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THE CANADA LANCET

A Monthly Journal of Medical and Surgical Science,
Criticism and News.

Vol. XIII }
No. 8. }

TORONTO, APRIL 1, 1881.

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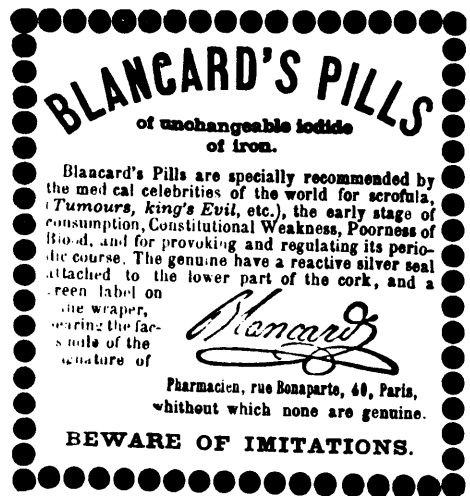
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E. J. DAY, F.C.S., M.R.C.S., L.S.A., M.M.P.A., R. & W. Medical Officer of Health, Public Analyst.

To MR. JAMES FELLOWS, London.

DORCHESTER, DORSET, ENGLAND, October 2, 1880.

Letter from D. J. WYRBANTS OLFERTS, F.R.C.P.E., I.P.C.S., L.M., British Government Surgeon for L. M. & D. District.

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J. WYBRANTS OLFERTS.

To MR. FELLOWS, Snow Hill, London.

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DAVID INGLIS, M.D., Instructor in Practice of Medicine.	F. H. KNICKERBOCKER, M.D., Curator of Museum and Librarian.

The Collegiate Year is divided into two sessions.

THE REGULAR SESSION opens Wednesday, September 8th, 1880, and closes March, 1881 (obligatory).

THE SPRING SESSION opens March 15th, 1881, and closes June 23rd (optional).

All candidates for the degree of Doctor of Medicine at the DETROIT MEDICAL COLLEGE must successfully complete the following system of training:

PRELIMINARY EXAMINATION must be passed by all candidates for admission who cannot present satisfactory documentary evidence that their acquirements are equal, if not greater than the standard adopted. Date of Examination, September 6th and 7th, 1880.

GRADED COURSE covers three regular sessions of six months each. The course of instruction has been so arranged as to carry the student progressively and systematically, from one subject to another in a just and natural order.

DAILY PRACTICAL WORK in Anatomical, Chemical or Physiological Laboratories during the first two sessions.

DAILY CLINICAL LECTURES during the first two sessions.

DAILY CLINICAL WORK in the HOSPITAL WARDS or DISPENSARIES during the entire last session. For this purpose the Senior Class is divided into small sections, and each section placed in charge of a Clinical teacher for one month. Then the sections change teachers, so that during the session every member of the Senior Class is taught to do clinical work in Diseases of the Eye and Ear, in Diseases of the Larynx, in Diseases of Women, in General Medical Cases, in Surgical Cases, in Diseases of the Skin and in Diseases of the Nervous System and in Obstetrics. Thus the student makes, or assists in making, examinations and in carrying out treatment, writes prescriptions and histories of cases, dresses wounds, applies bandages, watches the progress of pathological processes, internal or external, assists at operations, etc.

DAILY LECTURES AND RECITATIONS on the several scientific and practical branches of Medicine and Surgery during the entire three courses.

EXAMINATIONS at the end of each course on the studies of that course.

DIVISION OF STUDENTS.—The students are divided into three classes according to time of study and proficiency in study. Each class has its lectures, recitations, clinics, and Laboratory work distinct from the others. The small size of the several classes brings the student into intimate personal relations with his several teachers.

Three Hospitals—Harpers, St. Mary's and St. Lukes—with two large free Dispensaries, afford abundance of clinical material. All lectures are delivered on Hospital Grounds. The peculiar feature of this school is the intimate relations between its Didactic, its Laboratory and its Clinical teaching.

FEES.—For Regular Session, Registration, (yearly)	\$ 5 00
Lecture Fees	75 00
Final Examination	30 00
Lecture Fees to Third Course Students	50 00

Hospital Tickets free to all who take out other Tickets.

For Spring Session, the fees are \$10 to those who attend the Regular Course. All others are required to pay \$25, but \$15 of this will be credited on the fees of the next Regular Course attended. All fees payable before Matriculation Examination, to the Secretary, but are returned if the applicant fails to pass the examination.

Announcement and Catalogue, or more detailed account of the above can be promptly obtained by addressing the Secretary,

LEARTUS CONNOR, M.D., 92 Cass Street, DETROIT, Mich.

N.B.—Under no circumstances will there be any reduction or remission of any of the published requirements of the College.

JOHNSTON'S
FLUID BEEF
IMPROVED COOKERY.
 OR, THE

SCIENTIFIC PREPARATION OF FOOD

Has lately occupied some public attention, and it may be anticipated that a more general knowledge of the chemical composition, preparation, and physiological effects of food will be the result. In this connection we submit the latest theory for the preparation of a perfect beef tea or "hygienic food," and in soliciting a perusal, trust it may prove not uninteresting.

Every vital action, mental or muscular, is accompanied with a proportionate waste in the structures of the body, and to renew this continuous waste is the ultimate design of all food. In order that food may be thus transformed into the various parts of the living organism, it is first essential that the materials of such structures shall be contained in the food supplied, for the human system is absolutely incapable of producing muscular fibre, cellular tissue, blood, brain, bone, etc., out of substances which do not contain the elements of which those organs are composed. And in proportion as food contains such elements in an available form, so is it termed nutritious or otherwise. Extract of Meat, or Beef Tea, is everywhere acknowledged as a harmless stimulant, serviceable in prostration, or as an adjunct to easily digested food; but outside medical or scientific circles it is not generally known that such extracts are simply the flavor of meat (technically the soluble salts of flesh), and as such are not in any real sense nutritious. In this connection we quote from the standard authorities, Drs. Edward Smith, H. Letheby, and Baron Liebig:

In the paper read by Dr. EDWARD SMITH before the British Association, August, 1883, he says of Meat Extract: "When, therefore, you have excluded fat, fibrine,

gelatine and albumen, what have you left? Certainly not meat, as we understand the word, for nearly every part of it which could be transformed in the body and act as food is excluded, therefore "Liebig's Extract of Meat" is not meat. It is clearly meat flavor. It is THE PLAY OF "HAMELT" WITHOUT "HAMELT," IT IS MEAT WITHOUT MEAT. Its true nutritive value is that which classes it with tea and coffee, and makes it a nervous stimulant. THE DELUSION rests with those who would regard it as a nutrient in the sense of meat or bread." And again: "Let its precise value be made known. Then we shall no longer have sick and dying men, women and children fed with Liebig's Extract of Meat, under the delusion that it is nutriment in the ordinary sense. Liebig's Extract is meat flavor—a nervous stimulant, and has good qualities, BUT IT IS NOT FOOD. All that is necessary for nutrition should be added to it."

