## CANADA

## MEDICAL JOURNAL

## AID <br> MONTHLY RECORD

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MEDICAL AND SURGICAL SCIENCE.

BDITED BY


## MONTREAL:

PRINTED FOR THE PROPRIETORS, BY JOHN LOVELL,
 1852.

$$
\text { B. Dawson, No. } 2 \text { Place d'Armee, Agent. }
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CANADA
MEDICAL J0URNAL.

Vol. I. MONTREAL: DECEMBER, 1852.
No 10.

ORIGINAL COMMUNICATIONS.
ART. LI. - Essai sur la nature et le traitement du Choléra Asiatique, basé sur l'autopsie et la clinique, par L. F. Chaperon, membre du Collége des Médecins et Chirurgiens, du Bas-Canada.
(Suite et fin.)
Recapitulation.
Les symptômes de cette maladie à ses diverses périodes; les apparences morbides sur ses victimes; les observations cliniques tendent de plus en plus à affermir chez moi l'opinion conçue :

10 Que le siege primitif de la maladie est l'estomac ;
$2^{\circ}$ Que la suppression absolue de la digestion en est la cause immédiate ;
$3^{\circ}$ Que les injesta ainsi laissés sous l'action inhérente de leur simple décomposition, déterminent sur la membrane muqueuse les symptômes de la première période;
4. ${ }^{\circ}$ Que cette source d'irritation varie selon la qualite et la quantité des injesta;
$5^{\circ}$ Que les symptômes de la seconde période, ne sont qu'une aggravation de ceux de la première période, résultant de l'action crois8ante de la masse irritante ;

6 Que cette irritation détermine des contractions spasmodiques irrégulières des sphincters œsophagien et pylorique, des parois des conduits pancréatique et cholédoque communs, et des parois même de l'estomac;

70 Que la suppression des sécrétions est simultanée, isocrhrone et subordonnée à l'irritation; qu'elles résulte des contractions spasmodiques, qui elles-mêmes cessent de pair arec l'irritation, dès que sa cause est détruite ou annulée;
$8^{\circ}$ Que cette contraction spasmodique est analogue à la contraction des sphincters de l'anus dans la dyssenterie ; que sa cause déterminante est aussi analogue, dépendant d'un corps qui devient de plus en plus irritant au fur et à mesure, qu'il acquiert par un trop long sejour, des qualites
irritantes ou anormales, ou plutôt qu’il perd ses conditions primitives;
$9^{\circ}$ Que cette contraction spasmodique s'oppose mécaniquement ì l'expulsion par vomissement, des matières solides, eu egard à leur volume, de là le vomissement séreux; qu'elle s'oppose, de la même manière, à leur égression par l'orifice pylorique;
$10^{\circ}$ Que la perte extraordinaire et subite qu'éprouve le sang dans sa partie séreuse ou saline, le rend impropre à la circulation, à la respiration, et à la restauration des diverses sécrétions, incapable, impropre à être décarbonisé durant son passage devenu très difficile à travers la fine texture des cellules aériennes, qu'il tend à engorger de plus en plus : de là, congestion pulmonaire, cérébrale, ou plutôt générale, injection de la partie fibrineuse du sang, dans tous les vaisseaux capillaires;
$11^{\circ}$ Qu’il est de nécessité indispensable, de rétablir simultanément : la chaleur animale, la circulation (réaction), les sécrétions, les fonctions organiques, en réparant la perte subie, détruisant la cause excitante, par l'application tempestive, d'un remède efficace;

12 - Que la modification que j'ai adoptée, que les remèdes préférés, me paraissent propres à remplir plusieurs buts essentiels, savoir : stimuler fortement ; diluer la masse alimentaire ; neutraliser sa fermentation accessante, ou putréfaction incipiente ; activer le travail de l'estomac (la chimification), en suppléant au défaut des sucs gastriques; activer indirectement l'ingression du bol alimentaire dansle duodénum ; suppléer au défaut des sécrétions biliaires et pancréatiques en fournissant les bases essentielles, en détruisant la source d'irritation, cause de tout le désordre; fournir au sang le liquide et les bases qu'il a perdues;
$13^{\circ}$ Qu'une transpiration surabondante, qu'une soustraction subite de carbonique par le froid, sont également causes prédisposantes, par l'atonie qu'elles peuvent occasionner ;
$14^{\circ}$ Que la cause excitante même détruite, la cure n'est possible, qu'en raison de la susceptibilité nerveuse; et que dans le cas où les secours de l'art auraient été tardifs, des chocs galvaniques pourraient être utiles.

La 12 me et 14 me proposition paraissent demander de ma part, afin que l'on puisse plus facilement saisir mes vues, certaines explications que je vais m'efforcer de donner aussi succinctement que possible, selon l'ordre qu'elles occupent.

Magendie, Cheireuil, Chaussier, Réaumur, Spallanzani, Thenart et autres chimistes modernes, paraissent d'accord, quant à la composition chimique des sucs gastriques, celle de la bile et du fluide pancréatique.

Du premier fluide, ils disent : "Qu'il est légèrement visqueux, con-
" tient beaucoup d'eau, de mucus, de sels à base de soude et d'amonia"que, et de lacide lactique, dit de Berzélius; qu’il est légèrement " acide."

Du second: "Qu'il est composé d'eau, contient du picromel, une " matière résineuse jaune, de la soude, du phosphate de soude, du "chloride de soude et potasse, du sulphate de soude, du phosphate de " chaux et une teinte d'oxide ferrugineux."

Le fluide pancréatique, à-peu-près analogue à la salive, contient, disent-ils: "De l'eau, du mucilage, de l'albumine, du muriate de soude "du phosphate de chaux et d'ammoniaque, \&c.;" ce sont conséquemment tous des sels à bases alcalines, et la physiologie moderne les regarde comme indispensables à la solution que doivent subir les aliments dans l'estomac, pour les convertir en chyme, et pour effectuer également dans le duodénum cette précipitation qui doit convertir ce dernier en chyle.

Quoique la présence, dans le sang, de ces différents sels, fut depuis longtems reconnue, les fameuses découvertes du Dr. Wm. Stevens durant ses essais sur les qualités du sang à l'état normal, ont établi : que le sérum contient toutes les parties salines du sang, que le crassamentum n'ent contient aucunement et pour prouver que sa couleur était due à la présence de ce fluide, une petite quantité de muriate de soude, nitrate de potasse, ou aucun des sels alcalins, lui rendait sa couleur après la séparation du caillot. L'expérience fut poursuivie sur ce fluide pris du cœur d'un patient mort de fièvre jaune; sa nature était tellement changée, sa couleur tellement foncée, qu'à peine pouvait-on le distinguer de la substance noire évacuée par l'estomac (black vomit) et en y ajoutant les mêmes réactifs, il acquierrait sa belle couleur artérielle.

Le Dr. S. inferant de là: que dans les mauvais cas de fièvre, la perte de la partie saline était la cause de la dissolution du fluide réparateur, s'efforça de réparer cette perte autant que possible, par l'administration de sels alcalins; et il ajoute, "que lorsque cette perte "se trouve ainsi réparée, l'etat d'excitation de la 1re période étant " diminuée, avec une diète convenable, les mauvais symptômes se trou" vent presque détruits." "Ces sels, dit-il, ne fatiguent point l'esto" mac, ils rétablissent la sécrétion urinaire, agissent comme doux laxa" tifs, tandis qu'une grande portion rentre dans le torrent circulatoire " et conserve le sang, jusqu'à ce que la fièvre soit disparue, ou soit du " moins mitigée."

Le Dr. Géatrax, de Trinidad, qui suivit un traitement conforme aux vues émises ci-dessus, eut le bonheur sur un nombre de 350 patients, dans un Hôpital militaire, de n'en pas perdre un seul (Fièvre jaune).

Le Dr. Stevens suivit un traitement analogue durant le Choléra; iis donnait en premier lieu, un seidlitz dans le but de diminuer l'irritation gastrique; avec une emplâtre de moutarde sur l'épigastre; et des frictions aux membres, contre les crampes; avec applications chaudes aux diverses parties du corps.

Le principal remède se composait, comme suit :
R Sodæ Bi-C," 3 ss,
Sodæ mur, 3i,
Potassæ gr. VIII.
On l'administrait dans un gobelet (tumbler) d'eau froide, immédiatement après le seidlitz.

On répétait cette dose tous les quarts d'heure ou demie-beure, selon le besoin, jusqu'à réaction parfaite.

En outre de tems à autres, les poudres effervescentes, avec excès d'alcali; quelquefois un énéma de muriate de soude.

Beaucoup de patients recouvrirent la santé, dit-on, sous ce traitement ; mais il est bon de remarquer, qu'il s'agissait alors de traiter des patients durant la première période.

Dans la seconde période, on pratiquait l'injection saline dans les veines; mais les résultats de cette pratique, ne furent pas bien encourageans.

On verra donc difinitivement que les idées précises de Stevens relativement à la nature de la perte liquide du sang, ne viennent que collatéralement à l'appui de mes convictions, sous ce rapport seulement ; et qu'au reste, la théorie que je propose, d'après une série de faits observés, mis en rapports mutuels, embrasse un ordre d'idées différent essentiellement tant au reste de sa théorie, qu'au traitement qu'il paraît avoir suivi. ${ }^{\text {- }}$

## Traitement de la ler et 2 me periode.

La médecine universellement, a semblé croire que cette terrible maladie était de nature putride, supposant d'abord que quelqu'un des éléments de l'économie animale, rentrait alors dans un état de putréfaction, et pour détruire cette cause supposée, elle a fait quelquefois choix d'antiseptiques. Dans plusieurs cas, leur administration fut très utile sous certaines circonstances, dans un état peu avancé de la maladie, quoiqu'administrés sous une fausse impression, l'effet étant confondu pour la cause qui était précisément de même nature.

Ceci pourrait expliquer entre autres ces cures à l'eau froide: car il est notoire que certaines eaux (non réputées minérales) sont fortement

* La suite de l'explication promise, i-e quant à la 14 me proposition, précède l'Hygiène, voyez page 585 ; elle aurait du faire suite, i-e, préceder le traitement de la première et deuxième période.
chargees de sels calcaires ou de terres absorbantes qu'elles tiennent en solution. Comme antacides et diluents, elles ont pu délayer la masse alimentaire, neutraliser son acrimonie, et promouvoir par là (en faisant disparaître l'irritation) le travail des organes réparateurs.

Les sels alcalins et calcaires sont considérés comme les meilleurs anti-septiques et les plus propres à arrêter la purréfaction végetale ou animale. Les carbonates surtout, paraissent les meilleurs anti-putridesIls me paraissent être les agents indispensables à la cure du Choléra Asiatique, à toutes ses périorles, vû que cette classe de remèdes fournit aussi un des plus puissants stimulants anti-spasmodiques.

Il est vrai que depuis longtems, durant le Choléra, on se sert du spiritus ammoniac fort, " vel aromat," comme stimulant diffusible, durant la 2 me. période à la dose de Gttes. X, XV, vel 3 ss, tous les quarts d'heures ou dix minutes, pour rétablir la réaction ; c'est le seul effet que l'on ait paru vouloir en retirer.

Dans une multitude de cas où l'on aurait sans doute réussi à opérer une cure, en fesant en même tems usage du carb. d'ammoniaque à la dose de gr. V. vel X. à de courtes intervalles, on a malheureusement failli.

Décidément, ce sel offre de grands avantages comme stimulant, antispasmodique et anti-putride. Dès qu'il a rempli ces diverses indications, on devra en discontinuer l'usage; car il ne faut pas stimuler inutilement, surexciter. Quelques doses pour l'ordinaire suffisent*. On devra en même tems se servir du sinapisme à la région épigastrique, pour parer au vomissement, du bain chaud quand on peut le commander, de formentations à l'abdomen, du bain de pieds chaud, de briques chaudes, sacs de sel ou de sable chauds, bouteilles d'eau chaude aux pieds, le long des membres inférieurs, et du corps en entier ; avec forces couvertes de lit, peaux de cariole, \&c. ; en un mot, employer les diverses applications chaudes, pour rétablir la chaleur animale, rétablir la réaction ; et les continuer, jusqu'à ce que le patient ressente visiblement un état de relaxation parfaite, un bien-être

[^0]général: et ce, durant la première aussi bien que durant la seconds période.

Quant au bi-c-de soude, il devra dans tous les cas, dans toutes les phases ou périodes de la maladie, constituer la base des breuvages ous infusions usités, à la dose d'environ 3 i ou 3 ij à la livre.

On peut l'administrer séparément, ou en combinaisons avec des toniques, des stimulants, des astringents, \&c.*

Le carbonate de potasse, ne peut suppleer que très imparfaitement à celui de soude ; mais à la vérité le tartrate de potasse fournit un excellent laxatif durant la 3 me période, ou le traitement de ces cas exceptionnels.

Les infusions aromatiques, telles que celle de menthe poivree, de gingembre, de canelle, de muscade, de cloux de giroffe, \&c., me paraissent les breuvages les plus convenables.

On devra les présenter au malade pour appaiser la soif, aussi souvent que besoin en sera ; car le système a beaucoup d'aptitude à s'en emparer promptement, pour reparer la perte qu'il a subie. Il me paraît preférable de les donner en petite quantité, à des intervalles rapprochées, et autant que possible, en même temps que les remèdes auxquels ils peuvent servir de vechicule.

Les liqueurs spiritueuses, à fortes doses, à des intervalles rapprochées, dans le but de rétablir la réaction, me paraissent dangereuses, vâ que dans cette maladie elles agissent comme sédatifs, surtout durant l'absence des crampes, en egard à l'extrême depression.

La teinture suivante, me paraît les remplacer avantageusement :

$$
\begin{aligned}
& \text { R Capsici } 3 \text { ss, } \\
& \text { Caryoph", } \\
& \text { Nuc" Mosch", } \\
& \text { Cinnam" } \breve{a}-a ̆ 3 i . \\
& \text { Spirit, Vini, Rect" }{ }^{\text {3 viii. }}
\end{aligned}
$$

Une cuillerée à thé, dans un peu d'eau chaude sucrée, arec un peu de soude, forme un excellent breuvage ; on le trouvera très avantageux comme stimulant, même durant la seconde période, à un b́tat avancé.

Le patient ne devrait prendre aucune nourriture, que plusieurs heures après la cessation complète de tous les mauvais symptômes; les substances farineuses, ou féculeuses, gruau, empois de blé d'Inde, arrow-root, tapioca, sago, mousse d'Islande, \&c., préparées à l'eau, et prises en petite quantité, me paraissent les plus convenables, dans le début de la convalescence.

Traitement de la fievre consecutive, ou de la 3me periode.
Ici la saignée locale pour parer aux déterminations locales, me paraît indiquée, ainsi que l'usage des contre-irritants, des applications froides ou glacées, lorsque le cerveau sera le siége de la détermination.

C'es ici que le tart". pot". sera des plus utiles, pour combattre la fièvre et les accumulations intestinales qui peuvent avoir lieu durant cette période ; lorsqu'il ne sera pas requis ou qu'il sera inadmissible, on devra toujours continuer l'usage de la soude, dans un breuvage nonstimulant.

Lorsqu'il y aura diarrhée, l'eau gommée (solution de gomme arabique,) sera probablement la meilleure preparation.

Dans la majeure partie des cas, les applications froides, et l'usage en temps et lieu, des autres moyens, dispenseront de la saignée locale.

## Cas exceptionnels.

Ce ne peut être que dans ces cas que l'on doit avoir recours à la lancette ; car en réalité, alors la maladie doit changer de nom, quoique la cause excitante soit la même.
L'irritation se porte alors sur l'encéphale, pour y déterminer épilepsie, par crudité de l'estomac (a cruditate ventriculi) et cette dernière se termine par apoplexie?

On doit alors saigner généralement et localement, jusqu'à ce que la congestion soit disparue.

Même en l'absence de toute action spasmodique, ce me semble qu'il ne serait pas prudent d'administrer un émétique, dans le but de débarasser l'estomac de la source d'irritation ; car en provoquant le vomissement, on pourrait peut-être exciter l'action spasmodique?

D'ailleurs il serait toujours préférable, ce me semble, de détruire, neutraliser son acrimonie, par l'ammoniaque ou la soude; l'ordre se rétablirait facilement durant l'usage de ces remèdes, et l'emétique ne serait pas requis. Si toutefois on désirait s'en servir, on ne pourrait obtenir le but que l'on se serait proposé, si l'action spasmodique survenait, car alors, la contraction des sphincters s'opposerait au passage des matières solides trop volumineuses, pour les franchir.

En pareil cas le seidlitz avec excès d'alcali, et le tart." pot." rempliraient, ce me semble, des buts essentiels, en agissant (le premier sur tout) comme antacide et laxatif.

Si la diarrhée et quelqu'autres symptômes survenaient spontanément, le traitement d'ailleurs, devrait-être tel que durant la lre. ou la 2 me période.

## Sur l'usage des Emetiques et des Cathartiques.

Les émétiques dans le but de débarrasser l'estomac de la masse irritante, durant la première et seconde période, me paraissent dangereux et inutiles: dangereux, vû qu’a l'instar des forts cathartiques qui administrés en pareil temps, à des intervalles fort rapprochées, (Hydrarg" Clor" 3 j bis horâ) ne purent en apparence opérer, ils pourraient pareillement faillir, et causer une irritation additionelle inutile: vû que le traitement proposé simplifie singulièrement la maladie, possédant en outre, l'avantage de stimuler fortement, tout en neutralisant la cause excitante.

Quant aux purgatifs, dans le but de débarrasser les intestins de la masse irritante dès qu'elle a franchi le pylore, ce qui précède, me paraît une raison suffisante par elle-même, pour ne pas les employer pendant les deux premières périodes.

En outre, les moyens précités en neutralisant cette masse, facilitent en même temps sa solution; et dans le cas contraire, les sels neutres qui se forment probablement, à l'état de solution, peuvent, pour ainsi dire, opérer à demande comme doux laxatifs.

D'ailleurs il est à présumer, que si la masse, après avoir franchi le pylore continuait à irriter, les intestins ayant recouvré leur action péristaltique par la cessation de l'action spasmodique, s'en débarrasseraient par eux-mêmes; car je dois ici remarquer, qu'après la cessation complète de l'action spasmodique, caractérisée par la relaxation générale, un sentiment de bien-être qu'éprouve le malade, vî qu'un laxatif ordinaire opère facilement, cette supposition me paraît raisonnable, étant porté à croire que l'action spasmodique influe sur les intestins tout aussi bien que sur l'estomac ; et par conséquent, le mouvement péristaltique se trouve généralement affecté ; ou peut-être, que durant l'action spasmodique, la membrane gastro-intestinale, sous l'influence d'une irritation spécifique et intense à laquelle elle ne peut se soustraire, ne peut être affectée par un agent quelconque, qu'après la disparition ou la neutralisation de la cause qui l'a déterminée.

