else. Mr. Squire suggested that danger would arise should the bottle be broken and the Laudanum be put in a common bottle .-- Lancet, Jan. 19, 1861.

British American Journal.

THE

MONTREAL, APRIL, 1861.

AN ACT TO LEGALIZE THE PRACTICE OF IMPOSTURE, ALIAS ECLECTICISM.

After the legalization of the practice of Homcopathy in the Upper Province some three or four years ago, the Profession neither of that Province, nor of the Lower, nor the reflecting portions of the community of either, need be astonished at the results, which at the time, we privately (for we occupied no Editorial chair then,) predicted, would at some future day flow from it. We regarded the legalization of Homcopathy, one of the greatest delusions of our day, as but the entrance of the wedge. Another blow is now struck upon it to force it deeper. Following hard upon the footsteps of one variety of quackery,-whose professors however, we will admit, are, in the majority of instances so far as we have seen, gentlemen, but whose profession we sincerely believe is in opposition to their judgment, which is made to succumb to the influence of the "all mighty dollar,"-we have now before us a Bill to legalize the practice of a set of the vilest impostors who act in the name of medicine, who, unable to live by ordinary industrial pursuits, have adopted this plan of earning a livelihood, whose wits, utterly incompetent to any thing of an honest or honourable nature, are only fitted to enable their owners to profit by and live upon their pretensions. Ignorant and artful as was the founder of their sect, Thompson, his successors with greater artifice have repudiated the name of Thompsonianism in which at one time they delighted to indulge, and although we, who are the true eclectics (appropriating the good wherever it may be found) choose not to designate ourselves by that title of a sect of ancient physicians, of which we are the true disciples, they, ignorant even of the meaning of the term, accepting every thing which has descended to us of the value of vegetable remedies, and ignoring every thing of value, which has come to us through the same channel as regards mineral ones, a testimony, which if good in the one case, must be surely of equal importance in the other, yet designate themselves by that title. Phædrus' fable of the jackdaw pluming himself in pavonian robes, is a burlesque compared with the pre-

tensions of these men. They pretend to use no mineral remedies i There is no greater falsehood than this! Their Lobelia owes no little of its emetic power to Tartar Emetic; and some years ago we were assured by one of the most respec-table druggists in this city, that his best customer for Tartar Emetic at that time, was a Thompsonian or Eclectic. And the reason was obvious, its solubility and tastelessness obviated its detection. It made in fact the Lobelia the more effective. On one occasion, however, this same Thompsonian objected to the price demanded for the Tartar Emetic, contrasting it at the time with what he had paid for a like article, or something selling by that name in the United States, the dose of which was a tea spoonful, and which he said he had repeatedly administered. Nevertheless, he purchased several pounds of the antimonial salt, and told the druggist that he would employ it as he had been accustomed to do. That druggist was informed the following year by the same party, that "his Tartar emetic was almighty strong," as it nearly killed the first man to whom he Such is a specimen of the men whose interests Mr. A. P. McDonald, gave it. the member for Middlesex, W.R., has taken under protection. Perhaps his election might have been due to their votes; if so, he was late in exhibiting his gratitude, as this is the fourth Session of the Parliament; but better late than never, says the accommodating member, as another election is at hand. And is it because that gentleman's election, or that of any other ambitious individual, is to be secured at the hands of such people, or by means of their influence, that the lives of the inhabitants of these fine Provinces are to be tampered with, and placed at the disposal of men educated in the United States, where colleges, if they may be called such, and in which they pretend to receive an education, spring up like mushrooms! Is it for such a purpose or end as this, that the Legislature has subsidized its medical schools, and colleges, and insisted upon a severe preparatory course of study extending over a period of four years, that it will permit a parcel of impostors to permeate the land, whose course of pretended education is measured by two years, and whose lectures are a sham? We can scarcely believe it, but after what has passed, we cannot tell what may not occur again. It behooves the friends of the profession in the two Houses, to be on the alert. We can do nothing but trust the truest interests of the inhabitants of these Provinces in their hands, and if we call attention to the facts of the case presented for their consideration, we have done all that lies in our power.

We had intended to have occupied this space with an article on the infant mortality of this city. This however we are compelled to postpone, because awaiting certain Statistics of the city bearing on the point.

THE DAILY BRITISH WHIG.

The Editor of this Journal still insists upon the superiority of the Examinations at Apothecaries' Hall, London. As he considers our own opinion as to their character a quarter of a century ago valueless, he will admit that whatever, they were then, they should have improved by this time. Yet the "Chemist and Druggist" of January, 1861, page 3, thus says, "The superficial examinations passed at Apothecaries' Hall by Medical practitioners who wish to dispense medicines, are so notoriously loose and unsatisfactory, that," &c., &c. We must say that in spite of the Whig's assertions to the contrary, we regret to perceive that they have not improved. Perhaps this testimony will be satisfactory to the Editor and settle the business. The cases cited by the Editor of the Whig have nothing to do with the matter. There is nothing more common than to find candidates received by one Board, rejected by another. Sir Astley Cooper was rejected by the University of Oxford; but even at the time alluded to by us, the Examinations at the College of Surgeons were not remarkable for their strictness or severity. But be these things as they may, we cannot perceive what bearing they have on the case of Mr. Hoare which originally elicited our remarks; and while recommending the Editor of the Chemist and Druggist, who ought to know the exact present value of these examinations, and who thus strongly confirms our position, to the tender mercies of the Editor of the Whig, we dismiss the subject.

DR. TUMBLETY.