The "London Examiner" says: "In making up the International Scientific Series, Dr. Edward Smith was selected as the ablest man in England to treat the important subject of foods." In his treatise on food, page 88, Dr. Edward Smith says:—"There is but little left in the extract to nourish the body, and the elements which it really possesses are salts and the flavor of meat which disguises the real poverty of the substance. If it then be asked why so much of the flesh is thus unused, we answer that only the soluble parts of the meat could be obtained in this form, whilst the insoluble but most nutritious parts are left behind, and only such of the soluble parts are retained as do not put on the putrefactive process, and hence nearly all nutritious matters are excluded. If it be further asked whether the popular belief in the value of this food is altogether based upon fallacy, we answer no, for it is a valuable addition to other foods, since it yields an agreeable flavor, which leads to the inference, however incorrect, that meat is present. If, however, it be relied upon as a principal article of food for the sick, it will prove a broken staff. ALL that is required for nutrition should be added to it. Liebig, in a letter to the "Times," stated that it is not nutriment in the ordinary sense, and Prof. Almen has shown the small nutritive value of this substance in the Transactions of the Medical Society of Upsala, in 1886." "USED ALONE FOR BEEF TEA IT IS A DELUSION."—Page 89.

Dr. H. LETHBRIDGE says: "False views have been entertained of the nutritive power of Extract of Meat, for as one pound of it represents the soluble constituents of 34 pounds of lean meat, it has been assumed that its nutritive power is in like proportion, but Liebig has taken care to correct this error by showing that the Extract merely represents the soup or beef tea obtained from that quantity of meat, and as it is deficient in albumen, it must be conjoined to substances which are rich in this material."—Cantor Lectures on Food, p. 165.

In the "Lancet" of November 11, 1886, Baron Liebig says:—"Were it possible to furnish the market at a reasonable price with a preparation of meat combining in itself the albuminous together with the extractive principles, such a preparation would have to be preferred to the "Extractum Carnis," for it would contain ALL the nutritive constituents of meat." Again:—"I have before stated that in preparing the Extract of Meat the albuminous principles remain in the residue; they are lost to nutrition; and this is certainly a great disadvantage."

For further reference see the works of Voit, Meissner, Bunge, *The British Medical Journal*, 1872, or any late authority on the subject.

To obtain a perfect Beef Tea, then, it is essential that the albumen and fibrine (which are the flesh-forming or nutritious qualities of meat) shall be added to the extractive or stimulative qualities, and that these shall be present in a form admitting of easy digestion by the most capricious and irritable stomach. This is the theory which led to the preparation of "JOHNSTON'S FLUID BEEF" (the only meat extract which fulfils all the conditions of a perfect food).

The "Christian Union," Glasgow, Sept., 1878, says:—"Some time ago a leading London journal threw out the suggestion that it would be a good thing if some practical analyst, or somebody else, would discover an extract of unusual strength-renewing property to resuscitate the enfeebled constitution of those who, by over-work or study, had sacrificed themselves. The idea was admirable, and one which thousands have often expressed. And it will be surprising and welcome to such to learn that there is already an Extract just of the nature so ardently longed for. We refer to JOHNSTON'S FLUID BEEF which possesses all the nutritive properties that can possibly be contained in any preparation."

The "Lancet," London, July 13, 1878, says of JOHNSTON'S FLUID BEEF:—"The peculiarity of this preparation is that the ordinary Extract is mixed with a portion of the muscular fibre in a state of such fine division that the microscope is required to identify it. It is unnecessary to say that the actual food value of the Beef Tea is greatly increased by this admixture, and the medical profession have now a Fluid Meat which is comparable in nutritive power to the solid. The new preparation is excellent in flavor, and we cannot doubt that it will be very extensively used."

JOHNSTON'S FLUID BEEF, then, is essentially an Extract of Beef, prepared upon the most approved principles, but differing from all other Extracts or Essences or Beef Tea, inasmuch as it is in combination with the actual Beef itself, and that in a form so assisting nature in the process of digestion that it is readily absorbed by the most hopeless dyspeptic or prostrate infant. Animal food offers a means of strength not furnished by any other article of diet, but from an enfeebled state of the digestive apparatus such nourishment has not hitherto been available to many who most require it. Digestion proper is the process by which food is chemically dissolved so that the nutritious elements which it con-

New Hypodermic Syringes!

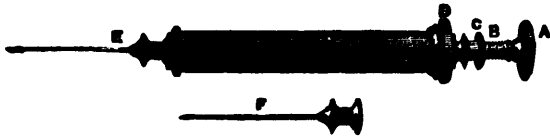


Fig 18.—No. 2.

These cuts (two-thirds the actual size) represent a New Hypodermic Syringe of our Manufacture. With the exception of the needles, it is of German Silver, a material chosen as possessing, next to steel, the greatest rigidity and durability, while free from liability to oxidation. The barrel is formed by a process peculiar to ourselves, securing uniformity of calibre without soldered joint or seam. It is plated inside and outside with nickel. The piston is packed in the double parac-ute form, with leather prepared expressly for the purpose. It will be found to retain its elasticity, to operate smoothly, to resist all tendency of fluid to pass above, as of air below it. A nicely-engraved scale upon the piston-rod indicates minims, thirty being the capacity of the Syringe.

Syringes Nos. 2, 3 and 4 have also a screw thread upon the piston-rod, and a traverse nut, thereby favoring the utmost nicety in the graduation of doses.

No. 3, Compact, has hollow piston-rod to receive one needle, also a protecting cover and fluid retainer; it may be carried in the Pocket Instrument or Vial Case, or without any case.

No. 4, Compact, is like No. 3, with the addition of a second needle, carried upon the Syringe in the usual place, protected by a metal shield. Nos. 1 and 2 are put up in neat morocco-covered case, with vial.

Two sizes of needles are furnished with each instrument, Nos. 1, 2 and 4; one only with No. 3. They are of refined steel, carefully tempered, and thoroughly plated with gold; they are of small diameter and large relative calibre, sharpened to such an angle as will offer least resistance to penetration, and therefore cause least pain. At the point of union with the socket they are reinforced with an outer covering of German silver, thereby overcoming the tendency to become broken at this place. They are connected with the barrels by a screw thread.

Prices: No. 1, \$3.50. No. 2, \$4.00. Postage, .03.
 " No. 3, \$2.50. No. 4, \$3.50. " .02.

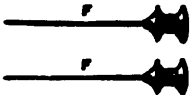


Fig. 3.

These Syringes are so thoroughly and strongly made as to be free from the annoying accidents common to most Hypodermic Syringes; and we believe that for convenience, durability, and nicety of construction, they have no superior.

OTHER HYPODERMIC SYRINGES.