Un ami professionnel, dans le cours d'une conversation en rapport avec le sujet, me fit part d'une observation clinique offerte durant une maladie grave (trismus), produite par l'absorption de sanie durant une operation, à travers une plaie légère à la main de l'opérateur, lorsqu'il amputait un membre gangréné et qui paraît appuyer cette dernière hypothèse. Les médecins de Québec s'empressèrent de lui porter tous les soins de l'art, durant sa maladie qui fut de longue duree: dans le but de soulager une gastralgie intense durant un paroxysme qui dura plusieurs heures, on lui administra un fort stimulant diffusible. Tant que
dura ce paroxysme, le liquide n'affecta nullement l'estomac, parut y reposer sans altération jusqu'à la cessation spasmodique, alors son effet se manifesta par une stupeur complète.

Supposant donc le principe établi: que dans le Choléra, l'action spasmodique provienne d'irritation progressive sur la muqueuse gastro-intestinale, et qu'elle soit dès le début, occasionnée par la présence dans l'estomac, du bol alimentaire dont les conditions chimiques se trouvent dans un état anormal par rapport à l'organe qu'il affecte spécifiquement; durant l'existence de cette action, il me parait impossible de détruire la cause déterminante, si les remèdes donnés dans cette vue, ne peuvent rentrer en combinaison avec le bol alimentaire et nutraliser son effet.

## Convalescence.

Cet état (selon moi) est caractérisé par la cessation de tous les symptômes propres à chaque période, s'il survient, ou existe encore malaise à la région épigastrique ou abdominale, les toniques et les laxatifs doivent y obvier: le pulv" rhei en combinaison avec sodæ bi-c.; le seidlitz; ol" ric"; pot" tart", \&c.,
Le régime doit-être soigneusement proportionné aux forces digestives; il faut y apporter de grands soins; le retour au genre de vie ordinaire, doit s'opérer graduellement. . ...

Le sang à l'état normal, fournit et maintient la chalcur animale: si la physique moderne a réellement constaté que la lumière, l'électricité, le magnétisme, et le galvanisme, \&c., ne sont que des modifications du calorique ; dans un cas extrême, pourvu qu'il n'y eut pas lésion organique, vû que d'ailleurs le fluide électrique agit aussi puissamment comme stimulant sur les organes vitaux, par l'intermédiaire du système nerveux.

Pourrait-on, avec un certain espoir de succès, diriger un léger courant galvanique sur la muqueuse intestinale, dans le but de rétablir simultanément la réaction, la susceptibilité nerveuse, et surtout la chaleur animale, par moyen direct et indirect?
Ce fluide si abondant par toute la nature, sous différentes formes, imprègne plus ou moins les corps organisés et non organisés; en le dirigeant sur un corps organisé, peut-il pour un certain temps, s'y fixer, comme calorique latent et réparer une perte de chaleur animale?

S'il est vrai que durant cette épidémie, comme on l'a prétendu en 1849, il y ait rareté d'électricité, ne pourrait-on pas être porté à croire, qu'il y aurait soustraction partielle de ce fluide, surtout chez les corps orgahisés, ce qui en vérité constituerait chez eux, atonie positive, faute d'un stimulus habituel, et agirait comme cause prédisposante?
Hygiène.-Les soins corporels, sont ceux que l'on doit observer gé-
neralement, pour se conserver la sante; éviter le froid, l'humidité, une chaleur intense, une transpiration excessive; l'habillement doit convenir au temps et à la saison; éviter tindigestion ; vivre selon sa coutume; faire usage de la nourriture d'habitude; éviter les excès.

Les aliments doivent être de bonne qualité, et pris en quantité suffisante pour réparer les forces; éviter de prendre ce qui ne s'accorde pas avec son estomac : on est toujours le plus capable de faire un choix judicieux en pareil cas, connaissant mieux ses aptitudes et ses forces digestives.

Se nerver d'une mâle résolution, afin d'éviter les effets pernicieux de la panique qui n'a eu que trop de victimes!!!..

Un air impur, une atmosphère viciée par les miasmes provenant de substances animales et végétales en décomposition, paraissent aggraver le type de la maladie, prolonger son existence, lui fournir un foyer, favoriser sa cause excitante et prédisposante....

Resume des principales Prescritions employees.


Cas où le traitement ne fut que partiellement modifié, et qui me démontre l'utilité des antacides en combinaison avec les stimulants.

1849, Mr. J. F. æt 15 (Juillet 14) tous les symptômes de la 1 re période, vomissement, diarrhee, crampes, soif ardente et les quatre premiers de la seconde période-i-e : entralgie, haleine froide, froideur générale, transpiration froide.

On emploie fomentations et applications chaudes en général, eau-devie épicée avec eau chaude poudres anticholérines toutes les heures; (15) cessation des crampes, réaction partielle, la diarrhée continue, elle est moins fréquente ; (16) retour de tous les symptômes précités ( 10 A.M.) R. Applications chaudes en général tr" capsici $\mathbf{c}$ " 3 ij , soda bi-c. 马i, aquæ cal" $Z^{2} \mathrm{iv}$ sach" q-v-E-H-s-s; (1 P.M.) cessation des crampes, malaise à l'épigastre, réaction ; (8 P.M.) même état, R. Aaust" ut antè, cont" omnia; (17, 8 A.M.) vomissement des matières solides : on distingue très clairement le plumpudding quiil avait mangé le 13 , durant un diner très copieux. R.-H. ut-antè ; $\mathbf{1 P}$ P.M. mieux très prononcé ; arrow-root claire, épicee $\mathcal{Z i v}^{2}$ et cont" omn"; (19) rentre en convalescencence. La menthe infusee constituait le breuvage ordinaire durant la maladie.
N. B. Le vomissement séreux avait été considérable; après la cessation de l'action spasmodique, l'estomac ne rejete les aliments qu'il n'a pu digérer que le 4 me jour, après un repas démésuré.

Je suis convaincu que quelques doses d'ammoniaque (bi, vel-c-ammonix) ou simplement de bi-c. de soude dans le début, auraient fait disparaître tous les symptômes; auraient activé la digestion; la convalescence aurait été prochaine. Nonobstant, j’atribue le résultat heureux d l'administration (tardive il est vrai) du bi-c-de soude, en combinaison avec la teinture de poivre rouge, préférable sous tous rapports, à l'eau-de-vie (brandy épicé), vû qu'elle peut s'administrer fréquemment, sans stupéfier.

C'est le seul cas à ma connaissance, où l'estomac ait rejeté les matières solides.

Autre cas-Cristiana Harvey, 1851 œt" 14—Sept, 8, à 5 P.M. le vomissement et la diarrhée subsistaient depuis la veille de la nuit précédente, et les crampes étaient survenues le matin de bonne heure : corps glacé, cyanose très prononcee; yeux profonds dans les orbites; voix ì peu près éteinte ; absence du pouls, mouvements alternatifs.
R. Applications chaudes en général, breuvage épicé. Poudres anticholérines, contenant un peu de bi-c. sodx, toutes les demie-heures; Spirit" ammon" Gtt" XV, toutes les X minutes. Je lui envoie une robe de cariole; de 8 à 10 heures P.M. pas de réaction; crampes atroces,
wil éteint, coma menaçant, je la compte pour morte, dans le cours de la nuit.....

Sept. 9, à 8 A.M. à ma grande surprise Mr. B. m'apprend qu'elle vit ; qu'elle est mieux ; je la visite. Pouls à la radiale; les crampes avaient cessé le matin; le pouls était à peine perceptible; elle donne peu à espérer : Cont" omnia. Sept. 10, 8 A.M. faible réaction, peu de chaleur. Sept. 11, réaction et chaleur croissantes; tend à rentrer dans la 3me période. Sept. 12, chaleur douce, pouls à 65 . Sept. 13 et 14 continue dans le même état. Elle prend du gruau à l'eau, en petites quantités depuis le 10.

Mr. B. ne pouvant lui porter les soins assidus, la transporte à l'Ifôpital de Marine.
N. B. Je pense que le bi-c-Sodx conjointement avec le Spirit" Ammon" avaient bien agi.
Autre Cas-1851, Honoré Lecourt, $\mathfrak{x t}$ " 28 , tempéramment phlegmatique, estomac très irritable; Sept. 14 se plaint de diarrhée, me dit qu'il vomit, qu'il n'en est nullement étonné; il se croit affecté d'une simple diarrhée. Je suis moi-même dans le doute, je lui prescris : cretæ-cop" gr. VIII avec quelques grains de rhubarbe, toutes les 3 heures, lui enjoignant de m'avertir, s'il ne va pas mieux sous peu, lui recommande d'être généralement prudent. Sept. 15, contre injonction expresse, monte au champ, à une certaine distance, descend plusieurs moutons qu'il tue pour le marché du lendemain, se permet de manger des pommes vertes et crues; la diarrhée s'aggravait toujours.

Sept. 16, à 9 A.M. diarrhée qui avait toujours été la même en apparence dès le début, est évidemment séreuse ; le vomissement est fréquent; voix altérée; yeux calés dans les orbites; sueurs et peau froides; cyanose incipiente; prostration des forces.

Je lui recommande de prendre le lit, et de faire usage des moyens ordinaires pour rétablir la réaction ; ne ressentant pas de mal, il ne veut pas se conformer à mes injonctions. 3 P.M. me demande : le danger est évident à tous; il implore secours. Tous les symptômes se sont aggravés: il y a peu de crampes; cyanose; absence de pouls; corps glacé; sueurs par-gouttelettes, prostration absolue; la maison offrant les commodités requises, tout est mis en requisition, forces couvertures, briques, bouteilles d'eau chaudes, fomentations, etc., tout le monde est a l'œuvre; rien n'est épargné.
R. Spirit" ammon" gr. XV, toutes les X minutes, dans de la menthe chaude, the de gingembre avec soude, donne très souvent pour appaiser la soif; a 7 P.M. nul changement, douleur intense à l'hypochondre droit; fomentations locales; le mal s'aggrave de plus en plus; perte de la

Vue, teintement d'oreilles; à $9 \frac{1}{2}$ P.M. j'avertis les parents qu'il n'y avait plus d'espérance.

Nonobstant, nos efforts redoublent pour ainsi dire, les remèdes sont administrés, ou plutôt versés lentement d'instans en instans dans la bouche, sans avoir égard au temps précis; les briques sont brûlantes, fomentations, \&c., (Sept" 17, à 1 A.M.) on me réveille, me demandant de voir le malade: la douleur à l'hypochondre, descendant graduellement avait atteint l'ombilic, elle est plus supportable, continue sa marche; le pouls à 30 : je suppose d'abord que c'est un léger subsultus tend'; pas de retour de chaleur ; 3 A M . pouls à 40 .
Il y a lueur d'espérance ; la chaleur animale est.à peine perceptible; le malade a recouvert partiellement la vue.

Le 18, tout avait fait place à une fièvre lente; mouvements alternatifs et débilité continuent; soif ardente pour l'eau froide; le thé de gingembre avec le bi-c-sodæ est continué avec arrow-root à l'eau. La fièvre dura environ 8 jours, cédant graduellement: je ne crus devoir donner dans lintervalle, que trois ou quatre poudres de pulv" rhei et sodæ-bi-c.
N. B. J'ai attribué la douleur errante aux pommes vertes. Il m’a semblé depuis que j'aurais dû ajouter à ce traitement, dès l'apparition des mauvais symptômes surtout, le carb" ammonix, et donner le bi-c. sodæ dès le début. L'expérience me l'a prouvé depuis.

Ce cas-ci, quoique négligé, et qu'il cut été facile de guérir en le traitant dès le début, comme cas de Choléra, fut intéressant sous le rapport clinique ; ayant présenté la marche progressive de la maladie dans toutes ses phases, se développant progressivement, sans douleur ou malaise notables. Le traitement proposé dont les prescriptions donnent à peu près un apperçu compte 45 cures, dont 2 de coma, 2 de collapse comaleux, i-e, cet état qui précède immédiatement le coma; 38 cas de collapse (cold stage) dont 2 avec syncopes.

## ART. LII.--Observations on the Sanatory Institutions of the Hebrews as bearing upon Modern Sanatory Regulations. By the Rev. Abraham De Sola, Lecturer on Hebrew Language and Literature in the University M•Gill College, \&c.

(Continued from page 532.)
The result of such a critical examination of the text would be to establish, first, as regards beasts, that all which possess hoofs that are cloven or bifurcated, that is, which are clearly and unmistakably divided into two parts or hoofs, and which also and at the same time, chew the cud, or ruminate, are to be accounted as clean and proper for food; and as such, may be used by the Hebrews. This will be further seen
by the examination following of some of their most eminent and authoritative writers. We commence by translating from the commentary of the learned and elegant Abarbanel on the 11th chapter of Leviticus.

He writes-" Every animal having hoofs, and this hoof split or divided into two, possesses the first requisite of the text; the second requisite is, that the animal chew the cud, or ruminate. Possessing these two conditions, it is clean, and permitted to be eaten. It is not, however, the intention of the text to imply that these requisites render the animal, clean per se, or their absence, unclean per se; but it teaches us, that these are the signs by which we are to pronounce the animal clean for man's food, or the reverse ; that is, that the flesh of the animals possessing these requisites, is, for the most part, proper and good for man's diet. Thus, the reason why animals chew the cud, is, that they have no grinders [incisors] in the upper jaw, wherewith duly to grind or masticate their food; and on which account they are unable to eat any hard substance but vegetable matter which they swallow whole, and which, when softened in the stomach through the natural heat, \&c., is regurgitated into the throat again, for further mastication and deglutition. Animals of this order are mostly obese and best adapted to become food for man, since they can find their food at all times and in all places; their fat also, is, comparatively speaking, better distributed than with other classes of animals, because they feed upon vegatation, both green and dry, which does not yield gross nutriment;-such animals are not ferocious nor predaceous. In addition to this, they possess a broad and divided hoof; wherefore they do not require claws like those beasts which prey upon human beings or other animals; which kind of food produces in these latter, a hot dry temperament and cruel disposition: * but the former 'walk the earth' eating the produce of the field. In this connexion we have to remark that the prophet Isaiah (upon whom be peace) shows us that at the time of the future redemption, " the lion shall eat straw like the ox," on which account "they shall not hurt nor destroy," and that "the wolf shall dwell with the lamb, and the leopard shall lie down with the kid, and the cow and the bear shall feed together," because the preying on flesh and blood is [both] the cause [and effect] of their objectionable temperament, and of their trampling upon and seizing what they require. Nature, on this account, has prepared for them claws and fitting grinders to tear their food; but for the clean animals, whose

[^1]food is the grass of the field, she has prepared divided and broad hoofs, as their manner of walking on the earth to gather their food therefrom requires; nor bas she bestowed on them grinders or incisors since these are not required for vegetable food." Abarbanel next proceeds to remark on some of the beasts mentioned in the sacred text, which will be hereafter noticed. We will continue some further observations of this celebrated Jewish commentator, having a closer connexion with those just quoted: thinking that our readers will not be uninterested to see, for the first time in an English dress, the continuation of what we may regard as a brief Hebrew treatise on Zoology, which, although republished by Don Isaac Abarbanel some three centuries and a half past only, was actually taught in the schools of the Hebrews some fifteen centuries back; for our author advances nothing that is not to be found in the Talmud, and as we have elsewhere said, the Talmud is a mere compilation of ancient teachings in Israel. But prior to continuing the Rabbi's remarks, let us make a few of our own on what has been already advanced from him. The reader will, doubtless, readily perceive their pertinency to the main question, since they involve inquiries elucidatory of the nature of the clean and unclean animals.

We observe, in the first place, a remarkable identity in the definitions of the ruminating animals as given by $A$ barbanel and the Talmud, and by modern naturalists. Let us compare his definitions with those of the illustrious and world-renowned Cuvier. In his Rigne Animal, he gives the following definition of the Ruminantia, Which he says may be considered as an order very distinct of the Mammalia-the first class into which vertebrate animals are divided. - The order of the Ruminantia is characterized by its cloven feet, by the absence of the incisors to the upper jaw, and by having four stomachs." The identity of definition is immediately perceived; for though in the quotation we have just made, Abarbanel only indirectly refers to the four stomachs of the ruminants, yet in other passages of his writings they are specially referred to as characteristics; just as they are in the Talmud. See in particular the Treatise Cholin, Perek Elu Terephot, \&c., p. 42. The absence of such reference, however, in the above passage from Abarbanel, leads us to observe that the names given in the Talmud show how intimate the ancient Hebrews were, ${ }^{\text {even }}$ before the destruction of the second temple, with the mechanism and philosophy of rumination. In the first place, we remark that With reference both to position and functions, the first and second stomachs have much in common. Thus, though at first sight, the ${ }^{8}$ econd stomach would seem to be merely an appendage to the third,
in front of which it is; yet, it may, with greater propriety, be regarded as rather a prolongation of the first. This first stomach, which is the largest, is named the paunch (magnus venter rumen, aut, penula) is covered with papille and is lined by a layer of the epidermis; and the second which is called the honcycomb [reticulum arsineum] from the mucous membrane which lines its interier, forming a multitude of folds so arranged as to constitute polygonal cells, like those of a bees comb. And with reference to their functions, recent investigation has shown these to be identical in repect to the regurgitation by which the food contained in them returns into the mouth. For this has mostly been attributed to the second stomach only, whereas it is now established especially by the experiments of M. Flourens, that both the first and second stomachs are instrumental therein. * Moreover food remains in both, until after a second maceration, when it passes on to the third and fourth stomachs. From all this is very apparent the propriety of the Hebrew term which is one and the same for both stomachs, viz.: Beth hakossoth the cup-like or celular regions $\dagger$ the word generally translated cup, referring either to the stomach being a hollow vessel to receive matter, to be poured therefrom again, as is certainly the office of the cup, more especially when, as of yore, the grape (vegetable matter) was pressed into it for the refreshment of the guests at the wine feasts; or else referring to the papille of the internal surface of the first, as of the polygonal cells of the second. The third stomach called many plies, on account of its large longitudinal leave-like folds, in Hebrew, receives the names of Hamesses, from which the Latin name for the third stomach omasum, we think is unquestionably derived, wherefore it needs to make no further remark thereon. $\ddagger$ The fourth stomach is called reed (aboma-
*"By their contraction," Dr. W. B. Carpenter informs us, "the paunch and honeycomb force the alimentary mass which they contain between the borders of the furrow of the cesophagus, and this contracting in its turu, takes up a portion of it, separates $i t$, and forms it into the ball which is destined to return along the esophagus.
$\dagger$ Kos in Talmudical Hebrew also means a pore. Vide Lingua Sacra, Rad. Kos.
$\ddagger$ Save that the Aruch in a comment on the word as occurring in the Talmud has the following remarks "מסס ובית הכוסות Messes and Beth Hakossoth signify the stomach, because the concoction of the food therein, is called Messes like the passage והיה כמססנסם [This passage Isaiah x. 18, is translated in the English version, " and they shall be as when a standard bearer fainteth". Without examining the correctness of this rendering, we state that the root massos means to melt, and the connexion between this idea, and that of the functions of the omasum is very clear.] The Aruch then shows how the word has been explained by others, which, as not immediately concerning us, we pass over. The following note to the Aruch, added by R. Benjamin Musaphia, an author of the highest order, we give in full, as it confirms what has been advanced above with reference to the terms applied to the stomach-הומסוס בלשון רומי אחר מן קרבי
sum faliscus ventriculus intestinalis) and in Hebrew קיבה (Kebah) which is derived from the root (Nakob. Sce Parkhurst thereon) meaning to perforate, and conveying, as will be seen, the same idea as the English term. From this brief analysis is evident, as we imagine, that the ancient Hebrews were well acquainted with the mechanism of rumination, and, it would be reasonable to conclude, as a consequence, with the phenomena and process thereof also. Continuing now our comparison between the definitions of Abarbanel and Cuvier, let us premise this single remark. It is not to be forgoten that neither the Talmud nor Abarbanel are writing medical or physiological treatises, yet, the latter gives what none can consider a contemptible account of the process of rumination as compared with those of modern writers. A further remarkable identity in Abarbanel's and Cuvier's definitions $i_{\text {s easily }}$ and clearly perceivable by comparing the last two paragraphs of the quoted comment with the following postulates of the renowned naturalist in his formal and learned treatise :-" A hoof which envelopes all that portion of the toe which touches the ground, blunts its sensibility, and renders the foot incapable of seizing." "For cutting flesh, grinders are required as trenchant as a saw, and jaws fitted like scissors which have no other motion than a vertical one." "Hoofed animals are all necessarily herbivorous, and have flat crooked grinders, inasmuch as their feet preclude the possibility of their seizing a living prey, \&c., \&c."