This impostor it appears is now in New York, where he has carried on his depredations. The wonder to us is, that with all his exposures, he succeeds in getting dupes. Not satisfied with duping what he calls, "his patients," (and patient they must be) he has been endeavouring to defraud one of the New York Banks. Having got him, we hope the authorities of that city will not let him off. What further has transpired between the Mayors of New York and St. John, N. B., beyond the following we have been unable to learn. The Colonial Empire, a paper published at St. John, N. B., on the 8th of March, has the following:

"His Worship the Mayor has received a letter from the Chief of Police at New York, intimating that a charge is now pending there against Dr. Tumblety, for attempting to defraud one of the City Banks; and it is asked, that a certified copy of the verdict for murder, found against him here by the Coroner's Inquest, may be forwarded with any other information respecting Dr. Tumblety, who, it is intimated, will be handed over to the authorities, if wanted.

THE MONTREAL DISPENSARY.

Ten years have now clapsed since this institution was organized, and we confess to the great amount of good which it has achieved. At a meeting of the committee of management, held at its rooms on the 19th January, a report was adopted, from which we glean the following interesting facts:—It was first established in the year 1843 by Drs. Arnoldi, Badgley, McNider, Munro, Sutherland and Nelson. After continuing for about two years in active operation, a deficiency of funds caused a temporary suspension. Upon the outbreak of the Asiatic Cholera in 1849, it was re-opened under the professional charge of Drs. Wright, Gibb, Peltier, Boyer, Howard, and Fenwick; since which period it has been in active operation, distributing its benefits on the poor in all quarters of the city, even visiting the sick poor in their own homes. Under the prudent and economical system with which it has been conducted, it has become an institution of the city, and we are happy in being enabled to chronicle its progress. We notice that the committee feel desirous of extending its benefits by establishing an infirmary for children, with a branch for treating the diseases of women. Nothing whatever can be urged why these extensions of this charity should not be carried out. The former especially, is much needed in this city, as the Montreal General Hospital admits no children under the age of six years, and we believe the Hotel Dieu Hospital acts upon the same rule. We trust that the Legislature will accord the prayer of the committee for an addition to their annual grant, for the purpose of enabling them to effect their benevolent design, based as it is, upon the fact, that last year, out of 1063 cases treated at the dispensary, nearly one-half were children under 14 years of age; and we can very easily imagine that many cases of infantile disease must have presented themselves, which would have been better served by an indoor hospital regimen and treatment, than by the fitful visits made by mothers carrying their sick children to the dispensary rooms. We subjoin the annual list of patients treated since the year 1850, with a report of the patients treated, and their diseases, tabulated, during the year 1861.

Patients treated since the year 1850.

I attents treated since the year 1650.	
1st May, 1850, to 1st May, 1851 46	68
lst " 1851, " 1st " 1852 42	78
lst " 1852, " lst " 1853 58	87
lst "1853, "1st "1854	53
lst " 1854, " lst " 1855 3	
lst " 1855, " lst " 1856 30	64
lst " 1856, " lst " 1857 41	
lst " 1857, " lst " 1858 43	
8 months ending 1st Jan. 1859 39	
lst Jan. 1859, to 1st " 1860 8'	70
lst " 1860, " 1st " 1861	63
DETAILED REPORT showing the number and nature of Diseases treated at the Montre	al
Dispensary during the year 1860:	
Number admitted during the year	63
Males	
Females	
10	63
Number visited at their residences	
Do sent to Hospital	
Do treated at Dispensary	
Cured 833	
Relieved 226	
Died 4	
10	63
Number of children vaccinated during the year	
Medical cases	
Surgical diseases and accidents 268	
10)63
	_
Diseases of lungs and heart 245	
Do abdominal viscera 256	
Do brain and nervous system 43	
Do skin 123	
Do peculiar to females	
Venereal diseases 32	
Surgical accidents and diseases 246	
Other diseases not included in the above	
Totai10)63

With reg	and to	ages, there were—2 years old and under 124
Between	the ag	ges of 2 and 7 181
Do	do	7 and 14 126
Do	do	14 and 20 157
Do	do	20 and 40 266
Do	do ،	40 and 60 165
And ove	r	50 44
		Total1063
		G. E. FENWICK, M. D.,
		Secretary, Medical Faculty.

THE CENSUS OF MONTREAL BY ORIGINS AND RELIGIONS.

The census of Montreal, within the narrow city limits, we have already stated at 91,006: and adding the population of the continuation of the suburbs outside the boundary, 101,430. A defect in the making out of the census forms, in accordance with the terms of the statute, has been remedied, at the request of the Government, by the Census Commissioners of Montreal, and we are now able to give the population of the city by origins. The following is a summary statement;—

French origin, Lower Canada42,	886
From France	184
Total French	
91,	006

The preponderance of population is therefore on the side of the English speaking inhabitants by 4,866. We count the Germans of which there are not many, 363 only, and the "other countries" among the English speaking inhabitants as distinguished from the French. The population by origins is made up in this way;—

England 4,394	Upper Canada 1,208
Scotland 3,235	France 184
Ireland14,469	Germany 1,706
British origin, Lower Canada . 21,647	United States 1,100
French do Lower Canada42,886	Other countries 793
Other origins, " 121	

91,706

The population by Religions shows the Roman Catholics to have a large majority over all other religions put together. The Church of England comes next in point of numbers.

Roman Catholics	
	91,006

The details run in this way ;—
Roman Catholics
Church of England10,072
Church of Scotland 3,848
Free Church of Scotland 2,196
United Presbyterians 1,740
American Presbyterians 422
Wesleyan Methodists 3,131
Episcopal Methodists 318
New Connection Methodists 245

-Montreal Gazette.

Jews	398
Baptists	624
Congregalionalists or Indepen-	
dents	969
Unitarians	468
Lutherans	304
Other Religions	120
No Religion	

91,006

COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA.