- | | | | |
|---|--------|--------------|-----|
| No. 7, glass-barrel, graduation engraved on barrel, with screw nut on piston, nickel-plated mountings, two best steel gilt needles, in neat case..... | \$3.00 | Postage..... | .02 |
| No. 9, glass, graduation engraved and numbered on piston-rod, with screw nut, two best steel gilt needles, in neat case.. | 3.00 | | .02 |
| No. 7 or No. 9, with two steel unplated needles, either..... | 2.50 | | .02 |
| No. 10, glass, Luer's (French), graduation as No. 9, one gold needle and two steel needles, silver mountings, neat velvet-lined morocco case..... | 12.00 | | .02 |
| No. 11, glass cylinder, fenestrated, nickel-plated metal mounting (see cut)..... | | | |



No. 11.

As represented in the cut, the glass cylinder is encased in a metal mounting, fenestrated to show the graduations for minims. The instrument may readily be taken apart for cleaning, and, for those who prefer glass, is recommended for its non-liability to breakage. Price, with two best steel gilt needles, in neat case..... \$3.50 .02

Any of the above will be sent by return mail on receipt of price and postage.

HYPODERMIC SYRINGES OF ALL KINDS PROMPTLY REPAIRED.

Our new Illustrated Catalogue of Surgical Instruments, also a new Pamphlet on Inhalation of Atomized Liquids, by distinguished medical authority, with many valuable formulas, will be forwarded, postpaid, on application.

Atomizers and articles for Antiseptic Surgery, Aspirators, Clinical Thermometers, Elastic Hose, Electrical Instruments, Invalids' Articles, Manikins, Models, Ophthalmoscopes; Dr. Paquelin's Thermo-Cautery; Pessaries, Rubber Urinals; Sayre's Splints, and apparatus for every kind of deformity; Skeletons, Sphygmographs, Splints, Transfusion Apparatus; Vaccine Virus from our own stables; Veterinary Instruments; Waldenburg's Pneumatic Apparatus, &c., &c.

See our other Advertisements in successive numbers of THE LANCET.

CODMAN & SHURTLEFF,

Makers & Importers of Superior Surgical Instruments,

13 & 15 TREMONT STREET, BOSTON, MASS.

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BULLOCK & CRENSHAW'S

PERFECTLY SOLUBLE



Sugar Coated Pills !

HAVE BEEN PRESCRIBED BY PHYSICIANS WITH
CONFIDENCE SINCE 1858.

They are entirely reliable in every respect, and have been pronounced the most readily dissolved Pills in the market, after experiments by disinterested Pharmacists, in comparison with Sugar Coated Pills of various makers. Gelatine coated and compressed Pills.

The CENTENNIAL COMMISSION at PHILADELPHIA awarded them a DIPLOMA and MEDAL, for SUPERIORITY of FINISH and PURITY of INGREDIENTS.

No higher award could possibly be obtained by any other manufacturer.

Full Price Lists (with Recipes attached) furnished upon application. Physicians are requested to specify (B. & C.) upon prescribing Sugar Coated Pills, and they will obtain the desired effect.

FRESH AND RELIABLE VACCINE VIRUS AT \$1.50 PER CRUST.

BULLOCK & CRENSHAW,

Chemists and Importers,

No. 528 Arch Street, PHILADELPHIA

For Sale by H. SUGDEN EVANS & CO., Montreal, Que.
J. WINER & CO., Hamilton, Ont.

BULLOCK & CRENSHAW, PHILADELPHIA,

MANUFACTURERS OF SUGAR COATED PILLS.

MEADS ADHESIVE PLASTER SEABURY & JOHNSON

This article is intended to take the place of the ordinary Emp. Adhesive, on account of its superior quality and cheapness. It is pliable, water-proof, non-irritating, very strong, and extra adhesive. It is not affected by heat or cold, is spread on honest cotton cloth and never cracks or peels off; salicylic acid is incorporated with it, which makes it antiseptic. It is indispensable where strength and firm adhesion are required, as in counter-extension, or in the treatment of a broken clavicle. It has been adopted by the New York, Bellevue, and other large hospitals, and by many of our leading surgeons.

Furnished in rolls 5 yards long, by 1 1/4 inches wide.

Price by mail, per yard roll, 50 cts., 5 yards 40 cts. per yard.

BELLADONNA PLASTER SEABURY & JOHNSON.

IN RUBBER COMBINATION. Recent analytical tests conducted by Prof. R. O. Doremus, of Bellevue Hospital Med. College, and J. P. Battershall, Ph. D., analytical chemists, New York, to determine the comparative quantities of atropine in Belladonna Plaster, prepared by the different American manufacturers, disclosed in each case that our article contains a greater proportion of the active principle of Belladonna than any other manufactured. Samples of the various manufactures, including our own, for this test, were procured in open market by the above named chemists themselves. In the preparation of this article, we incorporate the best alcoholic extract of Belladonna only, with the rubber base. It is packed in elegant tin cases, (one yard in each case), which can be forwarded by mail to any part of the country.

Price, by mail, post-paid, \$1.00.

BLISTERING PLASTER SEABURY & JOHNSON

IN RUBBER COMBINATION. We incorporate, by a cold process, the whole fly (best selected Russian), with the rubber base, which constitutes, we believe, the most reliable cantharidal plaster known. It is superior to the cerate, and other cantharidal preparations, the value of which is frequently greatly impaired by the excessive heat used in preparing them, which volatilizes or drives off an active principle of the fly. By our peculiar process, no heat is used.

Price, by mail, per yard, \$1.00.

MUSTARD PLASTER SEABURY & JOHNSON

IN COTTON CLOTH. Superior to the best Mustard Plaster; does not crack or peel off, or tear when wet. Can be removed without soiling the skin. Always reliable.

ALL THE ABOVE ARTICLES TO BE OBTAINED OF CANADIAN DRUGGISTS AT PRICES MENTIONED.

SEABURY & JOHNSON'S PLASTERS AND SURGICAL DRESSINGS
Office, 21 Platt Street, New York. Samples sent on application.

ALWAYS SPECIFY SEABURY & JOHNSON'S PLASTERS.

SAVORY & MOORE'S SPECIALTIES.

PANCREATIC EMULSION or MEDICINAL FOOD, in Consumption and Wasting, will always take precedence of Cod-Liver Oil, by reason of its introducing the Stable Solid Fats into the system instead of the evanescent fluid fats or oils.

No Oily Emulsions of any kind, not even Cod-Liver Oil itself, can supply the kind of Fat necessary for sound and vigorous human life. In addition to this, all the Oily Emulsions are liable to rancidity, and most of them are highly objectionable in consequence of the Saponification, and ultimate Putrefaction, produced by the *Chemical Agents used instead of Pancreatic Juice, so that*

PANCREATIC EMULSION, or MEDICINAL FOOD, is the most reliable form of nutriment for counteracting all tendencies to Phthisis and other wasting Diseases. It presents to the Lacteals, Fat in essentially the same condition for assimilation and absorption as in the vigorous human frame, and the agent of the important change is the natural secretion of the Pancreas.

PHOSPHORISED COD-LIVER OIL. Originated by SAVORY & MOORE. The advantage of this preparation over the imitations of it consists in the ability to administer a SUFFICIENT dose of Phosphorus without the admixture of a LARGE quantity of Cod-Liver Oil. Supplied in bulk or small bottles.