We continue Abarbanel's remarks having reference to the general directions for discrimination laid down by the Levitical law. "Our pious sages have traditionally supplied us with the signs whereby we may distinguish the clean from the unclean of those ruminant animals possessing horns. Beasts which ruminate, having no grinders or incisors on the upper jaw are supplied by nature with horns; the matter which should form these teeth being compensated by her with horns, which renew after their birth, at which time they do not possess any." This teaching is thus verified in one of the most recent and popular Works on Zoology, that of Dr. Carpenter. "Horns are found on the heads of all the other animals of the order, in the males at least. The horns essentially consist of prominences of the frontal bone. The Mammalia which are furnished with bony branching horns, all belong to the order of the Ruminants." $\dagger$ Abarbanel continues,

[^2]"The use of these horns to such animals is that they may defend themselves therewith against casualties and attack, since they cannot fall back upon their teeth and claws like the predaceous animals." Our commentator then proceeds to discourse of the distinguishing signs of birds and fishes, which we must omit for the present, while we see what further has been advanced by Hebrews respecting the clean animals.

Maimonides in his Yad Hachasakah, at the first chapter of his Treatise on Forbilden Meats, which contains the Hebrew traditional signs of discrimination, \&c., writes as follows:
§ 1. "It is an affirmative precept [obligatory on Israelites] to become acquainted with the signs which distinguish between beasts, domestic and wild, birds, fishes and locusts. [The word employed by Maimonides is חגבים (Chagabim) which, though we translate locusts, rather means the Orthoptera and Saltaloria of modern naturalists] permitted or prohibited for food, as it is said, ' ye shall make a distinction between the beast which is clean and that which is unclean, and between the fowl which is unclean and that which is clean.' It is also said, ' make a difference between the unclean and the clean, and between the beast that may be eaten and the beast that may not be eaten, (Lev. xi. 47.) § 2. The distinguishing signs of domestic and wild animals are explained in the Levitical law, and are two, both 'dividing the hoof, and 'chewing the cud;' every ruminant animal hath no teeth or incisors in the upper jaw; and every ruminant beast also divideth the hoof, the camel excepted; and every beast which divideth the hoof chewetb the cud, the swine excepted. • §3. Therefore, he who finds

[^3]a beast in the wilderness and is ignorant of its nature, but finds its hoofs divided; he examines its mouth, and if it has no teeth above, then it is undoubtedly clean ; and thus is the camel distinguishable. If he find a beast with incised or fissured mouth, he examines its hoofs, if they be divided, it is clean; and thus is the swine distinguishable. If he finds both mouth and feet cut, he examines it, after it is slaughtered, beneath the backbone. [On tearing the flesh, in this part of the female camel, some of it will rend woofwise, and some warpwise:-Rashi,] if he find its flesh proceed [or tear] warpwise and woofwise it is clean, and so is the ngarood distinguishable, for such is the nature of its flesh. [The "ngarood" is generally translated wild ass, Job xxxix. 5. It denotes the same in Chaldee with some variation in the form, as it is used in the plural, which is not the case in the Hebrew. It is also so understood in Talmudic Hebrew. Sce Keleem ch. viii., the Aruch, and Ling. Sac. rad Arod. In Shemoth Rabba, sec. 1, fol. 149, it denotes a species of serpent.] § 4. A clean beast that begot young having the appearance of an unclean animal, although it divides not the hoof, and chews not the cud, but is like the horse or ass in every respect, this young is permitted for food, that is, when born in the Israelite's presence; but if he should set apart in his flock a cow which is with young, and after an absence, finds a young one like the swine, even if it suckle it, it is yet doubtful and prohibited for food, for possibly it may have been born of an unclean animal, though attaching itself afterwards to the clean. § 5. An apparently clean beast, begotten of an unclean beast, although it divide the hoof and chew the cud, and is even in all respects like an ox or like a sheep, is yet unlawful food; since a preponderance of the unclean, we must pronounce as unclean, and of the clean, we
upper jav, divideth the hoof, the camel excepted, as is further explained in the Talmud, which says, 'The camel approximates to the clean animals in respect to its ruminating and in its want of the regular number of upper grinders. * * It is also stated in the Talmud, that the camel has (nibœ) on the upper jaw, meaning two teeth, proceeding different ways at the extremitics of the cheeks. The same authority also informs us that the young of the camel have not their tecth developed but are like the clean animals in this respect. It would appear then, that our author writes in a manner having refurence to these ancient Talmudic teachings, intimating that the camel, which is ruminant, is at the same time peculiar sui generis. None ruminating is unclean, like the camel, [there being also a peculiarity of hoof in its case] therefore is it particularly mentioned in the text. Harabad thought, however, that our teacher intended to assert, that all ruminant animals had no incisors on their upper jaw, hence his correction ; the result, however, is to show that all animals possessing regular incisive teeth are unclean. He (Harabad) further thought, that it Was the intention of Maimonides when he wrote that every ruminant animal divided the hoof' to convey, that this is so in respect both to those who do and do not possess such teeth ; but I have already explained his opinion."
must consider as clean; wherefore an unclean fish, found within one clean, is prohibited; and a clean fish found in one unclean, is for the stated reason, permitted. § 6. A clean beast that begot, or that contained, a creature [monstrosity] having two backs, and also a double back bone is prohibited food; this is the [Shessungha cloven, or divided] to which holy writ refers, when it declares, [Deut, xiv. 7.] ' Nevertheless, these ye shall not eat, of them that chew the cud or of them that divide the פרסה השסועה [Parsah Hasseshungha] cloven hoof,' implying a creature that was born, being divided or parted, as it were. into two animals. § 7. And so with respect to any beast in which was found a creature, having the form of a fowl; although it may prove one of the clean species of fowl, yet must it be accounted as unlawful food. It is not proper to regard as clean, any creature found in any animal but such as possess hoofs. § 8. Of all beasts, wild and domestic, which the world affords, none are permitted for food except the ten kinds specified in the law.* Three are of the domestic kind, viz.: 1. II [shor, ox ; we retain, for the present, the translation of the Anglican version, ] 2. שה [seh, sheep] 3. 3 [ngez, goat]; and seven are included among the wild beasts, viz: 1. [ayal, hart], 2. [tsebi, roebuck]. 3. יחמור [yachmur, fallow deer] 4. אקו [ako, wild goat] 5. רישון [5] [dishon, pygarg] 6. תאו [tèo, wild ox] 7. ומר [zemer, chamois] these and their various genera, such as the שור הבר [shor abar, according to

[^4]some the wood-ox. Cumpare Turg. Jur. Ps. I. 10. Treat Peah ch. 8, Rashi, Ps. l. 10, according to others the תרבלה Tarbelah, wild ox or buffalo ; 'Targ. Onk. Deut. xiv. 5. Cholin fo. 80, a.] and of the מרי [merie, translated by some, fatted ox] which are of the ox kind. All these ten species and their gencra, are ruminant, and of bifurcated hoof; therefore, he who [at first sight] knows them, need not examine either their mouth or feet, [to ascertain their lawfulness for food.] § 9. Although they are all permitted for food, yet do we require to discriminate between the clean among domestic, and the cican among wild animals; for the fat of the wild animal is permitted, and its blood, [issuing at the time it is slaughtered] must be covered; whereas with respect to the domestic animals, the sacrificial suet is prohibited under pain of excision, and its blood does not require to be covered. § 10. The distinguishing signs of the wild beasts, are supplied to us by tradition. Thus, every animal dividing the hoof, and chewing the cud, and possessing divided horns like the (ayal, stag,) is to be considered as unquestionably clean; but with reference to all, not having their horns divided, if their horns be covered or encased, like the horns of the ox, incised like the horns of the goat, and the incision erased, and crooked like the horns of the tsebi [roebuck,] these are wild animals which are clean, provided always that the horns possess these requisites, being encased, incised, and crooked. § 11. This applies, however, only to such kinds of animals as are not known ; but as to the seven species of wild beast mentioned in the law, if one be well acquainted with these, even if he fiud that they possess not horns, he may eat its fat, and is obliged to cover its blood in slaughtering it. § 12. The shor habar is of the domestic species, and the pew keresh, [by some translated, unicorn] although it possess but one horn it is accounted as a wild animal. All, respecting which, there may be a doubt as to whether it be of the wild or domestic class of animals, the fat of such is prohibited, the scriptural penalty of stripes is not incurred, and the blood thereof is to be coverd at the time of slaughtering. § 13. A beast of mixed breed produced from a domestic animal that is clean and a wild beast that is clean is called (kooi) its fat is prohibited, the penalty of stripes is not incurred, and they cover its blood." Thus far Maimonides as to the distinctive signs of beasts.

A further result of a critical examination of the text would be to establish, secondly, as regards fishes, that "whatever hath fins and scales in the waters, in the seas and in the rivers," are to be accounted clean and proper for food, and as such, may be used by the Hebrews; whereas "all that have not fins nor scales in the seas, and in the rivers," adds the text, v. 10, " of all that move in the waters, and of any living thing which is in the waters, they shall be an abomination unto you.
v. 11. They shall be even an abomination unto you; ye shall not eat of their flesh, but ye shall have their carcasses in abomination. v. 12. Whatsoever hath no fins nor scales in the waters, that shall be an abomination unto you." This is further shown by the Hebrew writers, to whom we have just referred. Abarbanel's remarks are as follow-"Just as two conditions characteriss the clean beasts, and two, the clean fowl, [Abarbanel refers here to his comment, respecting the clean birds which we omit till hereafter] so doth the text lay down two conditions which must be possessed by the clean fishes. Its expression, therefore, is, "these may you eat of all that are in the waters, all that have fins and scales in the waters, \&c.," but those which are not so characterised "shall be an abomination unto you." Some have thought to assign as a reason for these directions, that fishes that possess fins and scales, are enabled to swim to and fro wherever and whenever they desire; whereas those who do not possess fins and scales, are not so able; wherefore they [the latter] remain continually in muddy places in the water, and become earthy and of unwholsome nature. But this is in reality not the case, for fins and scales are engendered in fish, in consequence of a superflux of nature which they possess, and therefore doth their body become clean and good for food, which is not the case with those not possessing fins and scales. These latter are of an exceedingly moist nature, and have not the advantage of getting rid of this natural superflux, which is, as it were, shut up with them, and therefore is it that they are pronounced unclean. The text adds with reference to these fishes the expression "in the seas and in the rivers," because there is a vast difference between those found in salt water and those in rivers of fresh water, and therefore doth it lay down one general rule for all, and establisheth one law for all that move in the waters, and for all living things in the water, whether you conclude them to be of the reptile or fish species. The word שקץ [shekets, an abomination] is employed three times in the text, and the expression "all that have no fins nor scales" twice, because there are some fish which possess scales while they are in the water, but leave them there when taken forth from the water. The text therefore says explicitly, " all that have fins and scales in the waters, both in the seas and rivers, these may you eat, but those which have no fins nor scales while they are in the seas and rivers, you of your own accord shall loath and abominate as things to be rejected of men; and even as they are abomination unto you because of your natural antipathy to them, so shall they become one in consequence of this command. Ye shall then not eat of their flesh, nor touch their carcase, for they shall be an abomination [shekets]. The word $\mathrm{\gamma p}$ [shekets]
 vex or fret] as in Genesis xxvii, 46, , I I am vexed or fretted [Ang. vers. weary] with my life." Now berause some might peradventure say, 'Not to eat of them is, doubtless, proper, since their flesh is bal; but as to the prnalty attached to touching them, why should their carcase be pronounced an abomination ?' on this account saith the text for the second time, 'all that have no fins nor scales in the waters shall be an abomination unto you'; as if it were giving us the Talmudic caution במופלא ממך אל תדרוש [Investigate not matters above your comprehension] and seek not of yourselves to assign reasons for my commandmeuts. As sum of all, take this general rule,-All aquatic and marine creatures which do not possess fins and scales, shall be an abomination unto you, and this whether in respect of eating or touching them."
(To be Continued.)

On the internul administration of Chloroform in Delirium Tremens. By George E. Fenwick, M. D., Lecturer on Materia Medica, St. Lawrence School of Medicine, Physician to the Montreal Dispensary.
J. S., aged about 40 , labouring under an attack of Delirium Tremens, brought on by suddenly stopping all stimulants after having led an irregular life for months, came under my care on the 16 th September, 1852. Present symptoms. Great anxicty expressed in the countenance, fear ofimpending danger, frequent sighing, general tremor, delirium when left alone, which was of the quiet muttering kind, as if holding conversation with some imaginary person, pulse 110. weak, tongue covered with a whitish fur, bowels had been opened slightly that morning, appetite capricious, had not slept since the Saturday previous. It was 9 o'elock at night when I first saw my patient ; I ordered a full opiate, and as he had formerly been in the habit of chewing opium, I prescribed it in six grain doses, to be repeated every second hour until he slept; two doses only were administered, the effect of which was to deprive him of consciousness, but he did not sleep, he raved and walked about his room the whole night.

The following day, Friday, he was worse, tremor increased, constant muttering, though when spoken to he conversed rationally on whatever subject was started. He stated there were two little devils playing the drum on his head, and that they kept up such a noise he could not sleep. The eye exhibited greater wildness and less fear than last night, the pulse was the same 110, but fuller and more bounding, bowels not open. I
prescribed two blue pills rolled in Croton oil, to be taken immediately, and at night the following draught:-

$$
\begin{array}{cl}
\text { R. Spt. Æth. Sulph. } & \text { 3ii. } \\
\text { Chloroform. } & \text { 3i. M. }
\end{array}
$$

This draught to be repeated every second hour until sleep was induced. Owing to a mistake the patient did not take the pills till 8 o'clock, P. m., and half an hour afterwards the draught was administered; the pills operated rather briskly, both up and down, an hour after they were taken, and the draught was not repeated.

Saturday 18th. Found my patient somewhat better, although he had had but one draught of the chloroform, still, through the night he had dozed once or twice for a few minutes at a time. The symptoms not being urgent, I ordered porter to be taken during the day and nourishment. Visited my patient at 9 o'clock, p. m., determining to administer chloroform myself and watch its effects.

I gave three teaspoonsful of a mixture composed of chloroform and spirits of sulphuric ether, in the same proportions as above, in a few minutes he complained of drowsiness, he closed his eyes and became perfectly tranquil, the respirations became deeper and slower, the pulse fell from 96 to 62 ; to keep up the action I held the bottle to his nose for a few minutes; I watched him for half an hour, during which time he appeared to be in a natural sleep. This state lasted for about three hours. At leaving, I directed the draught to be repeated in two hours if necessary, but my instructions were not attended to.

The day following, Sunday, he appeared much refreshed, less tremor, pulse 72, had eaten a hearty lireakfast, I did not repeat the chloroform through the day ; that afternoon he slept for an hour and a-half, at night I again visited my patient, and again administered the chloroform and ether as before, a single dose threw him into a profound sleep, from which he did not awake till six o'clock the following morning. From this time he gradually recovered, slept naturally and well without the use of chloroform ; the only unpleasant symptom noticed was beadache, which came on for two or three mornings afterwards, and lasted for some hours, this appeared to be relieved by porter.

The second case which fell under my observation was one of quite a different character:-

Mr. S., labouring under an atlack of delirium tremens, brought on by a debauch, came under my care 2nd October, 1852. When I saw him there was considerable anxiety, great tremor, the eye wild and staring, features bloated and swollen, pulse 120 , full and bounding, tongue furred, bowels constipated, had not slept for two nights; I administered

2 drops of Croton oil immediately, and prescribed the following mixture :-

B. Tr. Opiï 3 ii.<br>Ant. Pot. Tart. gr. iv.<br>Aquæ $\boldsymbol{\beta}^{\boldsymbol{Z}}$ iv. M.

Dose, a tablespoonful to be taken every three hours. The Croton oil operated five or six times, and after the first dose the antimony was borne by the stomach.