We have been requested to announce that the semi-annual meeting of the Board of Governors, for license, &c., will be held on Tuesday the 14th of May, at 10 a.m., at the Mcchanic's Institute, in this city. Members of the Board will govern themselves accordingly.

Candidates are required to send their testimonials at least ten days before the meeting to Dr. Peltier, Secretary of the College, complying at the same time with the By-laws in this behalf.

CONVOCATION OF McGILL COLLEGE.

The day for holding the annual convocation of the University, has we believe not yet been determined upon. In all probability it will be during the second week, and very probably on Friday 10th May, as it has been generally held on the Friday preceding the meeting of the College of Physicians and Surgeons.

THE MEDICAL SCHOOLS OF CANADA.

We were unable to give in January last the number of Medical students attending at Queen's and Victoria College, we now supply that omission.

ATLAS TO FRERICHS' PATHOLOGICAL ANATOMY OF THE DISEASES OF THE LIVER.

We have received the following circular, which we republish for the benefit of the members of the New Sydenham Society. We are astonished at the cheapness with which a work, such as this must be, can be issued. We doubt not that every member will subscribe to the Atlas, and trust that this additional advantage secured to members will influence others to associate themselves in this praiseworthy undertaking. Dr. Fenwick, Craig street, is the Honorary Sec. for the Canadas, to whom gentlemen desirous of becoming members should apply.

TO THE MEMBERS OF THE "NEW SYDENHAM SOCIETY."-Messrs. Vieweg and son of Brunswick, Proprietor of the Atlas to Frerichs' Pathological Anatomy of the Diseases of the Liver, have been induced to issue, for the Benefit of the Members of the "New Sydenham Society," as an almost indispensable complement to the "Clinical Treatise on Diseases of the Liver," by Dr. Frerichs, an English Edition of the Atlas, under the following title:-*Atlas of Pathological Anatomy*, Illustrative of a Clinical Treatise on Diseases of the Liver. By Dr. F. T. Frerichs. Translated and edited by Dr. Charles Murchison."

Part I. Containing Twelve carefully coloured engraved Plates, in royal 4to.

Price to Members of the "New Sydenham Society," upon direct application to the English publishers. 12s. 6d. post Free.

No application through the Trade can be supplied at this reduction.

PHYSICIAN TO THE QUEEN OF GREAT BRITAIN.

Dr. William Jenner has been appointed physician to the Queen, in place of Dr. Baly, who was recently killed by a railway accident. Dr. Jenner is mostly known in this country as the author of some monographs on subjects connected with practical medicine.—Dublin Med. Times,

THE VACCINATION ACT.

We are happy to announce that this Bill, whose provisions will be found on page 185, vol. I, has passed its second reading without material amendment, if any indeed has been effected upon it. Its operation, however, is still restricted to the chief towns of the Province, the country districts having been unprovided for. This is certainly to be regretted, as vaccination is on the whole less practised in the country places than in the cities, and it is well known to prevail occasionally alarmingly thoughout whole districts. The Act, however, so far as it goes, is a good one, and we are thankful for it. Originating as it did in the Legislative Council, we have learned, since the preceding remarks were written, that it has passed that body, and been sent to the Legislative Assembly, where we hope it will meet with equal success.

The Act for preventing infection from bodies of persons dying from infectious diseases in Upper Canada, has been reintroduced this Session, with every probability of its becoming Law.

Nothing has been done as yet in regard to the Apothecaries' Bill, and the Adulteration of Food Bill. These two are apparently shelved in the meanwhile. The Session is expected to be a short one, and will in all probability have terminated before another number of this Journal sees the light.

HONORARY APPOINTMENTS.

We are exceedingly pleased to be enabled to announce the two following Honorary appointments :---

During the month of February last, Wm. Marsden, M. D., of Quebec, was elected an Honorary Fellow of the Medico-Chirurgical College of New York. This appointment is a marked honor, as by the rules of the College, the number of Foreign Fellows is restricted to twenty.

And at a meeting during the same month, W. Fraser, M. D., Professor of Institutes of Medicine, McGill College, Montreal, was elected an Honorary Member of the Medical Society of the State of New York.

We consider these two appointments but a just recognition of the professional qualifications of these gentlemen.

TORONTO MEDICO-CHIRURGICAL SOCIETY.

The second meeting of the Toronto Medico-Chirurgical Society, was held in their rooms, in the *Temperance Hall*, on Tuesday, 12th March.

The President took the Chair.

After the ordinary business matter of the Society was completed, Dr. C. B. Hall read a paper on the "Chemical Treatment of Disease." This was followed by a lively discussion on the various points put forward by the learned essayist, which lasted till the meeting broke up.

QUACKERY ENCOURAGED IN WATERLOO, COUNTY.

(To the Editor of the British American Journal.)

SIR,-Through the kindness of my friend, Otto Klotz, Esq., the committing magistrate, I have been furnished with an outline of the proceedings in a case

that came off in our County Court last month, and as it may be interesting to the readers of the Journal, I place it at your disposal, prefacing it with a fuller explanation, to give you an idea of the kind of persons who are encouraged to practice medicine in this county. Some time about the first of last October there came to this village a German, innocent of a knowledge of the merest elements of a common school education, by the name of Hessel, who called himself a German physician and professed to be able to cure "all the ills that flesh is heir to." He soon had quite a practice among the Dutch farmers, who mostly compose the yeomanry in this (Waterloo) township, as he went around among them, asking for cases and promising a sure cure in every case and "no cure, no pay."

His practice this winter, however, was getting "small by degrees and beautifully less" until about the first of February, when he was applied to by a married women (pregnant) who wanted, as she said, "something for the piles." On being made aware of her condition, he assured her she had nothing to fear; she took the medicine and immediately aborted.