PHOSPHORUS PILLS. 1-32nd of a grain, or any other strength required, non-resinous and perfectly soluble.

PANCREATISED (Digestive) COD-LIVER OIL. By combining the Pancreatic Juice with the Oil, the digestion of the latter is easily and rapidly effected, nausea is prevented, and the beneficial properties of the Oil are increased.

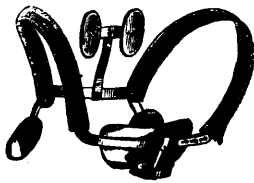
PEPTODYN, for Indigestion, a Combination of the whole of the Digestive Secretions—Pepsine, Pancreatine, Diastase, or Ptyalin, etc., forming an invaluable remedy in the treatment of all forms of Dyspepsia and all diseases arising from imperfect nutrition.

SAVORY & MOORE, 143 NEW BOND ST., LONDON, W.

AND ALL CHEMISTS THROUGHOUT THE WORLD.

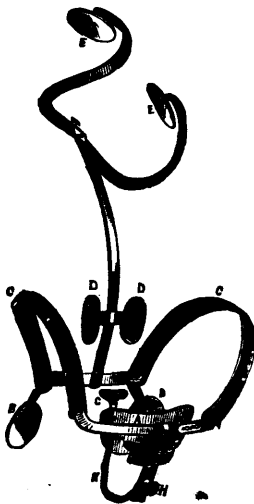
Fig. No. 3, a comfortable support to the abdomen, but is not so effective as No. 8 in supporting the bowels, spine or chest.

THE IMPROVED BODY BRACE.
FIG. 3.



ABDOMINAL AND SPINAL SHOULDER AND LUNG BRACE.
FIG. 8.

No. 8 is a general and grateful support to the hips, abdomen, chest, and spine, simultaneously and by itself a one, is ordinarily successful; but when not so particularly in spinal and uterine affections, the corresponding attachments are required.



THE BANNING Truss and Brace Company's SYSTEM OF Mechanical Support

Has the unqualified endorsement of over five thousand of the leading medical men of this country and Europe, and has been adopted by them in their practice

PRACTITIONERS

report to the Medical Journals and to us that cases of

Hernia, Spinal Deformities and Uterine Displacement.

which have gone through the whole catalogue of other Spinal Props, Corsets, Abdominal Supporters, Pessaries and Trusses,

Yield Readily to our System of Support.

AN EXPERIENCED PHYSICIAN IN ATTENDANCE FOR CONSULTATION.

Banning Truss & Brace Co.

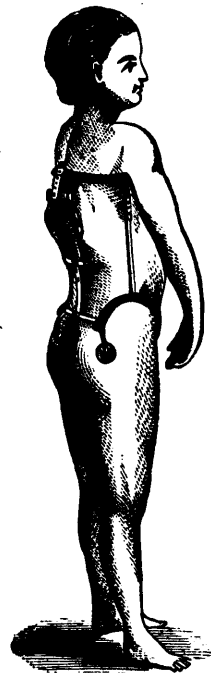
704 BROADWAY,

New York City.

NO OTHER OFFICE OR ADDRESS.

Send for our Descriptive Pamphlet.

FIG. 19.



HOW TO MEASURE FOR ANY OF THESE APPLIANCES.
1st. Around the body, two inches below the tips of hip bones.
2nd. Around the chest, close under the arms.

3rd. From each armpit to corresponding tip of hip bone.
4th. Height of person. All measures to be in inches. Measure over the linen, drawing the measure moderately tight.

No. 10. - THE IMPROVED REVOLVING SPINAL PROP, for sharp angular curvature, or "Pott's Disease" of the spine. Recent and important improvements in this have led to its adoption by the most eminent physicians.

ELIXIR GUARANA,

(PAULLINIA SORBILIS.)

Guarana is used with much benefit in cases of Sick and Nervous Headache, Neuralgia, Diarrhoea, Gastralgia, etc.

The active principle is analagous to Caffein, being found in Paullinia in five times the quantity that it exists in the best Coffee. The tonic influence allied with the stimulating effect renders it an exceedingly valuable medicine.

As its use has proven the entire absence of any irritating properties or any astringent effect, in Debility, Languor, Protracted Convalescence and Nervous Irritability, it is specially useful.

The effect is almost immediate in all cases of Headache, from whatever cause it may arise; but it is more especially beneficial in those produced by over excitement to the nervous system.

The usual mode of administration has been in powder; but the Elixir will be found not only more agreeable, but much more efficacious.

Each fluid ounce contains eighty grains Guarana.

For HEADACHE,—dose, a tablespoonful for an adult, to be repeated in an hour, if the first dose does not give relief.

For DIARRHŒA,—a dessertspoonful morning and evening.

For NEURALGIA, as a General Tonic for NERVOUSNESS, DEBILITY, etc.,—adult dose, a dessertspoonful three or four times a day.

JOHN WYETH & BROTHER,

CHEMISTS,

PHILADELPHIA.

AN IMPORTANT NEW REMEDY.
SUPERIOR TO PEPSIN OF THE **HOG.**

*A Powder:—prescribed in the same
manner, doses and combina-
tions as Pepsin.*

INGLOVIN.

VENTRICULUS CALLOSUS GALLINACEUS.

From the Gizzard of the Domestic Fowl, Pullus Gallinaceus.

A SPECIFIC FOR VOMITING IN PREGNANCY,

AND A

Potent and reliable remedy for the cure of **INDIGESTION, DYSPEPSIA,** and
SICK STOMACH, caused from debility of that organ. It is superior
to the Pepsin Preparations, since it acts with more cer-
tainty, and effects cures where they fail

PREPARED BY

WILLIAM R. WARNER & CO.

MANUFACTURERS OF

SOLUBLE SUGAR-COATED PILLS,

IN ALL THEIR VARIETY.

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SOLD BY DRUGGISTS THROUGHOUT THE COUNTRY OR SENT
BY MAIL TO ANY ADDRESS.

Physicians will please see that no other article is substituted.

TO PHYSICIANS.

Messrs Warner & Co.

Brooklyn, N. Y., August 10, 1878.

Dear Sirs:—It is with pleasure that I report to you briefly my experience, and also that of eminent Physicians, as to the valuable medicinal qualities of INGLUVIN, and testify to its superiority in all cases over Pepsin.

Drs. F. A. Howe and E. P. Hurl, of Newburyport, Mass., report a case of Chronic Dyspepsia as follows: Our associate in medicine, Dr. E. Cross of this city, was taken violently sick. For a time his life was despaired of; everything was tried but with no good effect. Finally, INGLUVIN was administered in doses varying from five to ten grains; to our surprise, the patient began at once to mend and rapidly convalesced. We cannot speak too highly of INGLUVIN in this case, it is certainly a valuable remedy.

Dr. F. W. Campbell, of Montreal, Canada, says that with INGLUVIN he cured three out of four cases of VOMITING in PREGNANCY.