This treatment was continued up to the evening of the 4 th , when, as there was no improvement nor tendency to sleep, I determined to employ chloroferm, and accordingly prescribed the following:--

## Re Spt. Æth. Sulph. <br> Chloroform. aa $3 \frac{1}{2} \mathrm{M}$.

Dose, a desertspoonful to be taken every two hours until sleep is induced. After the second dose my patient fell into a quiet slumber which lasted six hours. The following day, the 5 th, he was much better, countenance improved, eye less starting, much less tremor, pulse 88, bowels had been moved that morning. I ordered the chloroform to be repeated at night. After the first dose he slept, and did not awaken till the following morning, when he felt much refreshed, and quite himself, he got up, dressed and took a short walk; being fatigued, on his return he laid down again and fell into a sound sleep which lasted three hours. I ordered the chloroform to be repeated if necessary at night, however he slept all night without it, from this date he recovered rapidly.

Chloroform has frequently been employed in the form of inhalation with advantage by Dr. Todd and others. In the American lournal of Medical Science for January, 1852, Dr. Pratt, of Baltimore, published two cases of delirium tremens, in which the internal administration of Chloroform was attended with most marked success. Since preparing this paper 1 have read another case of delirum tremens published by Mr. Butcher, in the Dublin Medical Press, in which the internal use of chloroform was attended with like success. Mr. Butcher draws attention to the lowering of the pulse when the perfect effect of the modicine was produced. This was most marked in the first of the above cases, the pulse fell from 96 to 62 , it never rose above 76 while the patient was under treatment. In the second case, I had not an opportunity of observing the immediate effect of the medicine on the heart's action, but the pulse fell from 112, which was the number of pulsations previous to the exhibition of the chloroform to 88 , which was its standard the following morning.

The foregoing cases, though by no means severe or alarming in their
character, yet serve as further evidence of the successful employment of chloroform internally in the above class of diseases. In the first case opium had a dicidedly injurious effect, all the symptoms were aggravated, at first I felt at a loss how to act, having read Dr. Pratt's cases, I determined to adopt the same line of treatment. Another point I would draw attention to; in the one case, the disease was brought on by want of an accustomed stimulus, in the other, the attack followed excess of the stimulus, in both the symptoms were peculiar, and in both the result of the treatment satisfactory.

73 Craig Street, 20th November.

Case of Dislocation of the Crystalline Lens of the lcft Eye through the Choroid and Sclerotic Coats, from injury, with detachment of a portion of the Iris from the Ciliary Ligament. By Henry Howard, M.R.C.S., Ophthalmic and Aural Surgeon and Clinical Lecturer to St. Patrick's Hospital, Surgeon to the Montreal Eye and Ear Institution, Lecturer upon Ophthalmic and Aural Surgery at St. Lawrence School of Medicine.
In page 243 of my work upon the Eye, there is a case recorded of dislocation of the lersis into the pupil. Since then, I have seen several cases of dislocation of this body. I have seen it dislocated into the vitreous humour, where it kept oscillating every time the patient ${ }^{\text {moved }}$ his eye. I have seen it dislocated into the posterior chamber pressing upon the iris, and requiring to be removed by extraction. I have seen it in the anterior chamber and producing such inflammation as to require extraction; and also cases in which it produced very little inflammation, while finally the lens became absorbed. But the particulars of the following case I consider worth recording. First, because it shows how much nature will occasionally do to repair injured parts; and secondly, how great an injury the Eye will sometimes sustain, with the preservation of sight.

John $\mathrm{N}-$ —, aged 52 , was received into the Ophthalmic Ward of St. Patrick's Hospital, April 8, 1852. The history he gave of his case was that ten days previously, he received a blow on his left eye which deprived him of sight, having been nearly blind of the right eye for thirty years. The following are the appearances his eyes presented. A dense cicatrix across the lower half of the right cornea, the remaining portion of the cornea opaque from lymph deposited in its layers. Left eye turned outwards and downwards, with no power to move it from that position, owing to a hard round tumour on the upper and internal
portion of the sclerotic and beneath the conjunctiva. The surface of this tumour pressed against the anterior and internal angle of the roof of the orbit. The natural pupil was closed, but there was a large triangular artificial pupil in the inferior portion of the iris, caused by the iris being detached from the ciliary ligament in that particular part. There was also a small pupil about the size of a small pin's head in the upper and external part of the iris, and part also detached from the ciliary ligament. The whole eye-ball was inflamed intensely. The sclerotic a deep red, the iris a dark green. I at once diagnosed the case to be a dislocation of the lens through the choroid and sclerotic coats forming the tumour described above, under the conjunctiva. I made an incision through the conjunctiva, covering the tumour, and had the satisfaction to find the lens fall into my hand, the eye immediately after resuming its proper position. I then covered the eyelids with a pledget of lint-sent my patient to bed, ordered him low diet, and one grain of calomel with quarter of a grain of opium every six hours. The next day, the eye felt very painful, and upon examining it, I found a tumour occupying the same spot from which I removed the lens the previous day, and producing the very same effects as before the lens was removed. I saw that the incision I had made the past day had cicatrized and that the sack which the lens had made for itself in the subconjunctival cellular tissuc, had secreted a fluid which caused this second tumour. I then took hold of the flacid tumour in a pair of forceps and cut it off with a pair of curved scissors, after which the eye again resumed its natural position. I again applied a pledget of lint and continued the same treatment ordered the first day. The third day following I again examined the eye, and found the part from which I had removed the cyst, healed. I did not close the eyelids again, but ordered the calomel and opium to be continued. On the 13th, seven days after his admission, there was slight mercurial fxtor; and, with the injured eye, he cou'd see my hand move between him and the light from the window. The inflammation of the eye was very much subdued. I then put him on the solution of biniodide of mercury, discontinuing the caInmel, ten drops twice a day, and ordered that he should have soup diet. On the 19th all the inflammation of the eye had disappeared, and he was able to distinguish the different patients in the Ward. I then discontinued all preparations of mercury and put him on hydriodate of potash, two grains every eight hours. I also gave him a more free diet and permitted him to go about the Ward. On the 10th of May, one month and two days after his admission, he was discharged, having as good sight in the injured eye as is generally found after the removal of the lens by operation. The day following I met him walking through the
crowded streets as brisk as any man. During the time he was in Ilospital, I every day touched the old diseased cornea with some stimulating lotion, such as the Diluted Liquor Potasse, the Hydrocyanic acid and the nitrate of silver, so that when he was leaving, the upper and lower parts of the cornea were perfectly clear, leaving the greater part of the pupil and iris visible, of course the cicatrix across the cornea remained.
I said, this was an interesting case in two particulars. First, as the injury the eye will sometimes bear, and nevertheless vision be restored. Secondly, the effort nature makes to repair the injury. Here is a case in which, by a blow on the eye, the iris is detached from the ciliary lgament, which destroys the natural pupil, but makes an artificial one in its place. At the same time the lens is dislocated from its capsule and burst through the choroid and sclerotic coats. There is no escape of any of the other humours, but the laceration of those tissuesheal, and the lens becomes imbedded in the sub-conjunctival cellular tissue. Lymph is thrown out and a regular cyst is found round the lens. Keeping it snug in its new place and producing no other evil results, preventing its results as a foreign body than the mechanical one of preventing the eye-ball being turned upwards. That form of dislocation of the lens has been long since described by authors, but no attention, that I am aware of, has been drawn to this important fact, the effort made by nature to repair the injury produced by this accident. Now this is important in a practical point of view, for, no doubt, if this patient had come to me immediately after the injury, I should have at once considered it my duty to remove the lens, and in all human probability my interference would have resulted in the vitrious humour following the course of the lens, or if not that, by exposing the wounded parts to the action of atmospheric air, a greater degree of inflammation would have followed, perhaps terminating in suppuration; or if neither of those accidents occurred, I might have had a prolapsis of the choroid, and perhaps part of the iris, through the wound. Therefore, when the lines is distocated through the choroid and sclerotic, instead of simply saying cut down on it, through the conjunctiva, and remove it, we should rather say, use all necessary means to subdue inflammation for three or four days, and wait patiently till nature has united the wound of these tunics, then by all means remove the lens from its new position.

It is evident that the cause of the immediate blindness in this case was the effusion of blood, into the chambers of the eye, caused by the detachment of the iris from the ciliary ligament, and that the cause of blindness, when I saw the case, for there the blood was absorbed, was from the high degree of inflammation there existing in every part of the eye, which being subdued by proper means, vision was restored.

Proceedings of the 29th Annual Meeting, of the German Society, of Naturalists and Physicians. Communicated by W. Hales Hingston, M. D., L. R.C.S.E.

To the Editor of the B. A. Journal.
(The following paper was forwarded for insertion in the British American Journal of Medicine, to Dr. Hall, who, with his usual liberahty handed it to us for our pages. - Eds.)

I took advantage of a short residence here, to be present at the Anniversary Mecting of the Society of German Naturalists and Physicians, which commenced its sittings at Weisbaden, on the 18 th ultimo. Believing they are of a nature interesting to many of your readers, I send you the enclosed report; and if gou think it worthy of a place in your Journal, I shall feel happy to have it inserted.
Having been enrolled a member of the Society, I regularly attended its sittings, and was afforded every facility for becoming acquainted with the business of the various sections.

The Society (of which 776 members were present) met on Saturday, 18th Sept., and after having gone through the public business-divided itself into seven sections, (1) Physics, Mathematics and Astronomy; (2) Chemistry and Pharmacy; (3) Mineralogy, (reology and Geography ; (4) Botany and Husbandry ; (5) Zoology, Anatomy, and Physiology ; (6) Medicine, Surgery and Midwifery ; (7) Anthropology and $\mathrm{P}_{\text {sychology. As the proceedings of those seven sections, would occupy }}$ too much space in the columns of a Monthly Periodical, I send you a report of those sections only which I thought most particularly pertained to the practice of Medicine and Surgery. A considerable amount of matter, must of course be necessarily omitted.

## section 2. chemistry and pharmacy.

Professor Schroetter, Vienna-spoke of the cause of the shining of many bodies when heated, in which he with many others thought, that the shining of Phosphorus, was not the result of, or caused by, evaporation, but oxidation; and stated that Sulphur, Selenium, Tellurium, Arsenic \&c., when submitted to a proper temperature, and under the oxidizing influence, emit light with the formation of an oxide.

Dr. Boettger, Professor of Chemistry, Frankfort-Spoke of the affinity of Iron and Zinc, for Chloride of Mercury. He performed a few experiments, showing that by bringing together $4 \frac{1}{2}$ parts by weight of Hydrarg., Sublimat, 1 do do Iron, and 2 do do water, and heating them strongly, there resulted Ferri Chlorure, Hydrarg., Chlorid and Iron Amalgam. In the same way, 1 part by weight of Zinc, 4 do of Chlo-
ride of Mercury, and 2 do of water produced an Amalgam of Zinc. The best mixture for the production of Iron Amalgam, is 1 Iron, 2, Hydrag., Chlorid and 2 Aqua, with the addition of one drop of Quicksilver.

The same gentleman, made some remarks on the re-action of Iodine, and stated that all strong Nitric Acid emitted, when heated, fumes or vapour of Iodine, that it was the Iodine alone, that produced the vapour ;-and that the experiments of Chatain, have proved that Iodine is to be met with in all waters, in the air, in earths, and in a more concentrated form in the oil of the liver of all fishes.

He was followed by Dr. Von Scybel, who spoke of the developement of Chemical industry in Austria, and its present healthy and improving condition as compared with former years.

Professor Heivtz, read a paper on animal fat. He stated the analysis of animal fats had been hitherto incorrect-and cited several examples in proof. He said that in Spermaceti, there existed Spearic Acid; Pulmic Acid (Pulmitin Sarure) then a new Acid, Cetinic Acid (Cetin Sarure) C. ${ }^{30}$ H. ${ }^{30}$ O., ${ }^{4}$ crystallizable, melting about $54^{\circ}$; Cent Grate, in that case resembling the Acid formed in the nutmeg, C. ${ }^{28}$ H. ${ }^{28} \mathrm{O}^{4}$, melting at about $44^{\circ}$; Cent, and last, Cocinic Acid, (Cocin Sarure) whose composition he had found to be C. ${ }^{26}$ [I. ${ }^{26}$ O.4. The soap from Spermaceti is made by digesting it with an alkali, so that the acid previously existing in the Spermaceti can be collected.

## SECT. 6. MEDICINE, SURGERY AND MIDWIFERY.

Professor Vogel, Giessen-Made some remarks on the divisions of labour. He thought some improvement might be made in Medicine relative to this matter, and trusted some gentlemen present might lay down some plan, whereby each member of the profession would know his peculiar province-and keep within it.

Professor Ran, Berne-Exhibited an ear catheter of Gutta Percha, lauded its superiority over similar instruments of different materials, and described its make.
Professor Griesniger, Cairo-Spoke of a disease observed by him in Egypt, a kind of Typhus, presenting some of the characters of Bilious Typhoid, which had as yet been benefitted by no treatment.

Professor Naumann, Bonn-Related two cases of Fever, in which there was almost complete Atrophy of the spleen.

Dr. Schuetz, Deidesheim-Made a few remarks on the favourable results of Collodion, applied externally in Gouty swellings of the joints, and extolled the efficacy of Pyechrum Romanum in Intermittent Fever.

Professors Heyfelder, of Erlangen, and Sedillot, of Stratsburg-

Dwelt at considerable length on the "Hemostatic Liquor of Pagliari. The latter gentleman said, that he had performed several experiments to prove the efficacy of this remedy. In every case he had every reason to be pleased. It seems to diffuse itself in an inconceivably short space of time, over the whole system, and its action was soon manifest. They then spoke of its local action. Professor Chelius, and others thought it an important addition to surgery. I asked, Professor Heyfelder, its composition. He gave me the name of the ingredients, but not the proportions.R. Alumina, Sulph? Res. Benzoin ? Coque et Cola. I was referred to a periodical, which I was told contained the prescription ; but have not yet found it.

Dr. Hoeple, Heidleberg, referred to the diagnosis of fungoid formations on the mucous membrane of the buccal cavity and CEsophagus, by means of the microscope. He distinguishes as conditions essentically different though in external form frequently similar.

1. The Sore or Schwämmchen (aphthice of many writers, lactumina or muguet of French authors) consisting of an exudate, which proceeding from the buccal cavity, frequently extends to the cardiac extremity of the stomach; and which, when viewed under the microscope, contains besides the proper albuminous exudate, epithelial scales, fungoid formations (which he minutely describes) in different stages of developement; and along with these, other accidental ingredients, but not the ingredients of pus. This exudate never exerts a destructive influence on the subjacent mucous membrane.
2. The Aphthæ proper (les aphthes of modern French writers) hitherto frequently confounded with the foregoing, but in reality very different, inasmuch as they consist essentially in the inflammation and ulceration of the mucous follicle, and
3. The exudate or pseudo-membranous formation without the developement of fungi, (Diptherite of Bretonnean, Stomatite and Pharyngite pseudo-membrane, of recent French writers,) which arises under conditions more or less inflammatory of the mucous membrane, and presents sometimes a gelatinous, sometimes a viscous-coated mass, closely united (occasionally even by the development of new vessels) with the subjacent mucous membrane.

This subject is treated of at length, in an excellent work by Dr. Hoefle, entitled "Chemic und Mikroskop am Kranken Bette, (2nd. edition, Erlangen, 1850.)
Dr. Bukring, Berlin-Spoke of the powers of restoration of the hard palate, he communicated a case in which an accident had occurred to the hard palate, rendering an operation for its partial removal necessary, and its subsequent restoration.

A long diseussion on operations on the hand ensued. Professor Roser, Marburg-asked whether in operations on the hand the middle joint might be saved. Was there any possibility of saving it when not discased, and would a joint or finger, so saved be a useful one.

Dr. Johardt, Weisbaden-mentioned a case where laryngotomy, had been performed for Edema of the Glotis, after Typhus. The patient was exhibited, and although the Edema, had not entirely disappeared, yet did he seem perfectly at ease, breathing freely, and speaking when the tube was closed.

Dr. Brown, Weisbaden-spoke of Tracheotomy, and exhibited a patient on whom this operation had been performed. When the tube was partly closed, he spoke more clearly and distinctly than the preceeding. The relative value of these operations was discussed. The majority seemed inclined to think, that when practicable, Tracheotomy, should be chosen in preference, and that those cases requiring Laryngotomy, were not of frequent occurrenee. Then as to the value of these operations in croup. Although, many present mentioned cases, in which Tracheotomy had apparently been the means of saving the lives of the patients, yet were the majority inclined to think that the cases of real croup, benefitted by operations were rare indeed.

Professor Sedillot,-vary warmly opposed recourse to these operations, except in cases of extreme urgency, such as the presence of a foreign body. Opinions to the same effect, were expressed by Professors Baum, of Gottingen, Naumann, of Bonn, \&c.

Professor Gerlact, Erlangen-exhibited a very beautiful and well prepared specimen of Miliary Tubercle in the Choroid Coat of the Eye. The Choroid was well injected, and the tubercles, even with the naked eye, were distinctly visible.

## SFCT. 6. MIDWIFERY DEPARTMENT.

Dr. Ricker, of Eltoille-made some remarks on the employment of ergot of Rye in parturition. He complained partly of the uncertainty of its operation ; and partly of its prejudicial consequences to the child. Dr. Wegler, of Coblentz, agreed with him, while Drs. Mappees and Martin said, that in their practice, they had found this remedy of the greatest use; when employed at the proper time. Dr. Solneeman, related two cases of premature labour induced by the use of the warm water uterus douche, one with a favourable result to mother and child. Dr. Ricker, related two cases that were followed by Endometritis puerpuralis.

Prof. Martin read a very interesting paper transmitted to him by Dr. Genth, on a case of extra uterine Fertation causing a crural hernia
which was relieved by operation, and followed by a favorable termination.

Dr. Lichener communicated a case in which the bones of the feetus had escaped through the rectum of the mother.

A discussion arose on the use of chloroform in child-birth. Prof. Hohl and Dr. Schneeman said that they would use it onlyin a single case, namely, in turning, and, indeed, even then, only in very painful labor, to induce a quieter state. They entirely differed from those who had frequent recourse to such an agent.

Dr. Sinneeman read a paper on the treatment of Placenta Pravia and assured the society that after many years experience, and having given the suoject his most serious attention, and having also agitated it in public, he had come to the conclusion that turning should be accomplished as soon as nossible. Prof. Hohl agreed with him-Prof. Martin said that, although an advocate of this method, he would strongly advise them not to lose sight of the cold water douche, to arrest the hemorrhage until the time for turning has arrived.

Prof. Hohi desired the society to give their opinion as to the time the placenta should be allowed to remain. Dr. Schneeman, of Hanover, said, that in his opinion the placenta should be removed as soon as possible. He observed that a placenta, after the expulsion of the foctus was a foreign body, whether partially or completely detached or adherent; whose presence might be productive of injury, might give rise to flooding and prevent complete contraction of the uterus.