This coming under the observation of my neighbour, Dr. Koetsch, also a German, but holding a provincial license, he at once had him arrested, not (as I would have supposed) for malpractice, but for practising physic without a licence.

While before the magistrate, Hessel stated that before coming here he had. practised a length of time in Lockport without being troubled and that "he supposed he could do so in Preston or any other place belonging to the States.

He was committed to the county jail at Berlin to await his trial at the County Court, but was subsequently bailed out, and continued to attend one or two patients until the day of trial, which came off on the 12th of March, before his honour, Judge Miller.

During the trial, it was most distinctly proven by two of his patients that Hessel had demanded and received payment for medical treatment from each of them; and from one of them he had demanded more, but was refused because he did not, according to agreement, first effect a cure. And, although the charge was so distinctly proven, the jury returned a verdict of *not guilty*. But this did not much surprise those who were present, and witnessed the almost perfect indifference with which the case was treated by the prosecuting attorney on the one hand, and the rabid and uncourteous address of the defendant's counsel on the other. And even the presiding judge himself seemed to have a leaning towards the defendant, which was afterwards explained by his stating, that he considered the statute (under which Hessel was arraigned) *inhuman*, *unjust*, and ought to be repealed.

Judge Miller, with many others, does not seem to understand that it is the *people* and not the profession that require protection from heartless quackery; but I cannot here do better than introduce the following from the inaugral address of Dr. Bulkley, the new president of the New York County Medical Society:

"But is it so? Do we require the strong arm of the law to protect us? Which is the greater sufferer by this removal of all legal restraints from the practise of medicine, and surgery, the profession o: the public? Does not the public stand more in need of this protection than the profession? and are not many of the evils inflicted upon the public the indirect result of the indiscriminate use of dangerous weapons by those who have not the skill to use them? Where do these very public bodies, which would thus break down all distinctions between the educated and the ignorant in our profession, where do they look in times of danger for counsel, and upon whom do they call for advice and aid in their public institutions for the relief of the sick? Not to the ignorant pretender; not to those who use roots and herbs without fee or reward, whose claims for confidence they have sanctioned by their short-sighted legislation, but upon those whom they know to be qualified, both by education and experience, for the important trusts which they wish to commit to them. Let us then rather pity than blame this delusion, which leads those who are constituted our legislators to act thus blindly, and rob their constituents of the only protection they have against the ignorance and rapacity of pretenders; and let us, by increasing the facilities for education, as well as by a more diligent use of those with which we are already favoured, prove ourselves above the necessity of legal protection; and by our devotion to our cherished pursuits and our deep sense of the obligations imposed upon us by a higher than human law, show our fellow-citizens the true bearing of the question, and by this best of all influences, lead them to honor and protect the profession, as the best and surest way of honoring themselves and protecting the lives and pockets of those for whom they are called to legislate. Yours most respectfully,

Preston, Waterloo County, April 9th, 1861.

A. M. ROSEBRUGH, M. D.

IN THE COURT OF GENERAL QUARTER SESSION FOR THE COUNTY OF WATERLOO. 14TH MARCH, 1861.

The Queen vs. Frederick Hessel.

Practising physic for hire, gain, or hope of reward, without license or authority. Consolidated Statutes for U. C. cap. 40.

VERDICT-NOT GUILTY.

The defendant having been committed for trial in February last, on the affidavit of several witnesses, for having practised physic, and for having demanded and received payment for the same, was subsequently bailed and released from his imprisonment, and upon arraignment in Court, pleaded "Not guilty."

The County Attorney as prosecutor for the Queen.

J. W. Hancock for the defendant.

Upon examination of four witnesses it was proved :---

By 1st witness. That defendant had undertaken to cure her, and was to be paid for it in washing; defendant had given medicines, and witness had paid him in washing, but was not cured. By 2nd witness. The first testimony was corroborated by the second witness, the husband of the former witness, who further stated, that soon after the medicine had been used by his wife, she (being enceinte) had lost a foetus of about two months old, and that defendant upon being asked by said husband whether the medicine given by defendant would not operate injuriously upon witness' wife, on account of her pregnancy, had replied that the medicine would not injure her. By 3rd witness. That defendant had engaged to cure him, had given him medicine, had demanded payment, had received four dollars in part payment, had demanded more money, had been refused further payment because he had not effected a cure. By 4th witness. That witness was afflicted with the asthma, that defendent had undertaken to cure witness, that if defendant did not cure him he would have no pay. That defendant had asked witness for some money, that witness gave him twenty dollars, that defendant promised to return the money, that he had returned one dollar, that defendant had hired witness' horse and conveyance at different times, that defendant had not paid witness any money for such hire.

For the defendant it was proved by one of defendant's sureties, that defendant had attended witness' wife for several months, and had not received anything for it. And by another witness it was proved that his wife had been cured by defendant of a cancer (?) in the face; the patient having been for some time under medical treatment in the Toronto Hospital, without success.