Dr. C. F. Clark, Brooklyn, N. Y. has used INGLUVIN very extensively in his daily practice for more than a year, and has fully tested it in many cases of VOMITING in PREGNANCY, DYSPEPSIA and SICK STOMACH, and with the best of results.

Dr. Edward P. Abbe, New Bedford, Mass., mentions a case of vomiting caused by too free use of intoxicating liquors; INGLUVIN was administered in the usual way, the effect was wonderful, the patient had immediate relief.

A gentleman living in Toronto, Canada, gives his experience. He says, I was suffering terribly from Indigestion, I could eat nothing, life was almost a burden to me. INGLUVIN was prescribed in five to ten grain doses, the medicine was taken for about two weeks; result, a permanent cure.

In fact were I to note all the remarks of the profession and my experience in relation to this remedy, and report to you the cases in detail, you could fill a volume with expressions as to its great efficacy in the troubles for which it is recommended.

Yours Respectfully,

CHAS. H. BENNETT, 144 Luqueer St., Brooklyn, N. Y.

INGLUVIN

IN CASES OF DIARRHŒA, CHOLERA INFANTUM AND MARASMUS.

From the Cincinnati Lancet and Observer, August, 1877.

The prevalence of Cholera Infantum, Cholera Morbus, and Diarrhœa, to a greater extent at this period, induces me to call the attention of the medical fraternity to the lately introduced remedy called "INGLUVIN." I have been using it in my practice with very happy results for a considerable time, having originally called attention to the use of the simple lining membrane of the Gizzard of the Domestic Fowl. We find indigestion generally at the bottom of bowel complaints, which INGLUVIN has almost instantly corrected for me, alone or in combination. I give it in the following formulas:

INFANT FORMULA.

℞ Ingluvin, gr. xii.
Sacch. Lac., gr. x.
Misce et Ft. cht., No. x.
Sig.—One every 4 hours.

℞ Aqua Calcis, ℥ssj.
Spts. Lavand. Comp., ℥ss.
Syr. Rhel. Arom., aa ℥ij.
Tr. Opil., gtt. x.
Misce—Sig.—A teaspoonful every 2 to 4 hours.

FOR ADULTS.

℞ Ingluvin, ʒj.
Morphia Sulph., gr. jss.
Misce et Ft. cht., No. xii.
Sig.—One every 4 to 6 hours.

℞ Aqua Calcis, ℥ssjss.
Spts. Lavand. Comp., ℥ss.
Syr. Rhel. Arom., ℥vjss.
Tr. Opil., ℥ss.
Misce—Sig.—Dessertspoonful every 2 to 4 hours,
or after each evacuation.

In inflammatory affections, I combine INGLUVIN with subnitrate of bismuth, equal parts, and oleaginous mixture with ol. terebinth instead of aqua calcis. Should the evacuations be suddenly arrested, and tympanitis and colic supervene, follow with a dose of oil or magnesia, or injections. In many cases of sick headache and indigestion I have the most happy result from the combining of INGLUVIN with *Pv. Nux Vomica*, the one-twentieth to one-tenth grain. I have treated a case of Marasmus successfully with the INGLUVIN—see article contributed in "MEDICAL AND SURGICAL REPORTER."
A. F. SHELLY, M. D.

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ON PSEUDO-HYPERTROPHIC MUSCULAR PARALYSIS.

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GENTLEMEN,—The disease which I am about to describe is happily very rare in this or any other country. It is nevertheless very interesting, and well worthy our careful consideration. It is the first case of the kind I have seen in a practice of sixteen years, and is the first case recorded as occurring in the Toronto General Hospital, if not the first in Canada.

Synonyms.—Pseudo-Hypertrophic Spinal Paralysis, Progressive Muscular Sclerosis; Myosclerotic Paralysis; (Duchenne's Disease?) Lipomatosis Musculorum Luxurians Progressiva, &c., &c. The disease is clinically characterized by an abnormal increase in size of certain muscles accompanied by a diminution or loss of their functional energy. It was first described by two Italians, Coste and Gioja, in 1838, and subsequently by Meryon in 1852, and Rinecker in 1860; but the diagnosis from the descriptions given by these observers is not at all certain. It remained for Duchenne to point out distinctly the contrast between the weakened function of the muscle and its excessive size, in a case published by him in 1861. The first complete report of an autopsy was published by Eulenburg & Cohnheim in 1866.

The symptoms as detailed by Duchenne are as follows: 1st. Feebleness of the lower limbs first observed. 2nd. Lateral balancing of the trunk and widening of the legs in walking. 3rd. Lordosis, or "saddle back" curvature of the spine in standing and walking. 4th. Talipes equinus (or equinovarus) with over-extension of the first phalanges of

the toes. 5th. Apparent muscular hypertrophy. 6th. Stationary condition. 7th. Generalization and aggravation of the paralysis.

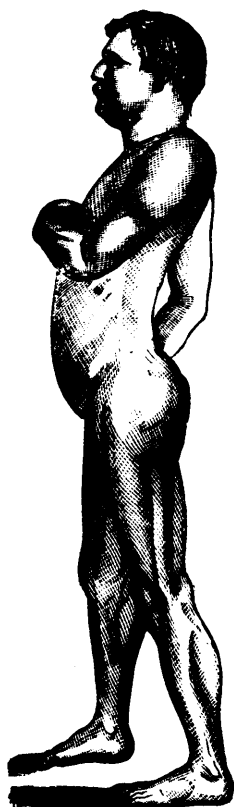
Instead of giving a detailed statement of the clinical characters of this disease as recorded by the authorities on the subject, I will give a description of the course and symptoms in the case of the patient before us, as I regard it as a typical one.

James Steele, æt. 24, unmarried; robust looking; apparently well developed, and well nourished; a Canadian by birth, and a shoemaker by trade. Family history good; parents and grandparents healthy, so far as can be ascertained. He has two sisters and one brother, all of whom are healthy. There is no evidence of specific disease. His father was a farmer, and the lad remained on the farm until he was 14 years of age, when he went to learn the shoemaking business owing to his inability to follow his father's occupation. The disease commenced by weakness of the legs and back when he was about 7 years of age, and continued slowly and gradually to increase. When he went to learn his trade he found that he could work tolerably well in the sitting posture, but complained greatly of stiffness of the knees, as if from long sitting. At this time, and up to within four or five years ago, he could walk without a cane. About two years ago he was compelled to give up shoemaking on account of weakness of the back, and inability to sit long in one position.