Dr. Boschas, of Franzcusbad, spoke of the employment of Chalybeate baths, where there existed a predisposition to miscarriage or abortion, and stated that in such cases he had found them particularly serviceable.

Prof. Martin related two cases in each of which a large tumour or abscess had occupied the pelvic cavity; one opened spontaneously into the rectum, and discharged a grumish liquor.

The same gentleman spoke of the treatment of inflamed breasts by means of collodion. He besmeared the whole breast, with the exception of the nipple, to prevent slippuration, and administered internally at the same time tartar emetic in large doses. If an abscess formed, he made ${ }^{a}$ a free incision for its evacuation, and when the inflammation had partially subsided, a compressing bandage for the greater ease and comfort of the patient.

Dr. Goeschen thought that the principal, and perhaps only use of the collodion was the production of cold by the evaporation of the ether.

SECTION 7. ANTHROPOLOGY AND PSYCHOLOGICAL MEDICINE.
The greater part of the business of this section was of local interest only.

Dr. Riciari delivered a discourse on the refusal of nourishment by the insane, especiaily by the melancholic, in whom this phenomenon is found for the most part associated with delusions about poisoning, or about their own body being totally dead, or changed; or about a divine command to abstain from eating. He referred the proximate cause of this phenomenon to an affection of the nervus vagus, inducing an extinction of the sensation of hunger; and maintained, that although delusions might greatly contribute to strengthen the refusal of nourishment, still it was rare to find this refusal originating in the delusion alone. In regard to treatment, Dr. R. was a decided opponent to forcible treatment.

Dr. Ricken, Physician to the King of Belgians, communicated a new method of treatment, consisting in the injection of nourishment through the nostrils.

Dr. Snell then delivered a discourse on anœsthesia of the skin in insane patients. He stated that out of 180 cases, he had found 18 attended with total insensibility of the whole cutaneous surface; from whence he inferred that anœsthesia must be a phenomenon of frequent occurrence in insanity. This paralysis of the sensory nervous filamets was to be found only in cases of severe psychical malady; but not solely in such cases as were attended with depression; it was also to be found accompanied with the phenomenon of excitement.

Dr. Erlevmeyer addressed the section on illusions or hallucinations of the senses, which he distinguished according to their origin into three series-the first having their origin in the peripheral extremities of the nerves; the second in the spinal cord, but being projected toward the periphery; and the third, originating in the centre of the nervous system. All three occur in patients of sound and unsound mind. In cases of the latter description, they have generally been regarded as a ${ }^{9}$ bad symptom, and supposed to prognosticate the incurability of the mental disorder. The speaker opposed this view in cases of the first and second class, but regarded illusions of the third class as indicative of cerebral disease at an earlier period, whereby they acquire a much worse prognosis than the hallucinations of other senses-which only in a very small number of cases have their foundation in severe cerebral disturbance. Drs. Richarz, Snell, Nebal, Vogler, Friedlieb, Dioste, Brosius, \&c. took part in the discussion that ensued.
Dr. Vogler then opened a discussion of the question. What influ-
once the political events of the last few years had exerted upon mental derangement, as regarded both the number of the cases and the forms of its nanifestation? The Directors of lunatic asylums present agreed that the number of cases occurring of late, seemed greater than formerly-and Drs Erlenmeyer and Richarz observed, that suicide especially had been on the increase during the last two years. With regard to the mode in which political events operated in originating mental derangement, the psychological physicians present agreed in opinion that there was a threefold distinction to be drawn. It had been observed. 1. That political events had produced in some a disposition to insanity. 2. in others, they had stimulated predisposition to the disease into actual outbreak; whilst 3 , in a third set of cases, they had merely afforded the accidental materials for an insanity which had its source in other causes

Dr. Vogler then delivered a discourse in which he pronounced a very decided opinion against the claims of phrenology in its present form to be regarded as a science, and enlarged upon its pernicious consequences in a moral point of view. After a lengthened discussion, in which many of the members took part, the opinion was expressed almost unanimously-that modern phrenology was void of any anatomi cal or physiological basis, and the division and allocaticn of the several mental faculties so glibly accomplished by the phrenologists was totally unwarranted and unpsychological. The presidents of the various sections then declared the sittings to be closed.

Before taking leave of these matters, I will describe an instrument alluded to in section 6, the uterus douche. It consists of a funnel-like basin, containing about half a gallon or more ; at the lower end of which a gutta percha tube about 6 feet in length, and $\frac{3}{4}$ inch in diameter is attached, and at the lower end of this, a stop cock, also an ivory or wooden tube, resembling that of an enema pipe. This basin is filled with water (warm or cold, as the case may be) and suspended from the ceiling or attached to the wall. When required, the tube is introduced into the mouth of the uterus, the stop cock turned, and the water admitted. From known principals of hydrostatics, a column of water of such a height must possess force equal to any required, and having seen it used, I must say, I think it safer, easier of application, and less revolting to the feelings of the patient than any instrument hitherto used.

Heidelberg, October 12, 1852.

## SCIENTIFIC INTELLIGENCE.

surgery.
On the Application of Friction, as a remedy for some Diseases of the Joints. Illustrated by Cases.-By Edward William Lowe, M.R.C.S.E. Late Housc-Surgeon to St. Bartholomew's IIospital.

For some years past my attention has been directed to the application of friction as a remedy for certain chronic diseases of the joints. Unfortunately, circumstances have, until lately, prevented me from testing the accuracy of my opinions. I trust, however, that my observations will be found to have lost no force by the delay,-rather to have gained, not only by the casual experience which all observers must be making, but also by the mental contemplation of the subject which all thinkers must ever have.
In all cases my desire has been, and is, the discovery and promulgation of truth. I am not desirous of starting a theory which practice shall disapprove ; I would prefer, and, in the present case, have endeavoured, as far as my means allowed me, to prove a theory by practice; and the following paper will be found to embody the results of that practice.

I will endeavour to make the report clear. Truthful it shall be. If, by the introduction of this plan of procedure to the notice of the Profession, I succeed in drawing its attention to a simple yet oftentimes powerful remedy for some conditions of joints, I shall be satisfied, rejoicing in the feeling that $I$ have placed in the hands of those able and desirous to dispense it, a blessing to hundreds, in saving their limbs froms the operator's knife, and in feeling, also, that I have not been iule in the field of observation vouchsafed to me.

I have entitled this paper as one showing the effect of friction as a remedy in some diseases of the joints. I have done so because friction so applied is the only comparatively new feature I have to introduce in the plan I am about to advocate, the other parts of it being in some respects similiar to those followed by the late Mr. Scott.

I do not, of course, claim for myself the discovery of a new agent in the treatment of disease of the joints, for its powers have, in a limited degree, been long known to surgeons. I merely desire to call the attention of the Profession to a plan of procedure whereby I have been able to call out those powers to their highest pitch of usefulness, and to effect by their aid cures of conditions of joints hitherto considered beyond their grasp.

In my first trials of frictions as a remedy for diseased joints, I used
it simply with a little flour, to prevent chaffering of the skin. I soon found that I had in it a powerful agent, not only by its curative powers in some cases, but also by the effects of its careless employment in others ; for while, by its careful and judicious application in three or four cases, I was able to restore the joints, I learned some useful lessons by entrusting its use into surbordinate and less careful hands, the results here being the induction of attacks of acute inflammation on the previous chronic disease.

My experience fully confirmed my previously-conceived opinion in favor of frictions as a remedy for diseased joints, and I determined on more extended trials for its power.
I had, from a considerable experience, been strongly and favourably impressed with the local application of ung. hydrarg. in diseases either acute or chronic of the joints; and refection on the subject induced me to believe that a combination of the two means might prove more powerful than either individually.

The two next cases which fell under my care I accordingly rubbed with ung. hydr., in lieu of the simple flour. The benefit was marked; the cure was expedited, and without any general mercurial effect being produced. Knowing the effect of general and equable pressure in aiding the restorative action of diseased parts, and in promoting absorption, I determined on employing its powers also in aiding the object I had in view.

This combination of means has proved a powerful union, satisfactory in the highest degree, as I trust the following cases will prove.

Before, however, I proceed to describe the cases, I will briefly explain the manner of applying the remedy.

The joint having been carefully examined, and considered one fit for the remedy, if painful or tender of pressure, I take it and gently and easily rub it with ung. hyd. for a few minutes, avoiding as much as possible to give pain. Having done this, I wrap a piece of lint around the joint, now covered thickly with the ointment, and then smoothly apply straps of plasters from some distance below to the same distance above the joint, being careful that the sustaining pressure be equable, and at the same time slight. When finished the joint should feel easy, supported rather than pressed, certainly not in any part unduly pressed.

These dressings I allow to remain on four days or a weck; they are then removed, and the same process repeated, if the joint wiil tolerate it, the frictions being stronger and longer continued. Thus I go on, removing the dressings; and each time, as the joint will bear it, applying more and more poweriul friction, until it is downright hard and quick work for the rubber; and afterwards, eacin time making the pressure
greater and greater, until the strapping can be comfortably borne as tight as it can be put on.

The great art in the application of the remedy being to, at first, so gently rub the joint, and so easily press it with the strapping, that as little pain as possible shall be given. A little pain you will give by the friction ; it should, however, be but little, or, as a consequence, the joint will soon become hot, red, more swollen, and painful-in short, acutely inflamed, which condition will, of course, require removal by the appropriate remedies before you can resort to the friction.

If, however, attention be paid to this point, and to the easy application of the strapping, so that, when finished, the joint shall feel comfortable, it will soon become tolerant of increased frictions and tighter pressure, and the result will be, that, in a short time, a joint will bear hard rubbing and tight pressing, which, when you first began, was painful, even to gentle handling.

The one great caution I give is against a desire to do too much. Be content to advance slowly, and you will do so surely; attempt to push too eagerly forwards, and the chances are you will throw yourself backwards. Never continue the friction if it is painful, or apply the pressure so tightly as to cause pain; then you will find your joint rapidly become tolerant of the friction and pressure.

The strapping I use is emp.-robor, spread on moleskin. I find it more adhesive, and at the same time more supple, than simple adhesive. It should be cut into straps half an inch wide, and should be neatly applied, one a little over-laying the preceding one, so as entirely to cover the joint.

The friction, gradually increased from a little, may at least be made as firmly and quickly as can be done, for the space of half an hour-a longer period is seldom safe.

Towards the latter end of the cases, when the disease was well-nigh mastered, I have usually substituted a stimulating liniment, in lieu of the ung. hydrarg., and have believed that, by so doing, the end I desired was expedited.

Theory of its Action.-It is difficult clearly to prove it. I am inclined, however, to attribute to it the property of increasing the power of the circulation through the parts, and of stimulating the action of the absorbents ; so that, while a more healthy vigour is given to the bloodvessels of the parts, the absorbing vessels at the same time are excited to a stronger action. This may be true, or it may not. It is, perhaps, equally difficult to prove or gainsay it. But, be it true or be it-not, the fact of the efficacy of the plan of treatment remains the same.

The action of the local application of mercury is probably, as Mr.

Scott long since described, in giving tone to the vessels of the part, without at the same time producing any general mercurial effect. In this respect its action is, I believe, powerful and peculiar-essentially specific.

The pressure, at first, only acts as a means of support to the weakened vessels of the part; in this way acting as powerful auxilliary to the restoration of a healthy action in them. The subsequent pressure, however, which I apply as the joint becomes able to bear it, acts, I believe, as all pressure does, by inducing absorption.

Thus, then, the three means employed are all exerting their energies in one direction; and, while we are observing them, let us not overlook another effect they produce, viz., that of maintaining the diseased parts at a moderate and regular temperature. This is of the utmost importance ; for it is, I believe, of itself capable of restoring some joints, while, on the contrary, I feel confident that, without attention to it, none will get well, be the other means used what they may. Mr. Tamplin's remarks on this subject will be borne out by all who have much to do with diseases of the joints. The firmness and stiffness of the strapping while it produces the pressure you desire, acts at the same time as a well-fitted splint, preventing much motion of the joint. The usefulness of this is so evident as to require no comment.

In the following cases, I have endeavoured to avoid too much detail, which is often tedious and useless. They will be found rather epitomes, embracing the more salient and striking points.

I have but given three cases, and I have done so advisedly, believing they would sufficiently elucidate the practice ; the which a greater number would scarcely do better, whilst they would swell the paper beyond the limits of a weekly periodical.

I have several others, all equally favorable in their results; and those given are not picked ones, chosen for their peculiar happy terminations. The rest are equally satisfactory.
disease of the knee-joint, probably in the first stage of the condition known as brodie's disease, or pulpy thickening.

Elizabeth Thompson, aged 34, mill-girl, a pale and sickly person, applied with a diseased knee-joint.

The left knee is much enlarged, the increase in size having the form of the synovial membrane, smooth and regular, soft to the feel, with an indistinct fluctuation felt equally in all parts. Patella free; rides a little ; the motion limited, but not painful ; handling it gives more pain above the patella than elsewhere; striking the patella produces an aching
pain; striking the sole of the foot none. Behind, and a little above the popliteal space, is a small fistulous opening, discharging a small quantity of thin ichorous matter ; a probe introduced passes only a short distance. The bearings of the joint are a little altered, tibia being drawn backwards and outwards; by measurement, it is one inch greater in circumference than the sound one; when at rest, it is not very painful, only aches a little. She manages to hobble rather, than walk on it, but only for very short distances at a time, and even this is extremely painful.

General Health.-She is weak and feeble, and has a troublesome cough, attended with considerable expectoration of tenacious mucus.This she has had a long time. Auscultation detects a few large crepitations in the left apex. The resonance is but little diminished. Right apex healthy. Pain at the lower part of the back, which is occasionally exaggerated,-thinks about once a month. Has not had any menstrual discharge for the last two years. Urine scanty; bowels regular.

History.-Is single, but the mother of two children,-youngest 8 years old. Had typhus fever 18 years ago, and has never been quite well since. Two years ago, her laft leg began to fail her, more in the thigh than any elsewhere; and once she fell down, while standing at her work, from sulden failure of power in the limb. Soon after this, a large abscess began to show itself in the back and lower part of the thigh; also a smaller one higher up. At this time, she says, the knee was not bad. The lower abscess burst, and gave exit to about a quart of pus; this kept on a while, diminishing to its present condition. The upper abscess now disappeared. Now, also, was the time, she says, that the knee first began to be painful, but never severcly so, constantly aching and shooting. From this time it slowly increased in size up to its present condition. The pain of the joint was always increased at what ought to have been her catamenial periods. Has never had much treatment of the joint. A surgeon, who saw her early in its disease, ordered the cold lotions, but nothing more. An attempt to blister it was once made, but failed; further than this, it has been unmolested by remedies of any sort.

Amputation has been repeatedly and strongly urged by a surgeon, but she refused to submit.

March 13, 1850, date of first application of the friction and strapping. -Ordered, ol. jecoris asel. $Z_{j}$ j. ter die ex cyatho lactis. Grod diet.

30th.—Things wearing a promising aspect; joint less painful, and more tolerant of the friction. Ol. jecoris not doing much, ordered, ferri sul. gr. j., ex inf. quass. $\xi_{j}$., ter die.

April 10.-.Toint less painful, and evidently smaller; health improving.

The friction to be increased in duration and force; pressure increased. Progress continuously good till, on July 7, we find this note:-

7th.-The joint is abou: the same size as the other; no pain nor tenderness about it.

August 12.-Joint still keeps well ; health rather feeble ; catamenia returned.
20.-The joint is now so well as not to require firther treatment. It is rather smaller than the sound knee; paimes: motion fice, casy, and very nearly as extensive as natural ; can walk on it without discomfort, and dance too. Expresses herself that it never was better in her life.

She continued tonics isme time longer, and wore a bandage rolled tightly round the knee.

August, 1851.-The knee continues well, but the health is very feeble.

## CHRONIC SYNOVIAL ENLARGEMENT of THE RIGHT kNEE-JOINT OF THREE <br> years' duration.-CURED.

Eliza Frost, mill-girl, aged 13, thin, and dark-haired, presented herself with discase of the right knee-joint.

The joint is considerably enlarged, the enlargement having the form of the snovial membrane. Measured round over the centre of the patella, it is just one inch and a half more in circumference than the sound one. It is soft, and yielding to pressure ; but there is not any sensation of fluctuation. The swelling is smooth and regular; handling the joint gives scvere pain. The motion is very limited, and causes acute suffering. The patella is free, and the synovial membrane under it feels smooth. There is slight displacement of the tibia outwards and backwards. She cannot bear the weight of the body on the affected limb. The heat of the joint is natural ; it is constantly painful, the pain being of an aching, gnawing character; she gets but little rest from it; at times the pain is increased to such an extent as to be positive agony; a slip or twist of a limb will cause this.

Her general condition is low and feeble ; appetite poor ; pulse weak and quick; tongue pale ; conjunctiva bloodless ; catamenia not established.

History-It is now three years since she first perceived the joint begin to swell: $\cdot \mathrm{it}$ was on her recovery from scarlet fever. It seems to have had no other treatment than lotions at first; but subsequenty, as the joint continued to increase both in size and pain, she applied to several medical men, who all treated it one way or another, but with no effect. Once, she says, "it was cut and a fluid let out." For two years, or nearly sc, she hal two issues.

April 24, 1850. -The joint to be treated with friction, strapping, etc.
From this date we find the plan regularly carried out, with gradual and uninterrupted improvement of the joint, up to August 10 of the same year, when it was considered to be quite well.

It was less even than the sound joint, healthy to the feel, quite pain!eas, and with as perfest and free a motion as if it had never ailed.

She was ordered to wear a bandage on the knee constantly.
The only medicine she took during the whole time was fer. sul. inf. r. guassix; which improved her general condition, and induced the catamenia.

August, 1852.--The joint continues well.
CIIRONIC THICKENING OF THE SYNOVIAL MEMBRANE OF THE ELBOW.
WHTH EFFUSION INTO THE JOINT, COMMFNCING IN CHRONIC PERIOSTITIS OF THE OUTER CONDYLE OF THE HUMERUS, THE BESULT OF A BLOW.
M. Worsley, aged 19, mill-girl, pale and sickly looking, applied for disease of the right elbow-joint. There is a swelling over the outer side of the joint, especially in the space between the outer condyle and the olecranon; here also is fluctuation evident. Examining the condyle, it does notseem thicker or in any way larger than natural, but it is very tender to the touch; the joint is a little hotter than natural ; its motions are slightly limited; they are not painful, neither does striking the hand give pain ; when at rest it is quite easy.

Her general health is very feeble, and she is generally anæmic; tongue pale, indented edges; pulse small, bowels open, urine free, catamenia regular, appetite good.