Mr. Hancock in addressing the jury on behalf of the defendant, expressed himself very strongly against the statute under which the defendant had been 'rought before the court, denouncing it as a most inhuman Act, which forbids a man to even sell the smallest quantity of herbs or other medicines, in the expectation of receiving payment for the same, that Act forbidding men that were not licensed or otherwise authorized to practise physic, to do a humane act, an act of kindness whereby the life of their fellow creatures might be saved, and for which they expected to be remunerated. Mr. Hancock stated that the hope of reward was the very essence of our Christian faith, and that this Act therefore, was in direct opposition to our faith. Mr. Hancock spoke in most disrespectful terms of the medical profession, he stated that these men were men licensed to kill. He represented the Medical Board as a farce, and gave an instance of a person in a printing establishment who during the short space of several months studying in the evenings, after having been engaged in a printing office for ten hours daily, had nevertheless acquired sufficient knowledge in that short space of time to go before the Board for examination, and that he had received a certificate, and eventually a License from the Governor; that he, Mr. Hancock, would be willing to be sworn as to these facts. Mr. Hancock also stated a case of his own, that while in England, where such a law as the one referred to did not exist, but that persons practising without a license could not recover in court payment for services rendered, which was all the punishment they could be made to suffer, he had been ill for a long time, that a woman had once said he would soon be buried, that he only weighed about 98 pounds while standing 5 feet 9 inches in his stockings, that he had heard of a person whom the people called Doctor Cane (or some such name), and whom the medical profession called Old Cane, that said doctor was said to be a clever man for curing chronic diseases, that he, Mr. Hancock, applied to him and was cured by his medicines.

Mr. Hancock wound up in laudation of such men as the defendant, and appealed to the consciences of the jurymen on behalf of the defendant.

The County Attorney, during the address of Mr. Hancock, had absented himself from the court, and when the Judge of the County Court, who presided at the Sessions, enquired for him, he was not to be found.

His Honour then commenced his charge to the jury, stating the nature of the charge, reading the law on the subject and the evidence given; he stated that according to his opinion, the defendant having received four dollars for practising physic, the case was proved against him, but that he would leave it to the jury to say whether defendant was guilty or not guilty.

Shortly before the Judge had concluded his charge, the County Attorney returned and made his appearance in court.

The jury retired, and after half an hour's consultation, returned with a verdict of not guilty.

(This is Law and Justice with a vengeance, and proves the farce of Jury Law.) Mundus vult dicipi, ergo dicipiotur.

BOOKS, &c., RECEIVED.

GENERAL REPORT OF THE COMMISSIONERS OF PUBLIC WORKS, for the year ending 31st December, 1860. Printed by order of the Legislative Assembly; Thompson, Hunter, & Co., St. Ursule Street. 8vo, pamphlet pp. 84.

RESEARCHES UPON THE VENOM OF THE RATTLE SNAKE, with an investigation of the Anatomy and Physiology of the organs concerned, by S. Weir Mitchell, M. D., Lecturer

on Physiology in the Philadelphia Medical Association. Washington City. Published by the Smithsonian Institution. 4to. pp. 145. ON CANADIAN CAVERNS, read before the British Association of Science at Aberdeen, 16th September, 1859, by G. D. Gibb, M. D., London, 1861. Pamp. pp. 29.

ON THE STRUCTURE AND DEVELOPMENT OF BOTRYDIUM GRANULATUM, by George Lawson, Ph. D. Prof. Chem. and Natural History, Queen's College, Kingston. Pamph.

EDITORIAL SUMMARY.

Science at the bottom of the Sea .-- Dr. Wallick, who accompanied the recent expedition to survey the North Atlantic Telegraph Road between Great Britain and America, has established some curious but not surprising zoological facts. At the depth of two miles, where the pressure was calculated to amount to one ton and a half per square inch, and where it can hardly be conceived that the attenuated rays of struggling light could scarcely penetrate, he not only discovered the existence of minute infusorial foraminiferæ of the simplest organization, but he also obtained from a sounding 1200 fathoms deep, a number of star fishes (genus ophiocoma) adhering to the lowest fifty fathoms of the deep sea line, which must have resided on the bottom for a few minutes so as to allow these star fishes time to attach themselves to the rope. It is therefore established "that in these regions of watery desert and everlasting darkness, there exists a highly organized species of radiate animal, living, entwining, and flourishing, with its red and light pink tints, as clear and brilliant as its congeners which dwell in shallow and comparatively sunshiny waters." The curious inference follows, that if these animals of early organization and type now exist there, there may also exist others of a higher organization, and that these sub-aqueous regions, could they be well and adequately explored, would furnish an evidence that they are now undergoing those singular changes which have probably, millions of years ago, fitted our present dry land for the aptitudes of terrene life. One thing is very certain, that Dr. Wallich's discoveries have awakened curious speculations, and are capable of engendering curious thoughts as regards the future of our present earthy crust.

Diseased meat.—Notwithstanding a recent conviction in London for selling diseased meat to the inhabitants of the metropolis, the practice is still persevered in. Five rotten sheep were lately seized in one salesman's shop, so wasted that they did not weigh respectively more than from 15 to 20 lbs. each, less than a fourth of their ordinary weight. Mr. Firman, the defendant, was styled "a respectable salesman," but was nevertheless fined in the sum of £10. It was alleged in defence that the frozen condition in which the mutton was bought, prevented the recognition of its unsoundness. We scarcely think that this practice has crept into our markets yet. But if our meat is not impure, what other article of pure food do we get. It is a pity that the Bill for the prevention of the sophistication of articles of diet did not pass the last session of Parliament. We trust that some member may take it up at the ensuing.

Heroism of British Medical Officers.—Guthrie during the Peninsular War shewed his men how to put their backs to their waggons, and defend themselves against French cavalry. Many other members of our profession have shown great military capabilities on emergency, and amongst them Dr. Campbell, resident in the Tea district of Dasjeeling, who has been carrying on war with a very inadequate force against a neighbouring freebooter, the Rajah of Sikkim. The Doctor marched at the head of his force, handled his men carefully, saved them when in difficulty, and though he lost a gun, lost no honour, and added 500 square miles to British Territory. Of course as he is only a Doctor, he will see others rewarded for his work.—Medical Times.