He was first admitted into the Toronto General Hospital in December 1878, for the treatment of sciatica of the left leg. The disease was supposed to have been occasioned by exposure to cold, and lasted about two weeks. He was confined to his bed most of that time, and the true nature of the disease which he has had since childhood was not detected by his then medical attendant nor by any one else in the Hospital. He left the Hospital at the end of two or three weeks, and was not heard from again until the 14th of April, 1880, when he was admitted under my care. From the admirable clinical lectures on this affection by Dr. Gowers, delivered at the National Hospital for the paralyzed and epileptic, London, and published with woodcut engravings of cases, in the *London Lancet* for July 5th, 1879, and three following numbers, and which I had read carefully at the time, I was able at once to recognize it as a case of *Pseudo-Hyper-*

* (Read before the Canada Medical Association at Ottawa, September 1st, 1880.)

trophic muscular paralysis. When admitted to the Hospital he was unable to stand without support; now he can stand alone unaided for a few minutes at a time, and for a considerable length of time when his knees are supported against a bed or chair. When he stands erect a line dropped perpendicularly from the 7th cervical vertebra to the floor falls considerably behind the sacrum, and several inches behind the curve in the spine.



He stands with abdomen prominent, shoulders thrown back, feet planted widely apart, and toes turned inwards. In walking the body swings from side to side; his gait is waddling, and progression slow. The extreme lordosis or "saddle back" curve so well described by Duchenne is well marked in this case. In some cases this condition is reversed, the spine being convex posteriorly in the lumbar region. There is no tenderness along the spine; the action of the sphincters is not impaired, and the sexual functions are normal; also secretions generally; appetite good; he sleeps well. There is very little disturbance of sensibility either in the sound or hypertrophied muscles. The

muscles of the calves of the legs are greatly hypertrophied, and quite hard—in marked contrast with muscles in other parts of the body, which are soft and flabby. The muscles of the left arm are also much increased in size. There is also some hypertrophy of the right deltoid, supinator longus and extensors of the forearm. The flexors are somewhat atrophied. There is great loss of power in the lower extremities and the patient has considerable difficulty in arising from or assuming the sitting posture, and does so by laying hold of some object, or by placing his hands upon his knees and raising the trunk. Some of the muscles respond feebly to galvanism, others do not. He has difficulty in crossing his legs when sitting, and there is entire absence of tendon-reflex. His intellect is quite clear. During sleep his arm and legs are strongly flexed. The "saddle back" curve entirely disappears when he sits down. This curve of the spine so conspicuous when standing, has by all authors, from Duchenne, been attributed to weakness of the extensor muscles of the spine, but Dr. Gowers in the clinics to which I have referred, gives it as his opinion that it is due to impairment of the extensors of the hip, which permits of a forward inclination of the pelvis, for, as he says, "when the patient sits down the pelvis rests on the ischial tuberosities, its inclination forwards ceases and the lordosis disappears."

The following are the measurements of different parts—

Chest.....	37 inches.
Waist	32 "
Right arm (mid)	10½ "
Left "	12 "
Right thigh (mid).....	17½ "
Left " "	17 "
Right calf	15¼ "
Left "	14¾ "

With reference to the order of occurrence of symptoms, weakness of the lower extremities is one of the earliest. It is gradual and not preceded by fever, as in spinal paralysis. In children it may commence to show itself when the child commences to walk. In Dr. C. T. Poore's analysis of 85 cases, published in the *N. Y. Medical Journal* for June, 1875, 3 never walked; 24 never walked properly; 52 walked well at first, and in 6 no mention is made of the period of walking. In the majority of the cases the disease commenced before the

ages of ten years, in 6 between the 10th and 16th year, and in 6 after that age—one at 24, one at 26, 1 at 28, 1 at 37, and one at 40. Duchenne states that the disease is sometimes ushered in by convulsions. Pain in the calves is occasionally present. The next stage is the development of the hypertrophy. Very often this comes on early, but it may not show itself for 6 months, or several years. It generally begins first in the calves, but it may affect other muscles of the lower extremities as the glutei, or even the upper, as the deltoid, biceps, triceps or trapezius. The muscles not hypertrophied may become atrophied and thus add to the deformity. At an early stage the hypertrophied muscles respond to electricity, but later they lose that property owing to pathological changes. The appearance of the patient soon becomes striking—prominence of the abdomen—projection backwards of the shoulders—lumbar curve—wide separation of feet in standing, with the toes turned inwards—swinging gait—slow progression—waddling motion, and difficulty in rising from the sitting posture. The skin in the affected parts is sometimes mottled—partly pale and partly bluish, owing to modified cutaneous circulation, and the temperature is lowered.

With reference to the etiology of the disease, cold, dampness and antecedent febrile disease are mentioned as probable exciting causes, but our attention may be chiefly directed to age, sex and heredity as predisposing causes. The disease is largely confined to children, and males are more predisposed to it than females. Eulenberg, in *Ziemssen's Cyclopaedia*, vol. xiv., states that "of 86 cases that are adequately reported, 70 occurred in males and only 16 in females, which constitutes a ratio of nearly 9 to 2. This circumstance is still more strikingly shown by the fact that when several cases occur in a family, the male members are sometimes the only ones affected. The influence of heredity is seen in the appearance of the disease among numerous members of a family. Barsickow mentions 24 cases in two families. Cases of two children of the same parents are numerous. Dr. Gowers mentions in his clinic, 6 cases as occurring in one family. Cases of three brothers are reported by Heller, Wagner and Seidel. Poore's table contains the following examples of heredity. In two cases a maternal uncle and aunt had the disease; in one, three maternal uncles and aunts were af-

ected; in one, one maternal uncle and half-uncle; in one, three maternal half-brothers; and in one, a maternal half-brother, three maternal uncles and other members on the mother's side. It does not appear therefore to be transmitted directly from parent to offspring, but is a marked example of atavism. The descent is almost invariably from the mother's side, and the disease shows itself almost exclusively in the males.

In regard to the prevalence of the disease, Dr. Gowers says that up to the time of his writing (July, 1879) only about 140 unequivocal cases had been reported. Since Dr. Gowers' article appeared three cases in one family, all males, have been reported by Dr. Milner Moore, of London, Eng., in the *Lancet* for June 19, 1880. The family consisted of seven children, five boys and two girls. Three of the boys aged respectively 15, 10 and 7, are subjects of the disease, the other four are healthy strong children. In *La France Medicale*, June 30, 1880, is the report of a death that occurred from this disease in the Hospital of St. Eugenie (a brother of this child died of the same disease in 1870). Cornil made a histological examination in the recent case, but has added nothing to what was known before. The writer adds, in this connection, that some facts tend to prove that the girls who seem so refractory to the disease with which their brothers are attacked may in turn transmit it to their children. Dr. Hammond, of New York, in his treatise on Diseases of the Nervous System, 6th edition, page 491, says, his personal acquaintance with the disease is limited to two cases and that it is exceedingly rare in this country, seven other cases only having been reported; one by Drs. Ingalls and Webber, of Boston; one by Dr. Wm. Pepper, of Philadelphia; one by Dr. S. Weir Mitchell, one by C. H. Drake, one by Dr. C. T. Poore, of New York, and two by Dr. G. S. Gerhard, of Philadelphia. This case is the only one, so far as I know, which has been reported in Canada.*

With reference to the morbid anatomy and pathology much remains to be discovered. Nearly all observers agree in the main regarding the condition of the muscular tissue in the parts affected, but they differ very widely regarding the condition of the