History.-The disease is of two years' duration, first arising from a blow over the condyle. At the time this was not painful, but shortly became so. Has had considerable treatment from different surgeons, hut without benefit.

March, 1852.--The joint to be rubbed with mercurial ointment and strapped. Pot. iodid. gr. iii. ex. cyath inf. quass. ter. die. Good diet, fresh air.

29th.-The improvement in all symptoms quite marked. Perge.
April 6th.-Still improving. Perge.
26th.-The improvement has been progressive; there is now no pain on handling the joint; it is neither more swollen nor hotter than natural ; motion is also painless. Perge.

May 3rd.-The joint is quite well ; feels as comfortable as the other; is natural in size and heat; its movement free. Health very good.

Merely to keep a linen bandage on it.
August 3rd.-Continues quite well.
Congleton.

SURGERY.
Result of the Ligature of the Large Arteries in 82 cases occurring in the practice of M. Roux.
The following eighty-two operations comprise the whole number of ligatures of arteries performed by 11 . Roux, since 1808, and were communicated by him to the Societe de Chirurgie. An abstract of the paper has been published in l'Union Médicale:-

## Arteries. <br> Operations.

Popliteal artery 1$\} 1$ Spontaneous Aneurism (ancient operation.)

Femoral artery $46\left\{\begin{array}{l}7 \text { Hemorrhage after amputation. } \\ 1 \text { Fermoral aneurism (Hunter's operation.) }\end{array}\right.$
2 Femoral ancurism (ancient operation.)
2 Fungus tumour of tibia.
( 27 Popliteal aneurism (Hunter's operation.)
f 10 False ancurism of the bend of the arm.
Brachial artery. $20\{2$ Hæmorrhage after amputation.
1 Spontaneous aneurism of the ulnar artery.
1 Fungus tumour of the radius,
Carotid (common) $6\left\{\begin{array}{l}1 \text { Fungus tumour of the orbit. } \\ 2\end{array}\right.$
( 3 As a precautionary measure before operation.
$\left.\begin{array}{l}\text { Axillary (immedi- } \\ \begin{array}{l}\text { ately below the ca- } \\ \text { vicle) }\end{array}\end{array}\right\} 4\left\{\begin{array}{l}1 \begin{array}{l}1 \\ \text { Spontaneous aneurism. } \\ 1 \\ \text { Recent, wound, with false aneurism. } \\ 2 \\ \text { Hæmorrhage after amputation at the shoulder } \\ \text { joint. }\end{array}\end{array}\right.$
Subclavian ... 3 Secondary hæmorrhage.
External Iliac 2 Secondary hæmorrhage after ligature of the femoral artery.

## Total ... 82

In these operations the distal mode of Brasdor has not been tried The old method 16 times; and that of Hunter, with Scarpa's ligature 66 times. The number of cases of true aneurism was 33 , of which two only were women. The results were, 10 unsuccessful and 23 cures. The number of false aneurisms was 10 , all of which were successfully treated.

Of the six cases of arterio-venous aneurism, for which the humeral artery was tied in each case, four were successful, and in two amputation was necessitated by gangrene or secondary hæmorrhage.

These statistical facts will be read with interest by the English Surgeon, by whom the thick ligature used by Scarpa is now carefully eschewed, but the small number of cases (4) in which secondary hæmorrhage occurred, will certainly bear out M. Roux in his attachment to this mode of operation. The difference between the English and French modes of conducting the ligature of arteries is so great, both in the operation itself and in the dressing of the wound, that we rejoice to find that the above facts will form part of a complete work on surgery, which M. Roux is now preparing, and of which the memoir presented to the Societé de Chirurgie is only an instalment.

## The Transmissibility of Syphilis by Sccondary Sores.

The time of the Academy has been almost entirely taken up for the last two months, by the discussion on the transmissibility of syphilis by inoculation with pus obtained from secondary sores. This discussion has been mainly confined to M. M. Velpeau and Ricord, the former of whom maintains the transmissibility, whilst the latter, as is well known denies it in toto, and offered to prove the negative before a commission nominated by the Academy. This offer, however, was not accepted by M. Velpeau, but as the discussion was not likely to lead to any decision in the face of the conflicting opinions of such eminent observers as M. M. Velpeau and Ricord, it was proposed by M. Bouilland and carried with one dissentient voice, that the commission should be appointed to take into their consideration this question, so important in the tratment of syphilis. The members of the commission have not yet been named, and we are afraid there will be some difficulty in selecting them.

## PlaACTICE of Medicine.

Aneurisms of the Arteria Innominata; their History and Differential Diagnosis from Alneurisms of the Arch of the Aorta. By T. S. Holland, M. D., M. R. C. S. L.
The author opens this continuation of a very elaborate paper by proposing the question :-With what disease is aneurism of the innominata most liable to be confounded? and adds in reply:-doubtless, with aneurism of the transverse portion of the arch of the aorta; and it is by contrasting the symptoms and signs of the two affections that I shall endeavour to arrive at their differential ciagnosis. In order to make this
comparison, the twenty-four most accurately reported cases (in which post mortem examinations were made) have been placed in a tabular form, drawn up in a manner nearly similar to that in which have been recorded Dr. Greene's * twelve cases of aneurism of the transverse portion of the arch, as his essay contains the most complete collection of aneurisms of that part of the vessel with which I am acquainted.
In the twelve cases of ancurism of the transverse portion of the arch of the aorta tabulated by Dr. Greene:
External well defined tumour occurred in.................................................. o
Alteration in the arterial circulation in................................................... 5
Dyspиœа in...................................................................................... 10
Pain in.......................................... ... .......................................... 9
Cough in....................................................................................... 12
Dysphagia in................... ............................................................... 9
Arterial murmur in................................................................................. 8
Voice altered in. ....................................................................................... 6
Partial Paralysis in.......................................................................... 2
Double sound over the sac in..... ........................................................ 1
Oedema in............................................................................................ 3
Stridulous respiration in...................................................................... 8
Dulness on Percussion in............................................................................... 9
Larynx dislocated in...................... ......................................................... 0
Clavicle dislocated in............................. ............................................ 0
Congestion of Veins in.......................................................................... 8
Hemoptysis in ........................................................................................ 1
Respiratory mumur altered in................................................................. 9
In the twenty-four cases of ancurism of the Arteria Innominata tabulated by the author :
External tumour occurred in.................................................... 21
Alteration in the arterial circulation in. ........................................ 20
Dyspnoea in. ..................................................................... . 19 . 19
Pain in.......................................................................... . . . 16
Cough in....................................................................... 15
Dysphagia in.......................................................................... 10
Arterial murmur in............................................................... 10
Voice altered in.................................................................. 10
Partial Paralysis..................................................................... 7
Double sound over the Sac in. ......................................................... 7
Oedema in. ......................................................................... 6
Stridulous respiration in............................................................. 5
Dulness on Percussion in...................................................... 5
Larynx or trachea dislocated in........................................... 4
Clavicle dislocated in. ............................................................... 4
Venous enlargement . ................................................................. 4
Bemoptysis in....................................................................... 2
Respiratory nurmur altered in.............................................. 1

* Dublin Quarterly Journal of Medical Science. New Series, Vol. 2, p. 1.

From this it is evident, he observes, that there is a well marked difference as to the probabilities of certain symptoms and signs presenting themselves in those affections, and I shall examine them in the order of their frequency in innominatal aneurisms.

External Tumour.-Aneurisms tend to enlarge in the direction in which the distending force is applied ; hence, as the direction of the current of blood in the innominata is upwards, and to the right side, a tumour formed in this vessel presents itself in the great majority of cases, above the inner third of the right clavicle, while the high position of the artery in the neck renders this one of the earliest symptoms. In aneurism of the transverse portion of the arch, the sac comes in contact with the posterior surface of the sternum: hence, external tumour is by no means so frequent as in the former case, and when it does occur, it generally appears at one side of that bone, usually on the left, as the current is passing to that side of the body. If the aneurism forms at the most superior part of the arch, it is resisted by the convex surface of the trachea behind, and by the sternum in front; then, passing upwards, it appears between the sterno-clavicular articulations; but in these exceptional cases the tumour does not show itself in the neck until the sac has acquired considerable size.

Alteration in the Circulation.-It is a law, that a dilatation on a tube, through which fluid is sent per saltum, has the effect of weakening the force of the current and converting an interrupted into a continuous stream, while the pressure of the sac on the vessel may still further lessen the volume of the fluid; but this latter condition is not essential to its production. The arteries given off from an aneurismal vessel ought, therefore, to pulsate weaker than in the healthy condition, or than the corresponding arteries on the opposite side of the body. We might, therefore, cunclude, from a priori reasoning, that in innominatal aneurism the pulses on the right side of the neck and in the right arm would be weaker than those in the left, and this is borne out by the cases before us. M. Dubrueil, alluding to retardation of the pulse, as a help in the diagnosis, says, * that when a tumour is situated on the innominata, or on the origin of the left subclavian, the pulse of the corresponding side ceases to be synchronous with that in the opposite arm, sometimes even pulsating after its fellow, as well as being less developed;" but the diagnostic value of this sign can only be determined by future observations. Aneurism of the arch must effect equally the pulses on both sides of the body; but the tendency of the sac to enlarge towards the left should make us expect that it would in some cases compress the

* Obs. et Reflex sur les Anéurysmes de la portion assend, et de la Crosse de l'aorte, p. 157.
arterial trunks on that side, thereby causing the left pulses to be the weaker; this is confirmed by Dr. Greenc's and by other cases. A tumour of any kind pressing on the great vessels will cause comparative weakness, or even total absence of pulsation in the carotid, subclavian or brachial; hence the fact of the right pulses being weaker can only aid us in the diagnosis, after the aneurismal character of the disease has been established by other symptoms. Another source of error is, the occasional anamolous distribution of the vessels; this most frequently occurs in the radials, but by examining the other vessels on the same side, we shall be enabled to correct an opinion formed on the state of one artery ; a clot, or any change in the interior of the vessel may lessen the circulation through it, but the obstruction is at times only temporary, and if pulsation is absent or almost imperceptible in one vessel, while it remains also weaker in the other arteries on the same side, it would increase the probabilities that the trunk from which these vessels arose was aneurismal.

Dyspnoca.-We have seen that dyspnoea is rather less frequent in innominatal than in aortic aneurisms, and this is to be accounted for by the enlargement of the aorta being prevented by the sternum, thereby causing it to press more forcibly on the trachea. Further, the lung or pulmonary artery is far more liable to be compressed in cases of aortic aneurism ; and the left pneumogastric nerve, crossing the arch, brings it frequently in contact with aneurism of that part of the vessel, while the position of the right pneumogastric does not subject it to be compressed by aneurism of the innominata.

Pain.--This symptom appears to be less frequent in innominatal aneurism, and it has a marked tendency to be confined to the right side of the neck, right shoulder and arm, extending from this to the opposite side in some cases. In some, the pain was so intense as to form the chief subject of complaint, but its limitation, intensity, paroxysmal and apyrexial character, prove that it belongs to that class of pains caused by pressure on the nerves.

There is in many cases a dull, gnawing constant pain, which Dr. Law considers to originate in the charges produced in bone by the pressure of an aneurismal tumour. This double character of pain occurs independent of aneurism ; and further, bone may be extensively destroyed without pain being complained of. An important question here suggests itself, viz. Do cancerous or other non-aneurismal tumours cause absorption of bone? I can only find two cases recorded that bear upon this inquiry, and if they can be considered as examples of absorption of bone, they form exceptions to a rule which, if placed beyond doubt, would form a valuable diagnostic symptom of aneurismal disease, viz.
that aneurismal sacs are the only intrathorasic tumours which by their pressure can cause absorption of bone.

Cough. --'The relation of the tumours to the recurrent laryngcal nerve and the communication of this motor branch with the superior laryngeal or sensory nerve of the larynx, explains why cough shoull be the most frequent sympiom in aneurisms of the arch, while it was present in only five-eighths of the cases of innominatal aneurism.

Dysphagia.-This symptom is nearly twice as frequent in aortic as in innominatal aneurism, although, looking to the relation of parts, the reverse ought, at first sight, to be the case. It is to physiology we must look for this apparent anomaly. From M. Claude Bernard's experiment, who demonstrated, that section of the pneumogastric nerves caused forcible contraction of the lower part of the œsophagus; and from the frequent occurrence of dysphagia in cases where the post mortem failed to exhibit marks of compression of the œsophagus, I believe, the frequency of dysphagia in aneurisms of the transverse portion of the arch is in many cases to be explained by the pressure exercised by the sac on the left pneumogastric nerve, as it passes over the arch, causing forcible contraction of the lower part of the œsophagus.

Abnormal Artcrial Murmurs.-These sounds have a tendency to extend in the direction in which the current is passing ; hence they are heard in the right carotid or subclavian in innominata aneurisms, while the murmur was confined to the region occupied by the sac in all Dr. Greene's cases in which this sigh occurred, and if the sound was propagated in this latter affection, it would, most probably, be into the vessels on the left side, or, as has been frequently observed, downward along the spinal column posteriorly. The direction in which the arterial murmur extends, will, therefore, be a guide to us in the diagnosis, and future observations should be directed to determine if an innominatal aneurism is capable of causing a murmur along the descending torta.

Alteration of the Voice.-This, being most frequent in aortic aneurism, is to be attributed to the position of the sac, rendering it more liable to compress the trachea or recurrent laryngial nerve, than if the disease was confined to the innominata.

Partial Paralysis.-The relations of the tumour of innominatal aneurism with the right brachial plexus explains why loss of sensation or motion began in the right arm in all the cases in which it occurred, with but one exception. Weakness of the left arm was complained of in the case of aortic aneurism ; partial loss of power over both arms in another.

CEdema.-Began in the right side in the six cases of innominatal
aneurism in which this symptom is mentioned, and may have been caused by pressure of the sac on the right vena innominata; pressure on the right common lymphatic duct may have been an additional cause of ædema.

Double Sound over the Sac.-The difference in the frequency with which this sign occurs in these affections is very remarkable, as it was heard seven times in innominatal, and only once in the cases of aortic aneurism. Two opinions are entertained regarding this phenomenon; in one, it is considered to originate in the sac; in the other, it is referred to the second sound of the heart being propagated to the tumour. In a case of aneurism of the arch of the aorta, which I had an opportunity of examining in the Royal Infirmary of Edinburgh, double sound was heard over the tumour, without the faintest murmur, while a distinct bruit de souffet accompanied both sounds of the heart; this, and similar cases, argue in favour of the opinion that an aneurismal sac can per se, produce sounds similar to those of the heart.

Venous Congestion.-This is among the most frequent symptoms of aortic, and one of the rarest in innominatal aneurisms, but the proportion in which it occurs in the latter will be probably increased by future observations.

Altcration in the Respiratory Murmur.-This sign first pointed out by M. Chomel, and believed by him to depend upon pressure of the sac on the bronchus leading to the affected lung, Dr. Holland believes, from the experiments of M. Claude Bernard and himself, to be caused in most instances by the pressure of the tumour on the pneumogastric nerve distributed to the lung in which the modified murmer occurs.

From the foregoing review of the symptoms present in these affections, the following rule, says the author, may be deduced, viz.: That the symptoms and sigus of innominata aneurisms have a general tendency to occur on the right side of the body, and those of aneurism of the transverse portion of the arch of the aorta, on the left.

The following conclusions, however erroneous and imperfect they must of necessity be, represent, I believe, the present state of our knowledge of the differential diagnosis of aneurisms of the transverse portion of the arch from those of the arteria innominata; and contain, I trust, some of the elements of a diagnosis that clinical observation will bring to perfection :

In aneurisms of the arteria in-nominata:-
I. External tumour is a frequent and early sign, situated generally above the inner third of right clavicle.
II. Arteries in right arm, and on the right side of the neck and head generally pulsate weaker than those in the left.
III. Stridulous respiration, cough, dysphagia, alteration in the voice, and dyspnea, are comparatively rare.
IV. Pain, œdema, and enlargement of the veins, begin in right arm or the right side of neck and head; they may finally extend to the left side.
V. Partial loss of sensation or motion in the right arm is a frequent symptom.
VI. Dislocation of the clavicle, trachea or larynx, a comparatively frequent occurrence.
VII. Alteration in the intensity of the respiratory murmur occurs but very rarely, and then it is weaker in the right lung.
VIII. Abnormal arterial murmurs in the right carotid or subclavian.
IX. Pressure on the right carotid or subclavian diminished or stops the pulsations of the tumour.

In aneurisms of the transverse portion of the arch.
I. External tumour occurs comparatively rarer and later, situated generally at the left side of, or under the sternum.
II. Arteries in left arm, and on the left side of the neck and head, generally pulsate weaker than those on the right.
III. Stridulous respiration, cough, dysphagia, alteration in the voice, and dyspnœa, are comparatively frequent.
IV. Pain œdema, and enlargement of the veins, begin in left arm or in the left side of neck and head; they may finally extend to the right side.
V. Partial loss of motion or sensation in the right arm is a comparatively rare symptom.
VI. Dislocation of the clavicle, trachea, or larynx, very seldom occurs.
VII. Alteration in the intensity of the respiratory murmur occurs very frequently, and then it is generally weaker in the left lung.
VIII. Abnormal arterial murmurs loudest in left carotid or subclavian ; heard also along the spinal column posteriorly.
IX. Pressure on the carotid and subclavian, on either side, has but little effect on the pulsations of the tumour.

## OPHTHALMIC AND AURAL SURGERY.

Growth of Medullary Cancer behind the Eyc-Removal of the entire contents of the orlit.-Recovery. Under the care of Mr. Laloyd.

Elizabetir Refves, aged eight, of dark complexion, stout, florid, and healthy-looking, was admitted on June 24th, 1852. Her left eye was disorganized, and pushed forwards by a tumour behind it, which projected considerably from the orbit. It presented a rounded, tense swelling, tender to the touch, covered in all parts by the everted and very vascular conjunctiva, and yielding to the finger a deceptive sense of fluctuation. The upper lid was distended, the lower one everted. On its outer and under part were seen the remains of the collapsed eyeball, the cornea of which was shrunken, white and opaque. She did not appear to suffer much pain in the tumour itself, excepting when handled, but she often complained of headache, which was chiefly referred to the forehead. The greater part of the day as well as the night she usually spent in sleep, from which she frequently awoke suddenly, screaming, as if in pain or a state of alarm. When awake, although in full possession of all her faculties, she appeared heavy and deficient in animation. Her pulse was quiet, tongue clean, and appetite fair; but she frequently vomited her meals,-a symptom which had been troublesome for some time previous to her admission. The history of her affection was, that the eye had been considered weak for more than four years, frequently exhibiting a bloodshot appearance ; its protrusion from the socket had, however, been first noticed only eight months ago, and had since rapidly increased. She had not suffered from any form of convulsions, nor had her sleep ever been interfered with.