Ship surgeons and ship owners.—In 1857, a medical officer of H. M. service went out to India in charge of troops in the ship Nimrod, owned by Messrs. Allan & Sons of Leaden Hall street, London. The proprietors of the vessel had the right of taking out cabin passengers, and they advertised in the *Times*, that the ship would carry. "an experienced Surgeon." No other Surgeon having come on board, the medical officer in question, for whose passage a sum of £95 had been paid, served notice in writing on one of the owners, and personally, in presence of a witness, on the captain, as the ship was on the eve of sailing, to the effect that he would not attend gratuitously on the passengers and crew. No notice was taken of this, and the vessel proceeded to sea. On arrival at Calcutta, the Surgeon applied to the Captain, and also to the agents of the ship for payment of £6 per month, for his attendance on the Captain himself, as as well as on the passengers and crew, but his claim was unceremoniously refused. An application to the Messrs. Allan themselves, was equally unsuccessful. At length the medical officer came home from India, and on the Messrs. Allan still refusing to recognise his claim, it was placed in the hands of an Attorney, the result of which was that they had to pay the debt and all the costs incurred. This case is recorded to make medical officers generally aware of their rights ; their services being too often unceremoniously filehed from them under like circumstances.—Lancet.

Right of Physicians to Recover fees.—It was formerly held that physicians, practising purely as such, could not recover fees in a Court of Justice. This is now altered, as the new Medical Act of England gives them the power, as was lately proved in Liverpool in the case of Gray vs. Robinson, in which the plaintiff, a practising physician, recovered an account of £15 for professional services.

A centenarian.—There lately died at Lancaster, Glengary, on the 27th January, Mary , widow of the late Ewen Roy McDonald, aged 100 years and fifty-three days. This venerable woman emigrated to Canada in the year 1786, from Knoidart, in the North of Scotland, and has lived on the lot on which she died for the past 70 years. Her memory of early events was most remarkable, and continued unimpaired until a short time before her death. She leaves behind her, in Glengary, but two or three others, who were near her own age, of all the 500 souls who came in the ship McDonald, in that year, to Quebec.

Exhibitions of strength.—Dr. Winship, the celebrated Massachusetts althlete, who was asserted to be the strongest man in the world, and lately lectured in this city, giving at the same time exhibitions of his powers, has met a superior in the person of one William Thompson, who is connected with the Chicago Gymnasium. A test of strength was lately made in that city at a gymnastic tournament, at which Dr. Winship performed his great muscular feat of lifting 9 kegs of nails weighing 1000 pounds, and raising with the aid of harness on his shoulders 1517 pounds. He was succeeded by Thompson, who, commencing with the last lift of the doctor, then went on adding other weights, and lifting with harness on his shoulders and hips, until the numbers stood successively 1536, 1636, 1736, 1836, 1936, 2036, and 2136 pounds. He also experimented with dumb bells weighing 100 and 105 pounds. Another competing gymnast, named Curtis "pushed" first 130 pounds, and then 150 pounds in each hand with the pulley, and lying down upon his back, put up 110 pounds in each hand.

Handsome Fee.- A London physician recently received a fee of £5,000.

Gas and Oil.—The cheapness of gas as compared with other modes of procuring artificial light, may be seen from the following table :—It must be borne in mind that this table is made for the English market, showing as it does, at what a low rate gas canbe manufactured, and still pay fair dividends. According to this table, gas is afforded at the low sum of one dollar per thousand cubic feet in the city, and one dollar and twenty-five cents in the suburbs. Gas from cannel coal being much better than that made from ordinary coal, containing, as it does, more body, a higher rate is charged for the gas. The price received for this quality of gas is one dollar and fifty cents, or six English shillings. The machinery for the manufacturing gas in England is far superior to any in this country, and they also make a saving of nearly twenty per cent. on their method of washing or purifying the gas. This table has been computed with great care, merely altering the prices of gas to the rate as afforded at the present time :—

BIRTHS, MARRIAGES, AND DEATHS.

COMPARATIVE COST OF LIGHT, FROM CANDLES, LAMP AND GAS.

	Quar of ca	ntity : ndles	and	l pri d oil	сө s.	Quant gas fo At 5s.	r an e	qual	prices (light. per	oť
			s.	d.	c. ft.	, 1	,000	1,0	00	
Tallow candles, (dip.)	lb.	1	0	6	21	0	1‡	0	1	
" " (moulds.)		1	0	8	21	0	1‡	0	1	
Composition, "	ù	1	1	- 0	25	0	11	0	1‡	
Wax candles, "	"	1	2	4	25	0	11	9	1‡	
Solar and pale seal oil,	gall.	1	4	0	175	0	$10\frac{1}{2}$	0	81	
Sperm oil,	- 41	1	8	0	217	• 1	0	0	10]	

This table shows that gas is only about one-sixth the price of tallow, or one-twentieth that of wax candles. and one-eighth that of sperm oil.—Merchant's Magazine.

Removal of the entire Uterus.—Prof. Chappin of New Orleans, has lately successfully removed the entire uterus with the ecraseur.

Sir B. Brodie.—This gentleman has lately been operated upon on his right eye for cataract, and the operation promises to be successful. What now about the glaucomatists, and their iridectomy operation? In Sir Benjamin's case the operation has proved a failure, and most thoroughly so, because of faulty diagnosis.

Dr. Wm. Baly.—This rising and eminent young physician, one of the physicians of the Queen, was on the 28th January, thrown from the rail cars, and killed on the spot. A late number of the "Illustrated London News," gives his portrait, and a history of his life.

A singular Fracture.—The "Burlington Free Press" (Vt.) reports the following case, unique certainly of its kind. A man of the name of Wallace Sessions came with a load of wood into East Middlebury, (Vt.) on the 12th February, and driving under a shed, tried to get out, when he discovered that one leg was broken and entirely useless. He shouted for help unsuccessfully for an hour; his thoughts may be imagined as the cold was severe, the thermometer at the time being —25. How or when his legs were broken he could not tell.