* In the discussion which followed the reading of this paper, Dr. R. P. Howard, of Montreal, mentioned one or two cases which came under his observation.

spinal cord; some deny the existence of any lesion in this nerve centre. Dr. Flint in his recent work on clinical medicine, page 580, says, the "pathological questions under discussion at present are, whether the myopathic affection be primary or secondary to histological changes which have been observed in the spinal cord?" Eulenberg and Cohnheim were the first to make a complete necropsy, including the examination of both muscular tissue and spinal cord. They found the muscular fibres reduced to $\frac{1}{6}$ th of their ordinary size and in some localities, empty sarcolemmæ, but no lesions in the cord. Charcot found diminution of muscular fibres and indistinct striæ, increase of connective tissue and some fatty deposit, but no lesions in the cord. Duchenne also regarded the enlargement of the muscles as due to increase of connective tissue and fat. Muller on the other hand found, in addition to the changed condition of the muscles, degeneration of the lateral columns and atrophy of the nerve cells of the anterior horns of gray matter. Barth also found extensive changes in the cord and the peripheral nerves, but was inclined to interpret them as secondary. They consisted of wedge-shaped or roundish spots, gelatinous, and irregularly distributed in the white substance of the anterior and lateral columns. Here the nerve fibres were few, the space being occupied by a finely granular substance, traversed by dilated vessels and containing numerous corpora amylacea. There was also atrophy of the anterior cornua and cells, and the vessels were much dilated. The sciatic nerve was also flattened and the fibres pressed asunder by a deposit of fat.

Lockhart Clarke found disintegration of the gray substance of the anterior, lower, and central portions of each lateral half, also disintegration of the nerve roots, sclerosis of the anterior and posterior columns, dilatations of vessels and extravasation.

Dr. Hammond in his work, after reviewing the arguments of the different writers *pro* and *con*, says, that we are warranted in, at least provisionally, accepting the view that the anterior gray matter of the spinal cord is the seat of lesion in pseudo-hypertrophic muscular paralysis, or in other words, that the spinal lesion is the primary one, the muscular secondary, an opinion in which I fully concur.

In the matter of diagnosis, the only diseases with which it is liable to be confounded are pro-

gressive muscular atrophy and true muscular hypertrophy. But its gradual development, progressive difficulty in movement (especially in arising from or assuming the sitting posture), the curve of the spine, the age at which it usually commences, and the enlargement of the muscles, are distinguishing features which constitute easily recognized signs of the disease.

The prognosis is unfavorable. The disease is slowly progressive, but death generally occurs from some intercurrent affection, as phthisis, pneumonia,—rarely before the 8th year of the disease, and generally between the 14th and 30th.

The treatment must be conducted on general principles. Electricity seems to be the only remedy that promises to be of any service. Duchenne cured two cases by the Faradic, *i.e.*, induced current. Cases have been treated sometimes with the induced and sometimes with the constant current, but the former has been more beneficial in most cases. Electro-magnetism has been used in the present case, and has been of great service to the patient; he has improved considerably under its use. Kneading of the muscles, or shampooing, has sometimes proved beneficial. Among internal remedies may be mentioned arsenic, iodide of potassium (in special cases), strychnine, iron, quinine, etc.

SURGICAL CLINIC.

BY R. J. LEVIS, M.D., PENNSYLVANIA HOSPITAL,
PHILADELPHIA.

(Reported for the *Lancet* by Dr. L. W. Steinbach.)

Assistant Demonstrator of Anatomy in Philadelphia School
of Anatomy.

FRACTURE OF THE CLAVICLE.

We have here a patient, a male about 40 years of age, who three weeks ago sustained a fracture of the clavicle by being run over by a wagon. He came to the hospital only yesterday; during the interval some callus has formed around the fragment.

Fracture of the clavicle, like that of other bones, is produced by direct or indirect force, much more frequently however by indirect violence, and therefore the fracture is generally an oblique one. If the fracture, as in the case before us, is produced by direct force, it is more or less transverse, but is the least frequent in occurrence. Muscular con-

traction is sometimes a factor in the production of fracture of the clavicle, and I have had cases under my care where the accident occurred in an attempt at raising the body on a horizontal bar, and by climbing a tree; another case I remember in an actor who sustained this fracture while lifting a child with one arm. In fracture from indirect violence the break almost invariably occurs at one point, namely, at the junction of the middle with the outer third of the bone, and here we always look for the seat of the fracture. Transverse fractures which result from direct violence, such as from a blow, a base-ball, machinery, etc., take place at the point of impact.

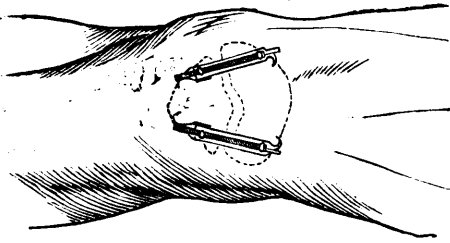
No apparatus has as yet been invented for a satisfactory treatment of a fractured clavicle, although every surgeon deems it his duty to devise some contrivance, and I myself am not guiltless in this respect. What are the difficulties that present themselves, and how are we to overcome them in order to attain a satisfactory result? The inner fragment is drawn upward and overrides the outer fragment by the action of the sterno-mastoid muscle, while the main factor in the displacement of the outer fragment downward is the weight of the shoulder. To counteract these, we employ the postural method, if I may so term it. It consists in placing the patient flat on his back for at least a week or ten days. We thus obtain correct apposition and in ten days a partial solidification or union occurs by callus which is thrown out. The muscular action by this time is overcome and the fragments are inclined to stay in position. A pillow properly placed under the head promotes flexion of the head on the chest with an inclination to the affected side, which relaxes the displacing sterno-mastoid muscle. In some cases we put an additional weight to the shoulder, generally in the shape of a small bag filled with sand or shot. After this preliminary treatment, or in cases where the circumstances of the patient do not permit him to stay in bed, we apply a sling or a dressing of adhesive plaster, the latter of which I apply in the case before us. At the end of a strip of adhesive plaster three and a half inches broad, and about one yard and a half long we make a loop by a few stitches, pass the arm of the affected side through the loop and bring the loop well up to the axilla. We then pass the plaster, with its face towards the

axilla, and then encircle the chest, in front. This will act to draw the injured arm backwards. Another strip of plaster of equal length and width we apply by beginning at the back and carrying the strip over the shoulder of the affected side, thence down the posterior aspect of the arm to the elbow. Here we make a longitudinal slit in the plaster, into which the olecranon process fits, and is thus protected from pressure; we then carry the strip along the forearm, which is placed across the chest, with the palm grasping the opposite shoulder, till it overlaps the hand and shoulder, and reaches the initial end upon the back. This leverage on the fulcrum made by the first band of adhesive plaster forces the shoulder upwards and backwards and tends to keep the fragments in apposition. As yet no means has been devised for bringing the shoulder outwards except to place a pad in the axilla, which however is attended with so much inconvenience to the patient as to make it highly objectionable. With a roller bandage encircling the chest several times I can trust the patient to be about, since he is anxious to join his family.