Notwithstanding the apparent health of the child, no doubt was felt by Mr. Lloyd as to the real nature of the disease, but there still remained the important and difficult question as to the exact limits of its extension. If travelling along the course of the optic nerve it had already involved the brain, an operation which must necessarily leave behind it a considerable portion of the growth would be worse than useless. It seemed desirable, therefore, to defer for a few weeks the contemplated extirpation of the orbital contents, in order to watch more narrowly the suspicious symptoms, which made cerebral implication seems not improbable. During that time the vomiting ceased entirely, but the headache, drowsiness, and hebetude of manner still persisted, unattended, however, with convulsions, paralysis, or disorder of intellect. A consultation was accordingly held, in which Messrs.

Stanley; Lloyd, and Paget, took part ; and it being considered to be quitc possible for all the symptons of cerebral disturbance present to be due simply to distension of the orbit, it was determined no longer to defer the operation.

July 27.-The patient having been put under the influence of chloroform, Mr. Lloyd first enlarged the palperal aperture a little at each angle, and an assistant holding forwards the diseased mass by means of a vulsellum, he then proceeded to dissect out with curred scissors and scalpel the whole contents of the orbit. Every structure was carefully removed, including the cunjunctiva of the lower lid. Considerable hæmorrhage took place during the operation; on the completion of which the orbit was filled with lint, covered with powdered matico, and the bleeding at once ceased.

The removed mass, which was much broken down by the necessary manipulations, consisted of a pale grey substance, somewhat lobulated, and of brain-like consistence. lmbedded in its front lay the remains of the eye, which was shrunk to the size of a small bullet. The sclerotic, quite sound in every part, contained a dry black mass, very hard, and almost bone-like, probably consisting of the concrete remains of inner tunics, coloured by the choroidal pigment. The optic nerve at the cribriform opening was unaffected with disease: and, as not a particle of medullary structure existed within the eyeball, it appeared certain that the growth had commenced and progressed throughout external to it. In the middle of the tumour was a small mass of much firmer consistence than the rest, homngenous, yellow, and oily-looking; it was the size of a beall, and much resembled in appearance crude tubercle. Examined microscopically, the juice of the white structure exhibited in perfection the usual features of medullary cancer.

31 st.-No hæmorrhage or unfavourable symptom has occcured. The urper lid is, however, much swollen. Mr. Lloyd ordered three leeches to be applied to it.

August 2d.-She takes her food well and sleeps comfortably ; pulse quiet; skin cool; tongue clean; states that she has much less pain in the head than before the operation. The eyelids are very much swollen and inflamed. Hydr. chlorid. gr. i. pulv. Jacobi gr. ij., fiat pulv.; nocte maneque sumend. Hirud. ij. ; part. affect.

4th.-The lint was removed from the orbit without difficulty; no bleeding took place. The lids are less swollen. Ordered to omit the medicines, and to dress the whole, surface exposed, with a lotion of the chloride of zinc (gr. v. ad. $\boldsymbol{Z}_{\mathrm{j}}$.)
From this date the progress was very satisfactory ; the tumefaction of the lids subsided, and, falling flat down in front of the orbit, they com-
ple:ely concealed the mass of firm granulation structure by which its cavity was filled. She entirely lost her headache and drowsiness, and became cheerful and sprightly.

Oct. 28.--The little girl has now been quite well for some time: is entirels free from pain, and plays about as usual. There can be no question as to the great benefit which has up to the present time accrued from the operation.

When malignant disease occurs in childhood, it almost invariably atacks the eye itself, and we believe that the above case is one of the frst, if not the first. put on record, in which the deposit began in the structures external to it. Mr. Travers, without adducing instances, vaguely asserts that such is occasionally the fact,--a statement which Dr . Mackenzie appears strongly inclined to doubt. There can be no question as to the great rarity of the occurren e, and that in a very large majority of cases the growth commences in the eye, and, after piercing the sclerotic coat, than gradually invades the surrounding structures. Speculations as to the precise tissue primarily affected, however interesting, or unfortunately futile, as operations are never performed before the disease has involved more than one.

Respecting the symptoms which, in the above case, excited apprehensions of cerebral mischief, the sequel has, we think, proved them to have been due merely to the pressure occasioned by the morbid growth. We shall have occasion, in one of the following cases, to point out their occurrence with a severity even yet more ominous in a case in which the disease an hydatid cyst, was strictly limited to the orbit.

Medullary Cancer of the Eye and surrounding parts.-Removal. Recovery. Under the care of Mr. Paget.
William Nevil, aged two years and a-half, a very pale and miserable looking child, was admitted July 28, 1852, on account of disease within the left orbit, by which the eye had been quite disorganised. Itprojected from the orbit as a rounded swelling, by which the upper lid was distended and the lower everted, and presenting a very vascular and odematous conjunctiva. At its inner part was a portion in a black and sloughy condition, below which the remains of the now opaque cornea could be distinguished imbedded in the mass. To the finger the tumour was softish, elastic, and gave the same of psendo-fluctuation so commonly felt ouer masses of medullary cancer. The child was accustomed to sleep a great deal, but always appeared to wake in suffering; he complained much of his head and was very fretful. All the history that could be obtain-
ed was, that in Novernber, 1851, he had had an acute inflammation of the front of the eye, and that in February, 1852, the eycball had been first observed to protrude.

From the appearance and feeling of the tumour, together with the very cachectic condition of the child's health, but littie doubt could be entertained as to the nature of disease. It was, however, thought best to defer the operation a little time in order to give opportunity for estimating more closely the probability of the existence of cerebral implication.

August 21--Having decided that the pain in the forehcad was not more than might fairly be accounted for by the distended condition of the orbit, Mr. Paget determined at once to extirpate the whole contents of the latter. The child having been brought into the operating theatre and placed under the influence of chloroform, an exploratory puncture was first made into the upper part of the mass, by which the previous opinion as to its nature was confirmed. The conjunctiva was then divided round by the margins of the orbit, and the mass behind drawn forwards by an assistant by means of a strong ligature passed throught its centre, Mr. Paget proceeded to remove the whole by cutting behind it with a curved bluntpointed knife. The cancerous matter was found so abundantly diffused anong the muscles, etc., in the back of the orbit, and the whole together were in such a soft, half-diffluent state, that the latter part of the operation consisted rather in scraping out the cream-like stuff than in any process of dissection. Pretty profuse bleeding took place, but it was checked by filling the orbit with lint and the patient was then sent to bed.

During the first two days all went on very favourably, but on the 24 th hæmorrhage to the amount of an ounce occurred; it was, however, easily arrested by pressure, and did not recur. The orbit became filled with firm granulations, which were covered in front by the lids. The child was discharged from the hospital in the beginning of October, having then much regained his health, and the parts being quite healed.

Examination of the diseased Growth.- The remains of the collapsed globe were placed in the front of an obscurely lobulated mass of soft and brain like substance, of a greyish-white colour in most parts, but very vascular, and even ecchymosed, in others. No trace of the optic nerve could be found, and the growth appeared to have communicated with the interior of the eye through the cribriform opening, as the sclerotic, although thin, was entire in every other part. Within the eyeball itself was a mass of white, pulpy structure, the size of a marble, and in its centre a small, but well-defined lump, as large as a horse bean, which was solid, firm, and of a yellow colour, much resembling firm butter. The naked eye examination was confirmed by the microscope in its con-
clusion that the whole was an example of medullary cancer. Respecting the little yellow mass just described, we may observe that it is a condition very frequently found in malignant tumours, and that it is, with much probability, generally considered to be a kind of fatty degeneration of the cancer structure. An explanation proposed by some, that it is an altered conditon of the natural fat of the part, is negatived by the above case, as no fat exists naturally in the eyeball.

It would be premature to lay any great stress on the successful event of the two preceding cases as indicating the property of operations in the advanced stages of malignant disease within the orbit. They have recovered, it is true, but there is no telling how soon the disease may return. We hope at some future period to lay before our readers the history of their future progress, and to compare it with that of several others now under our observation, in which no operation has been performed or is contemplated. In the meantime, however, we cannot help observing, that it was impossible not to be struck with the improvement which resulted in each of these children within a short time after the operation. In the case under Mr. Lloyds' care, a good contrast was offered by the admission into the same ward six weeks after the operation had been performed on her of a little boy suffering from the same disease. While the one was frolicking about the room in all the joyousness of childhood, free from every source of pain or disquiet, the other although, not much emaciated, formed, as he sat on his mother's knee nursing his aching head, and evidently in a state of constant suffering, as pitiable an object as could well be imagined.

Acute inflammation of the lachrymal gland-Displacement of the Eyes Treatment by mercury.-Recovery. Under the care of Mr. Stanley.

Elizabeth Lipsham, aged 29, married, admitted May 10, 1852, on account of acute inflammation within the left orbit. She states, that four days ago, while walking in the street, she was seized with sudden pain in the eye, attended with a profuse flow of tears. The pain continued, and in the evening much redness and inflammation was apparent. On the following morning, she observed that the eye was pushed forwards, and at the same time the pain had become extended to the forehead. During the next three days the protrusion increased, and the pain was so constant and intense that she could not sleep at all. She had no distinct rigors, but a general feeling of chilliness during most of the time. At present her skin is hot ; pulse 60, of moderate volume, and
soft ; tongue coated. The protrusion of the eye is so great that the lids do not cover it ; the upper one is tense, and the lower one everted. The conjunctiva is tumid and very red; there is copius lachrymation. The eye projected at least half an inch from the socket, being pushed downwards and inwards; it is so far fixed as to be capable of very little motion. The pupils of the two eyes are of equal size, but that of the right acts more sluggishly than the other. Vision is dim, and during the night she is troubled with musce and scintillations. On pressure above the eye, the parts are felt to to be firm and tense, and great pain is given. The swelling is greatest at the upper and inuer part of the orbit, where the sulcus is more than obliterated, and there is considerable rounded prominence.

Milk diet. C. C. ad $\mathcal{Z}^{2}$ viii. temp. Pil. calom. cum jalap. gr. x. statim. Haust. antim. Potass. tart. caw magnes. sulph. $\mathcal{Z}_{\mathrm{ij} .,} 6$ tis. horis.

11th.-Has slept better during the night, and the pain is much relieved. The swelling above the eye is, however, rather increased, and the upper lid is ve:y tense; no sense of fluctuation can be detected. Mr. Stanley, fearing the effects of the tumefaction, and apprehensive of the existence of deep-seated suppuration, introduced a straight doubleedged bistoury through the upper lid, for at least an inch and a-half into the orbit, just below its upper margin ; a small quantity of blood only escaped. Pt. med

12th. -The condition of the eye is much the same, and the swelling not at all diminished. The wound male by the puncture has healed, and no matter has escaped. The pain is very much relieved, and she feels more comfortable.

The medicine is omitted on account of diarrhœa.
21st.-Is sitting up in bed, and states that she feels much better. The swelling is certainly a little subsided, and the conjunctiva is less congested; the movements of the eye are much more free.

26th.-A slight increase of inflammation having occured, Mr. Stanley ordered eight leeches in the temple, and the haust. antim. potass. tart. to be taken every six hours.

28th.-The medicine has depressed her a good deal, but not relieved the condition of the eye. She has slept badly, and complains of throbbing pain in the eyeball. The sclerotic is much congested, the iris dull and muddy, and the pupil irregular; on the posterior surface of the cornea are some small white spots. Ordered C.C. temp. ad $\xi^{\mathrm{vj}}$. By Calomel, gr. ij., pulv. opii, gr. $\frac{1}{8}$, sextis horis sumend. Broth diet.

30th.-Her gums are slightly sore, and the condition of the eye in every respect much improved. Pt. pil. o. n. sd.
June 4.-Rapidly improving. The inflammation of the tunics has quite subsided, and the swelling is so much lessened that the lids can be closed with ease. Gums sore. To omit the pills.

9 th.-The eye has now returned to its natural position, can be rolled with ease in any direction, is quite free from inflammation, and has perfect vision. Discharged.

Although acute inflammation of the lachrymal gland is of very rare occurrence, at any rate in the adult, yet there can be little doubt that such was the nature of the above case. The position of the swelling, the direction in which the eyeball was displaced, and the fact that, although the tumefaction lasted for near a month, yet no suppuration occurred, all strongly support such a diagnosis. Had such great and acute swelling resulted from inflammation of the cellular tissue of the orbit, an abscess would have been the almost inevitable consequence.

There can be no question as to the propriety of making free exploratory incisions into all swellings within the orbit which by their size in any degree endanger the integrity of the eye. Such a measure can do no harm, while it may be the means of preserving the sight ; and the surgeon would act unwisely who, under such circumstances, deferred it, because he could not detect actual fluctuation. It is much better done too soon than too late.

The benefit derived from the use of mercury was, in the above case, most marked ; and it must not be forgotten, that other depressing remedies had failed before it was resorted to. In the first severity of the attack, these latter, it is true, appeared successful ; but, when again employed, in the acute relapse, which occurred at a time when the patient's powers were reduced by several weeks' illness they seemed to aggravate rather than relieve the local disease. At this juncture a rather better diet was allowed, and calomel and opium pushed to ptyallism with the most happy effect.

## FORENSIC MEDICINE.

Mysterious Case.-On Wednesday Mr. Wakley held a lengthenedinquiry at the Sir Issac Newton, York street, Foley place, touching the death of Mr. David Lewis, aged 35, a master tailor, residing at No. 6, York street. The house keeper of the deceased deposed that he was a married man, but had lived for some time separated from his wife. On Monday morning deceased came home at a little before six o'clock.

He was not quite sober, but walked into the passage and up stairs to his room very steadily. He had not been there long when he became sick, and vomited considerably, complaining of a fall. He did not say that he had been ill-used. He had gone out between five and six ocluck on the Sunday evering for a walk, and was away all night. About a quater to one in the afternoon witiess went for a medical man, but de eased died before his arrival. Thomas Lewis, the deceased's brother, said he was with him at the Feathers, in Oxford-street, at about halfpait one on Monday morning. The deceased went outside, and in a minute or so the potman came ruaning in and told witness his brother han! been struck by some man. Witness instantly went out, and found deceased lying bleeding on the favement; he then pursued and overton'; the assailant, seized him, and, meeting with two policemen, told them the circumstances, but they refused to detain the man, remarking, " You are all a drunken lot, get away with you," and the man escaped. Mr . Newington, surgeon, said he had made a prst nortem examination of the body. There was a large fissure sufficient to admit the hand on the right side of the head, and extending down towards the left ear. There were from six to eight ounces of extravasated blood spread around ; and there was also an extensive laceration of the brain sufficient to admit the ends of four fingers. The skull was a very thin one. The Coroner said that it was a most extraordinary thing, and one he had never seen equalled in the whole course of his experience, that a man suffering from injuries sufficient to kill a dozen men should walk home in his senses, and remain so up to the time of his death, without ever showing the least symptom of such fatal hurts. Under all the circumstances, the safest course would be an open verdict. The jury consulted for some time, and eventually returned a verdict to the effect "That deceased died from laceration of the brain, caused by violence, but that how such violence was produced there was no evidence to show."Neus of the World, August 1.

# $\mathfrak{C}_{\text {amada }}$ Atchical Zommal. 

MONTREAL: DECEMBER, 1852.

A few months ago, we gave expression to our opinion of the absolute necessity of a controliing body in Upper Canada to regulate the study and practice of Medicine, and we advanced the doctrine, that the regular practitioner, if not protected from the incursions of the quack, soon loses his own self respect, and imitates what he cannot restrain*-he nolonger takes pride in belonging to a learned and honorable profession, but seeks remuneration from the trade of physic, and soon he converts what " is the noblest science into the vilest of trades." Hitherto these instances of back-sliding have been confined to remote districts, and the practitioners of our large towns have sustained a high and respectable standing in their respective communities. But within the last few weeks, the prosperous town of Port Hope, has been visited with an alarming outbreak of ___ the libel law admonishes us to modify the expression we were about to use, and we shall merely state, that the term was suggested by a perusal of the tollowing exquisite morceau, which we are informed was placarded all over the Town. The notice we received was like a play-bill, with every variety of type, and printed on pink paper:-
Dr. John Gilchrist in returning his acknowledgments to the inhabitants of Port Hope and the adjoining country, for the very extensive patronage he has received in his profession, takes this opportunity to inform such as may be under the necessity of procuring Medical or Surgical assistance, or advice, that he has now associated with him in business, Dr. Charles M. D. Cameron, that one or the other of them will be in constant attendance at their office in Port Hope, and give their undivided attention to the treatment of all diseases which may be presented for cure. They will perform all operations in surgery with neatness, safety and ease to the Patient, under the influence of Chloroform, or not, at the option of the party. In

* "The regular practitioner who has a family to support, sees that the illiterate quack gains ground more rapidly with the public than he does; he sees he cannot interfere with the Charlatan's progress, he adopts the next best step, he imilutes him, be is forced to do it in self-defence, at first the attempt is revolting to his finer feelings, he soon becomes callous, and if pecuniary reward follows his experiments, he feels he has got the recompense, the legitimate practice of his profession refused to afford.-Canada Medical Journal, p. 381.
all cases of a doubtful character, in addition to the usual methods of ascertaining the nature of diseases, they bring to their aid a critical Chemical Analysis of the Blood, or Urine, or both, where necessary ; by which they are enabled to come to a sure conclusion, as to the nature and cause of the disease, and proper and best means of cure. They also give information that they possess specifics, or certain infallible remedies, for the following troublesome and often dangerous complaints. $\mathbf{v i z}$ :-Erysipelas. Bronchitis, Catarrh, Inflammation of the Eyes, (either Sclerotitis or Conjunctivitis) Croup. Scarlet Fever, Chorea, (St. Vitus Dance,) Ague and Fe ver, Quinsy, Sore Mouth in nursing females. Hooping Cough, and for several other diseases. Diseases of the eye, the ear, the skin, whether requiring medical or Surgical aid, will be treated in a satisfactory manner. Complaints peculiar to the $\mathrm{Fe}-$ male constitution, will be managed with care and delicacy, and unrivalled success.
Patients unable to come to; Port Hope, can be visited at their residence, at a very moderate charge.