Fecundity.—In Essex county, England, a woman is living, now aged only 45, who is the mother of 33 children. She married at 14, and became a mother at 15. She has twice given birth to triplets, thrice to quadruplets, and six times to twins. This is stated on the authority of the Essex Herald quoted by the Lancet.

BIRTHS.

At St. Aimé, on the 2nd instant, the wife of Dr. F. X. Coté, of a daughter.

At Quebec, on Friday, the 5th instant, Mrs. Dr. Wolff, of a daughter.

In St. Mary's, on the 20th ultimo, Mrs. Dr. Wilson, of a daughter.

In this City, on the 7th instant, the wife of William E. Scott, M. D., of a son.

MARRIAGES.

At Chatham, on the 2nd instant, Wm. L. Baby, Esq., of the Township of Moore, County Lambton, to Miss. Maria E. Donnelly, daughter of E. B. Donnelly, M. D. of the, same place.

In Montreal, on the 26th of November last, by Rev. Mr. Prévost J. J. B. Dupuis M. D., of Iberville, to Maria Lea, only daughter of M. Poutré, Esq., of Henryville.

In Montreal, on March 18th by the Rev. Mr. Prévost, Rector of Montreal, Achille Bastien Esq., of Vaudreuil, to Emma, daughter of P. Davignon, M. D., of Longeuil.

DEATHS

At Munich, lately, Dr. Tiedemann, the eminent Physiologist, aged 87 years.

In London, C. W., of paralysis, on the 25th inst., George Holmes; M. D., in the 52nd year of his age.

At Waterloo, on the 8th inst., after a painful and lingering illness, J. C. Butler. M. D., in the 41st year of his age.

At Fredrickton, New Brunswick, on the 2nd instant, Dr. J. Roob, Professor of Chemistry and Natural History in the Provincial College, in the 46th year of his age.