Who this Dr. John Gilchrist is we know not, but we have been informed that Charles M. D. Cameron was a student last year at M•Gill College, and having procured a license from the College of Physicians and Surgeons of Lower Canada, he turns his advantages to account, and despising all the notions instilled into him during his pupilage, he enters boldly the walks of * * * * *

We beg to remind the President of the College of which Mr. Cameron is a member, that it comes within the scope of his duty to take cognizance of such conduct, and we beg to inform him, that, however unpleasant the task, it nevertheless devolves upon him to visit, with the censure of the college, this scandalous attempt to lower the character of the profession. With the characters of the parties themselves we have nothing to do, they ought to be the best judges of the amount of injury such an advertisement is ealculated to effect, and as they have not hesitated to publish it, they must be considered beyond the pale of the profession, and cannot, of course, be considered any longer as regular practitioners, and, consequently, should be expelled from all Medical Associations, in which they may be enrolled.

Notice to Subscribers.-We now present our readers with the tenth number of the Canada Medical Journal, and beg to remind them that we commenced it, with the understanding that their subscriptions were to be paid in advance, and notwithstanding that we have made several appeals to their sense of justice, we have not received one-fifth of the subscriptions due to us. The matter resolves itself into a very simple form-the Editors do not intend, (as all their predacessors have done) embarrassing themselves with the expenses of
a periodical which should pay its own expenses, they do not intend paying for printing, \&c., out of their own pockets, they believe that in giving their time and attention to the management of the Journal, they do as much as can reasonably be expected from them, and consequently, if those indebted to them do not pay up before the termination of the volume, they must be content to do without the Canada Medical Journal. The Subscription list is larger than any other Medical Journal published in this Country, has ever possessed, and making all allowance for a certain percentage of non-paying readers (we cannot call them subscribers,) it should amply pay all expenses connected with its publication.

We have receivedfrom various quarters in this country and abroad, expressions of satisfaction with the manner in which we have performed our duties. We have procured contributions for the original department, which have been extensively quoted from, and copied into the Medical Pcriodicals of Great Britain and the United States, and we have reason to believe we have made such selections for our Scientific Department, as have met with the approbation of our country readers, and were calculated to supply the kind of information they most needed. In opening our pages to our French Canadian brethren, we were led to believe we supplied a large and intelligent portion of the profession in this part of the Province with a medium for communicating their views and making their researches generally known to the profession. It is not our fault that they have not more frequently availed themselves of this opportunity. We have also abstained from questions of a purely party character, and except on a recent occasion have excluded all matters of a personal nature. On that occasion we were forced to the step in consequence of a liberty taken with our name and reputation.

Having now spoken out plainly our intentions, and what we require, we place the matter, before our readers, and trust to their sense of right.

We copy the following from the "Ottawa Citizen," and are glad to have an opportunity of giving it insertion in our pages. We trust that the Medical Staff, of the Bytown General Hospital, will contribute to our pages the particulars of their interesting case.

## BYTOWN GENERAL HOSPITAL.

With much pleasure we give publicity to the following letters, which we regard as being bighly creditable to the parties whose names appear tharein, and take the opportunity of referring to the efficiency and use-
fulness of the Bytown General Hospital. The absurdity of "religious tests" is not heard of in connection with it-the only claim to admission being distress. During the past year upwards of two hundred patients have been admitted, with almost every description of disease, and it is gratifying to know that a great majority of the cases have been treated with success. Many difficult cases of Surgery have passed through the hands of the attending Physcian, one very recently of more than ordinary interest, known to the profession as "Strangulated Hernia." With respect to the Medical attend ance nothing more could be desired. Dr. VanCortlandt's high reputation is established by a long and eminently successful practice, and Dr. Cleophas Beaubien, we have good reason to believe fully merits the confidence of those who conduct the institution, and of the community. The institution is, we believe in a flourishing condition, and the support awarded to it is well deserved. Too much credit and consideration cannot be conceded to those truly humane and charitable females who watch over the afflicted with maternal solicitude, and unremitting vigilance.

Bytown, Nov. 15, 1852.
Doctor VanCortlandt, Sir,
I have the honor to inform you that our Attending Physician, Dr. Cleophas Beaubien, has expressed a desire to obtain a Consulting Physician for the Hospital, to which request I most cheerfully concede ; and as, both during the six years you officiated as our Attending Physician and subsequent thereto, you ever evinced marked attention, our choice unhesitatingly falls on you.-May I request therefore, you will inform me whether you have any objection to act in the capacity of Consulting Surgeon to the Bytown General Hospital.

I have the honor to be, Sir,
Your most obedient Servant,

Sister E. Bruxere, Superior.

Dr. VanCortlandt.

Bytown, Nov. 16, 1852.
Madame la Superieur,
I beg leave to acknowledge the receipt of your letter of yesterday's date, offering me the distinguished post of Consulting Surgeon to the Bytown General Hospital.

An uninterrupted attendance of six years duration, as the ordinary Medical Attendant to the Institution, served to convince me fully of its great usefulness, whilst your selection of me as first Physician there-
of, differing as I did from you in religious opinions, could not fail to convey very favorable sentiments of your liberality on the point. Under these circumstances, and so long as you do not make a Medical man's religion paramount to his usefulness, I shall accept, with pride, this distinguished mark of your favor, and feel happy to co-operate with a gentleman of Dr. Cleophas Beaubien's character.

I have the honor to be,
Madam la Superieur, Your most obedient Servant,

Edward VanCortlandt.
To Sister Bruyere,
Superieur Soeurs Grises, Bytown.

At the request of a subscriber we insert the following. It is well that medical men should know the law upon the subject.-Ed.

## LAW REFORM WITH A VENGEANCE!!

Previous to the sitting of the Division Court No. 1 of this County in August last, the Clerk caused a summons to be served on Dr. Moore a Medical Practitioner of long standing in the country and in "actual practice," to attend that Court as a juryman. The Doctor considered that medical men were exempted in all civilized countries from serving on juries, for the reason that from the nature of their professional duties it is often impossible for them to do so. He also thought that they were exempted by Act $13 \& 14$ Vic. chap. 55 , and that the summons was served by the functiouary who fills the office of Clerk, as a mere piece of petty annoyance, he therefore enclosed the summons, returned it, and paid no more attention to the matter. However on the first day's sitting of the Court, some persons met the Doctor in the street and informed him that his name had been called in Court as a juryman. He forthwith appeared in Court, and as soon as the case under consideration was decided, he addressed the Judge, stating that he had been summoned there as a juryman, but that he considered himself exempted by law-that it was impossible for medical men to serve, and that he therefore would refuse. The Judge replied that he had nothing to do with the jury act, that the Clerk did perfectly right to summon him. He then commenced reading part of the Division Court Act: at the end of every few sentences, repeating the words "I will fine you." When he had done reading he repeated "I will fine you," and after a pause, "I will think of it."

At the last sitting of the Court on Wednesday last, Dr. Moore again appeared in Court and demanded judgement that he might pay his fine. Judge Fairfield replied that the case was not then under consideration, and that it would be time enough to appear when called upon, but that by the Division Court Act Medical practitioners were obliged to serve as jurymen, and that if they refused he would fine them. The Doctor stated that he would refuse, and that he would appeal to the medical profession, and to the Legislature. Thus at present the matter stands, and we will only observe that if Medical men are obliged to serve on the juries of the inferior Courts, it must arise from an oversight in the Legislature, and will be remedied as soon it becomes generally known.. It cannot fur a moment be supposed that an enlightened Legislature would compel a Physician or Surgeon to abandon a patient in the hour of danger and of suffering for the purpose of dancing attendance on their petty Courts. One thing is certain, Judge Fairfield has been the first to raise the rod which he now holds " in terrorem," not only over the head of Dr. Moore but over that of every other medical practioner in the Province.

## $\mathcal{N e w}$ mode of taking Cod-Liver Oil.

Sir,-II have read Mr. Selwyn Morris's "New Mode of taking CodLiver Oil," and quite agree with his general principle of using a bitter infusion. I have been in the habit of recommending to my patients the use of pale or bitter ale as one of the best vehicles in which to take the oil, be it cod-liver or castor. This description of ale being intensely bitter, and tonic to boot, from the large quantity of hops used in its manufacture, serves the purpose admirably; and another advantage is, that it can be obtained more readily than a quinine mixture or an infusion of quassia; and, moreover, being a stimulant, the stomach is also beneficially excited to retain and digest the fatty oil. As an extempore vehicle, I have frequently used the concentrated infusion of gentian (of course, diluted) with good effect ; but when there is time to prepare an infusion, I would certainly give the preference to the quassia.*

* Note.-We have received a letter recently from one of our patients who, whilst in Dublin, consulted Dr. Graves, was advised by him to take Cod-Liver Oil, in infusion of quassia, which, no doubt that eminent Physician has found to conceal the taste of that valuable though disagreeable remedy. R. L. M. D.


## SUBSORIPTIONS HAVE BEEN RECEIVED FROM

Dr. Morrison, Toronto.<br>Dr. Tavernier, Montreal.<br>T. S. Huntly.


#### Abstract

A card.

TTHE Subscriber, thankful for past favors, begs to call the attention of his numerous friends, and of the public generally to his NEW ESTABLISHMENT KING STREET, WEST. Where he keeps constantly on hand a good supply of School Books and Stationery. As usual, the Ruinge and Binding department of his business receives his special supervision. He has now added a NEWSPAPER AGENCY department, and will be happy to order periodicals from any part of the United States, or Canada, on reasonable terms and with the utmost despatch.


Hamilton, 4th October, 1852.
S. HEWSQN.

## COLLEGE OF PHYSICIANS AND SURGEONS OF THE ONIVERSITY OF THE STATE OF NEW YORK.

The Forty-Sixth Session of the College will be commenced on Monday, 11th ot October, 1852, and continued until March 10, 1853, (commencement day.)

Alexander H. Stevens, M.D., L.L.D., President of the College and Emeritus Professor of Clinical Surgery.

Josefr M. Smitr, M.D., Professor of the Theory and Practice of Medicine and Clinical Medicine.

Join Torrey, M.D., L.L.D., Professor of Botany and Chemistry.
Robert Watts, M.D., Professor of Anatomy.
Willard Parker, M.D., Professor of the Principles and Practice of Surgery.
Chandler R. Gmanan, M.D., Professor of Obstetrics and the Diseases of Women and Children.

Alonzo Clare, M.D., Professor of Physiology and Pathology (including Microscopy.)

Elisha Bartlef, M.D., Professor of Materia Medica and Medical Jurisprudence.
Charles E. Isancs, M.D., Demonstrator of Anatomy.
FEES.-Matriculation Fee, 85 ; Fees for the full Course of Lectures, 8106 ; Demonstrator's Ticket, $\$ 5$; Graduation Fee , $\$ 25$; Board, average $\$ 3$ per week.

Clinical Instruction is given at the New York Hospital daily, by the Medical Offcers, (Professor Smith being one of them,) fee $\$ 8$ per annum; at the Bellevue Hospital twice a week, without fee, (Professor Parker and Clark belonging to the Medical Staff;) at the Eye Infirmary, without fee; and upwards of 1000 patients are annually exhibited to the class in the College Clinique. Obstetrical cases and subjects for dissection are abundantly furnished through the respective department.

The Annual Commencement is held at the close of the Session ; there is also a Semi-annual Examination on the second Tuesday of September. The pre-requisites for Graduation are--21 years of age, three years of Study, including two full Courses of Lectures, the last of which mast have been attended in this College, and the presentation of a Thesis on some subject connected with Medical Science.

In addition to the regular Course, and not interfering with it, a Course of Lectures will be commenced on Monday, 27th September, and continued until the 10th October.

This Course will be free.

R. WATTS, M.D., Secretary to the Faculty.

College of Physicians and Surgeons, 67 Crosby street, New York.

## 8T. PATRICK'S HOSPITAL, MONTREAL.

T
HE Clinical Courses of Lectures at this Hospital will commence on WEDNES-
DAY, the 3rd of November next.

Students requiring six months of either Clinical Surgery or Clinical Medicine to complete their Curriculum, can obtain them by attending these courses, as they are of six months duration.
A. H. DAVID, M. D.

Secretary

## st. PATRICX'S HOspITAL.

## Clinical Lectures.

IN addition to the subjects usually taught during the Winter Session, the Medical Officers of the above Institution, will deliver a COURSE OF LEOTURES, upon Special Subjects as follows:-
Dr. MaoDonnell
Diseases of the Chest. Female diseases, and diseases of the Urinary Organs.
Da. David, Diseases of the Skin and diseases of Children, \&c., \&c.

Dr. Hr. Howard,. On diseases of the Eye and Ear, with practical remarks upon all the operations on the Eye performed during the Session.
The Course will continue six months, commencing on Monday, 8th November. Each Lecturer delivering three lectures a week, for two months.

These Lectures are supplementary, to the ordinary Course of Clinical Instruction in Medicine and Surgery.

$$
\text { Fee for the Course, . . . . . . . . . . . . . . . . . . . . . . . . . . fs } 5 \text {. }
$$

Hospital Ticket, (six months)....................... 1 10s.
A. H. DAVID, M. D.

Secretary.

## ST. LAWREHCE 8OHOOL OF IESDICLNE OF MONTREAI.

indorporated by act of the provinolal parliament.

THE ensuing Winter Course of Lectures at this School will commence on TUESDAY, the 2nd of NOVEMBER next, and will be continued uninterruptedly (with the exception of the Christmas Vacation,) till the last week in April, forming a Session of six months.
Midwifery and the Diseases of Women and Children.................... T. O. T. Asnoldi, M. D., 9 o'clock A. m.
Institutes of Medicine (Physiology, Pathology and Therapeutics.) .. . . . . G. D. Grbs, M. D. 10 A. м.

Materia Medica and Pharmacy................G. E. Fenwiok, M. D., 11 o'clock A. x. Anatomy (Descriptive and Surgical)..........T. W. Jonrs, M. D. 2 " P. M. Theory and Practice of Medicine. . ..............A. H. David, M. D., 3 " $\quad$. .
Theory and Practice of Surgery.................R. L. MaoDonnell M D. 4 " $\quad$ м. M.
Ophthalmic and Aural Surgery. . . . . . . . ....... H. Howard, M. R.C.S.L. 5 " 5 P. $x$

Olinical \$urgery....
At the Montreal General Hospital by Dr. Arnoldi.
Olinical Medicine..
Olinical Ophthalmic
and Aural Surgery:. At St. Patrick's Hospital by Dr. MacDonnell.

The certificates of this School being recognised by all the principal Universities and Colleges in Great Britain and the United States, it will be to the advantage of setudents intending to complete their Profesional Education in either of those countries, to attend this School.


[^0]:    * Il y a des anti-septiques, toniques, réfrigérants, stimulants, et anti-spasmodiques.

    Les terres calcaires et les autres carbonates sont anti-septiques et agissent en absorbant les acides qui se forment durant la putréfaction.
    L'acide carbonique émanant des carbonates lorsqu'ils forment de nouvelles combinaisons, est aussi anti-septique, et en méme temps, un doux stimulant stomachique, dont l'utilité est reconnue.

    Le rêgne végétal fournit aussi une variété d’anti-septiques toniques et stimulants, qui peurent former des combinaisons très utiles: soit en infusion, décoction, teinture ou poudres.

    L'opinion me paraît inadmissible durant la 1re. 2me. et 3me. période ; ce n'est qu'après la cessation des symptômes propres à chacune d'elles, lorsque la maladie a pour ainsi dire, revêtu une forme secondaire telle que diarrhée ou dyssenterie qu'il peut être utile, sous ses différentes formes.

[^1]:    * Compare this remark of Abarbanel with what has been advanced by modero scientific writers as to the effects of blood-eating. See also p. 26.

[^2]:    הבהמות הכעלות נרה וכלל וה יעלה בידך כל הבהמות הטהורות יש להן ג ברסים ולריאה שלחו
    
     נ כרסים לעפות טהורות זפק וקרקבן וכרס א אטו גם לרנים הטהורים יש כרסים :
    *Sec. 259.
    $\dagger$ Sec. 82.

[^3]:    *The great Cabballist, Harabad (R. Abm. ben David) attacks this definition of Maimonides, briefly referring to the cases of the Shafan* and the Arncbet. The attack is, however, groundless and unjust, as it would appear, since Maimonides, though writing in the 12th century, writes like the great philosopher he was, just, as we have seen above, Cuvier in our age writes when discoursing of the Ruminantia of which animals as an order or class, Maimonides correctly speaks. He is ably defended, however, by the author of the Magid Mishneh who says: "From what oar teacher (Maimonides) himself writes else where, as well as from the explanations of Holy Writ, we know that the Shafan and Arnebet ruminate, but divide not the hoof. It is also known that it (the Arnebet) hath teeth, ineisors, in the upper jaw, as the Talmud inforns us, but with this our Rabbi was of a verity well acquainted, the proper interpretation of his words being this, Having already explained that clean beasts require both signs, his expression 'every beast which ruminates, dc.,' refers to the clean animals, which is indeed the case, as is slown in the Talmud which affirms-'You cannot find any of the clean animals which are ruminant that have incisors in their upper jaw.' Our author then explaing that every ruminant animal, i. e., that also does not possess incisors on the

    * The nomenclature of these animals is a subject for after consideration.

[^4]:    *"It was well known and manifest before him, who 'said and the world was' that the unclean animals exceed the number of the clean; therefore doth holy writ enumerate the clean ; and also that the clean fowl exceed in number the unclean, therefore doth the text enumerate the unclean"-Talmud, Treat. Cholin, Perek Elu Terephot, P. ©3., b. see the Magid Mishneh, which cites this passage, and one further (page 80 , of the same treatise,; to show that Maimonides is correct in the traditional rule he lays down as to the number and division of the enumerated animals.) There is a discussion-particularly interesting with reference to the knowledge of natural history displayed-as to the correctness of Maimonides' classing the shor habar, (geo nerally understood as the wood-ox) among the wild beasts, upon which subject there is a difference of opinion in the Talmud; but it is too lengthy, for more than ${ }^{2}$ passing notice. Its importance in fixing a charge of apparent self-contradiction on Maimonides, is but very small, since it can with truth be asserted, that he writes with reference to the opinions contained in the Talmud, as indeed the Magid Mishneh gives us good grounds for believing;-besides modern naturalists have disputed upon similar points, and it is not always profitable or necessary, to repeat the grounds of their opinions. The inquiring reader, will find this discussion on reference to the Magid Mishneh, the Keseph Mishneh, and other commentaries, published with the Yad of Maimonides, also to the Talmud, Treatise Filaim, Perck Oto Vëet Beno, bc. We learn however, that the shor habar, is, according to some, identical with the Tarbelah, Wild ox, or Buffalo, (see Targ. Onk. Deut. xiv, 5, Cholin fo, 80, a.) while according to others, it is of the goat kind.