	· · ·			17 P. S		Marka St.		2000 Q. A.		1 8. 1989			· 0 .	de la transferie de la la daga
	ABS	TRA	CT O	F ME'	TEOR	OLO		L OBS By Archi				MON	TRE.	<i>AL</i> IN MARCH, 1861.
		. 3	DAILY	MEANS	OF TI	IE .	,	THERM		WIND.	R	IN AN		w.
Day.	Barometer cor- rected and re- du'd to F. 32º	Temper'ture of the Air.	Dew Point.	Relative Hu- midity.	Ozone. Amount.	CLOU	description s	Maximum read at 9, P. M.	at 7, A. M.	Mean Porce from 0 Calm to 10 Violent	If urricane. Rain in 24 h'rs	Snow in 24 h'rs	Total rain and	B GENERAL OBSERVATION
3456789	Inc's. 29.506 29.712 29.351 29.498 29.655 30.339 30.120 29.475 29.929	c 37.8 38.9 41.7 37.4 21.6 20.9 - 1.9 22.7 35.9 28.0	35.4 38.3 28.4 13.2 13.6 7.7 15.0 33.5 20.9	.80 .88 1 .70 .70 .74 .66 .75 .92 .76	0.010. 5.5 0. 5.0 6. 5.5 7. 6.5 7. 8.5 0. 7.0 3. 9.5 10. 7.5 8.	Cu. S Cu. S Nimt Cir. S Cu. S Cu. S Cu. S Strat Nimb	t.). (t.). t.	82.8 20.5 32.0 42.9 38.3	34.0 17.4 W.1 15.5 V.1 6.5 W.1 1.8 S. 30.0 W.1 22.9 V	N.E 2 W. 0 V. 1 V. 3 V.W. 1 V. 2 V.W. 3 E. 2 V.W. 3 E. 2 V.W. 1 V. 2	. 6 6	26 41 	0. 0. p. Ina p. 1na 0 0.	26 Auroral bank at 11 P.M. Foggy at mid-day. 41 Foggy at mid-day. 63 High wind from W. (6) abo p. 13 Solar Halo. 59
	20. 175 29. 976 30. 256 30. 247 30. 239 29. 563 30. 403 29. 563 30. 194 29. 965 30. 194 29. 975 29. 815 29. 778 30. 136 29. 563 30. 010 30. 010 30. 010 30. 010 30. 194 29. 563 30. 000 30. 010 29. 563 30. 010 29. 563 30. 010 29. 563 30. 010 29. 563 30. 010 29. 563 30. 200 29. 563 30. 200 29. 563 29. 575 29. 575 20. 575 29. 575 20. 57	$\begin{array}{c} 24.6 \\ 26.2 \\ 19.4 \\ 19.2 \\ 19.4 \\ 19.2 \\ 4.1 \\ - \\ 4.5 \\ 21.2 \\ 32.5 \\ 32.5 \\ 32.5 \\ 35.5 \\ 37.0 \\ 38.2 \\ 20.1 \\ 38.2 \\ $	$\begin{array}{r} 4.6\\ 17.5\\ 15.3\\ 2.9\\ 20.4\\ -5.3\\ -9.6\\ 4.5\\ 15.7\\ 25.7\\ 26.1\\ 25.5\\ 22.5\\ 32.9\\ 32$	$\begin{array}{c} .65\\ .69\\ .55\\ .69\\ .66\\ .67\\ .72\\ .68\\ .67\\ .72\\ .68\\ .1\\ .65\\ .92\\ .68\\ .76\\ .79\\ .73\\ .92\\ 10\\ .73\\ .73\\ .92\\ 10\\ .98\\ .76\\ .68\\ .75\\ .75\\ .75\\ .75\\ .75\\ .75\\ .75\\ .75$	5.50.0 5.51.0 5.52.0 5.52.0 5.57	0.0 Cu. Nimb Strat. 0.0 Cu. St Strat. 0.0	• • • •	$\begin{array}{c} 25.8\\ 35.2\\ 27.0\\ 23.5\\ 34.5\\ 35.5\\ 35.5\\ 35.5\\ 35.5\\ 35.5\\ 35.5\\ 30.0\\ 39.5\\ 30.0\\ 39.5\\ 43.6\\ 41.0\\ 39.7\\ 1.5\\ 41.8\\ 41.8\\ 41.8\\ 41.8\\ 40.3\\ 31.5\\ 41.0\\ 39.7\\ 1.5\\ 41.2\\ 41.8\\ 40.0\\ 31.5\\ 40.0\\ 4$	7.0 S. 16.1 W.1 11.0 1 8.0 N.1 6.8 S.S 9.8 N 1.9 V	W. 1 V. 2 V. 1 V. 2 V. 1 V. 2 V. 2 V. 1 V. 2 V. 2 V. 1 V. 2 V. 1 V. 2 V. 4 V. 4	. 6 6 0 0 0 6 6 8 3 0.1 2 0.1 2 0.1 2 0.1 3 0.2 3 0.2 5 0.2	1.71 2.4 2.4 Imaj 0.7 8 	5 0, 0, 5 50 0, 5 50 0, 5 5 0, 0, 5 5 0, 0 5 0, 5 6 0, 5 7 0, 5	Aurora with stream's 11 PA 22 Aurora with stream's 11 PA 31 Solar Halo not well define. . Lun, Corona. Do'hle au.ban . High wind(7)dur, night16- p, Auroral arch at midnight. Fringilla Pictoriaheard. Lun
1 s			17.83					35. 19 10			1 0 0	3	0.0	3 Solar Halo Imperfect.
			1	MET	TEUR	, OLOG	ICA	L OBSE	RVAT	IONS	AT :	TORC	 NTO	I
					1		,	e Record:	of the l	RAI	NAND	SNOW		1
	Barometer re- duced to 32º	Temperature of K	Rolativo Ilumi-	Amount of Cloudiness.		Min'm read at 2, P.M. of same K	12	General Direc-	Mean Velocity in Miles ner hour	in 24 at 6 A	M. ne	ending at day. Mous I	Ozone in 24 hours end- ing 6 A.M. of next day.	GENERAL REMARKS.
	Inches 29.5445 .3387 .4027	39.7 37.4 Sui 29.3	0	$ \begin{array}{c} 0 & -10 \\ 10 \\ 10 \\ 10 \\ 5 \\ 6 \end{array} $		0 34.4 34.2 35.0 31.8 11.8	0 37.0 39.0 15.0 14.0	S. 85 S. 85	W. 1.8 W. 6.8 W. 17 2	.080 .170	1	Inch. .007 .080 .170 .250 .010	0.10	Dense Fog. Dense Fog.
33	. 6518 . 5820 0. 0553 9. 4817	19.5 17.4 8.2 33.1	7 68 0 84	3 0 10	25.0 24.4 42.6	18.2 3.5 9.3	5.5 9.5 28.0	N. 55 S. 74	V. 22.6 2. 6.64		0.2	. 020		Stormy cold day. Solar Halo.
	.3128 .7950 .6388 .7792 .8253	34.6 Sur 24.9 27.4 21.3 20.3	81 1 day 1 day 1 day 1 day 81 5 80 74 5 80 79	6 5 10 4 4	39.8 25.4 33.6 32.0 28.2 26.0	32.2 19.1 9.3 24.8 18.8 17.0	30.0 24.0 17.5 15.0 17.5	N. 44 1 N. 86 N. 33 S. 55 N. 51 1 N. 10 N. 45 1 S. 11	N. 14.54 N. 14.23 C. 11.61 V. 10.92		0.1 Inap. 1.0	.010 Inap. .100	19. 19.	Bright Aurora. Faint Auroral light.
	.6578 .3187 0.1087 9.9550 .6617	26.7 28.1 Sur 3.4 12.7 22,20	2 74 day 77	3 7 4 2 8	33.8 44.0 9.2 9.8 19.4 27.0	14.8 22.2 0.2 -5.2 3.5 12.6	25.0 31.0 	N. 56 N. 30 N. 38 N. 49 N. 49 N. 67	V. 15.81 V. 13.79 J. 6.70 J. 5.23 J. 11.16	·····	2.0		1 . 1 . 1	{ Rapid descent of temper- tature after 4 P.M. Solar Halo. Solar Halo.
	. 6092 .7222 .2652 .6382 .2942	25.32 30.37 34.47 Sun 36.18 38.97	83 77 88 day 85 95	5 0 10 10 10	32.2 38.9 40.4 31.5 39.9 42.8	20.5 22.5 25.0 23.4 25.8 34.2	21.0 28.0 34.0 31.0 39.0	N. 34 N. 61 S. 55 N. 76 N. 81 N. 81 N. 74	V. 10.02 V. 3.61 V. 13.17 V. 15.55 V. 15.65		0.5 Inap. 0.1	.050 .210 .010 .468 .865		
	.3135 .8440 .7197	37.22 32.02 Good 31.63	84 77 Frid'y	9 9 5	45.0 38.4 43.8 35.0 33.2	35.8 25.4 32.4 31.5 25.0	34.5 24.0 26.0	S. 82 V N. 77 V N. 47 H N. 41 V S. 89 I	V. 18.71 V. 8.73 . 11.12 V. 13.87	. 275	Inap. 0.2	Inap. .275 .020	. :	Faint Auroral light.
		1	I						-1	2,125	6.9	2,815		

Wert Frank and State

ja 4

6-59 yet a