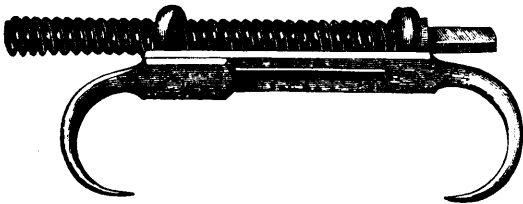
TRANSVERSE FRACTURE OF THE PATELLA.

The patient before us, a male about 40 years of age, has a fractured patella, which without inquiry into the history of its origin we can pronounce as being produced by muscular action, since I can detect no bruise which invariably accompanies a fracture produced by direct violence. The accident occurred four days ago, and the space between the fragments which two days ago amounted to two inches is but one-fourth of an inch at present, the parts having come nearer together by the subsidence of the inflammatory effusions. I am of the opinion that the separation of the lower from the upper fragment is due in a greater measure to the interposition of inflammatory deposits than to muscular contraction, and whenever the serum and lymph become absorbed, the ends of the bone approximate. The best method for the treatment of this accident is the immediate, consisting in the application of iron hooks. Some time ago, I modified the original Malgaigne's hooks by separating them into two pairs, believing, that in this manner they can be applied with greater accuracy. My colleague, Dr. Morton, improved this modification, and we had in this house such good results from the employment of these hooks, that in more than

one case we could not detect any space between the fragments. Although it is thought that no real synostosis takes place in this fracture, the fibrous band intervening must have been so short as not to be appreciable. In many cases we could not



distinguish the fractured from the sound patella. The screw does not form an essential part of the hooks, and my recent modification consists in these hooklets sliding upon each other; they can be adjusted by the fingers and fastened by a small thumbscrew on the top.



We allow from three to ten days from the date of the accident before we apply the hooks, and so we will postpone their application in the present case until the swelling has gone down to a greater degree, meanwhile the patient is kept on his back in bed.

THE INTERCELLULAR SUBSTANCE AS A TRACT FOR THE SECRETION OF PIGMENT.

BY C. SHEARD, M.B., M.R.C.S., ENGLAND.

Lecturer on Normal and Pathological Histology in Trinity Medical School, Toronto; Pathologist to Toronto General Hospital.

Much has of late been done to advance our knowledge of the methods by which secretion takes place in the various secreting organs of the body, and much knowledge has been gained by close and continued observations made upon the structure of various cells, and the changes which their structural elements undergo before and after secretion. Klein (in *Quarterly Journal of Medical*

Science, No. 71 and subsequent Nos.) has shown that the goblet cell is present in all mucus secreting glands, and is the form assumed by epithelial cells at the time of their secretion. Kleinenberg, W. Flemming, O. Hertwig and E. Van Beneden (in *Archives fur Microscopic Anatomie*, Bd. XIII.) have explained the structure of these cells and the part played by their elements in bringing about the discharge of their secretion. All these observers have confined their attention to the epithelial cells, and I think, with the single exception of Herdenhain (in *Pflüger's Archiv. I*, 1874), no one has regarded the intercellular substance at all as playing any part in secretion. Herdenhain has stated that certain coloring matters—sodium sulphindigotate—when injected into the blood are taken up by the cells of the kidney tubules and passed from them into the intercellular substance, and thence into the lumen of the renal tubule.

It is my object, in the present paper, to show that certain pigments, in escaping from the blood by means of the kidney, do not at any time pass into the epithelial cells, but are transmitted entirely through the intercellular substance. The coloring matters experimented with were sodium sulphindigotate and ammonio-carmin. The experiments number fifteen, and were performed upon medium-sized healthy rabbits, as follows:—The rabbit was placed under the influence of chloral hydrate. The left external jugular vein was then dissected out, a ligature passed beneath it and looped ready to be tied, the vessel was now opened, a glass canula introduced into its proximal end, and the ligature around the distal end tightened. Into the vein 5 cc of a saturated solution of sulphindigotate of soda was slowly introduced, 1 cc at a time, being introduced at intervals of a minute; the animals were then allowed to remain alive for periods varying from ten minutes to four hours, and then killed, the kidneys taken out, cut into pieces parallel with the pyramids. The kidneys from the first experiments were placed in dilute methylated spirits—two parts spirit and one part water—the hardening fluid used by Herdenhain, whilst the kidneys from subsequent experiments were hardened in absolute alcohol.

The kidneys, from the first experiments where methylated spirit was used as a hardening fluid, were examined after a period of five days. As soon as they were able to be cut, and sections

from them examined, they showed the nuclei of all the epithelial cells deeply stained with the coloring matter; that this was due not to their having secreted the pigment, but to their being simply stained in a solution of sulphindigotate of soda, might be known by examining the epithelial cells lining the *collecting tubes*, where they will also be seen to be stained, and I think that all physiologists are now agreed that no secretion of urine takes place in the collecting tubes. Again, specimens exactly resembling those which Herdenhain has drawn in the *Archives*, as representing the early stage of secretion, may be produced by simple staining.

In my experiments the kidneys of animals, treated as above described, examined at a period of *ten* minutes after the injection, showed the pigment just commencing to appear as granular dots in the intercellular substance, and later, after a period of *twenty* minutes, a distinct blue delineation of the intercellular substance was seen, but at no time was there staining of the nuclei, or pigment in the substance of the cell itself. The entire secretion of the pigment required from one to three hours, varying with the degree of arterial tension and the rapidity of the heart's action. In those animals of high arterial tension and quick pulse, the pigment was found to have escaped almost entirely from the kidney in about sixty minutes.

With regard to the ammonio-carmine pigment, the same solution was used as given in the *Hand-book to Phys. Lab.*, save that air was passed through the solution until the carmine began to be precipitated in order to get rid of the excess of ammonia. The results of experiments with carmine were the same, as far as avoidance of the cells and their nuclei were concerned, but the observations were much more difficult on account of many animals dying from the effects of injection. The specimens also showed in many cases the lumen of the tubules, especially those near the Malpighian bodies blocked by injection matter. This I regard as important, as showing that some at least of the pigment had been dissolved in the serum of the blood, and transuded through the vessels of the glomeruli. No such blocking occurred in the kidneys of those animals injected with sulphindigotate of soda.

From these experiments it is reasonable I think

to infer that the discharge of pigment by the kidney is more of the nature of a *transudation* than of a true secretion. This we know to be true in reference to two pigments—ammonio-carmine and sulphindigotate of soda. We know still further, that the *fluid portion* of the urine is secreted mainly by the glomeruli, leaving therefore only the solids of the urine to be secreted by the epithelial cells of the tubules.

This is not only shown by experiments in the physiological laboratory, but is borne out in the clinical history of kidney affections. In acute desquamative nephritis we have the glomeruli affected by inflammatory changes, causing diminished quantity of urine, and also the epithelial cells of the tubules destroyed and uræmic poisoning following, since urea can no longer be secreted when the epithelial cells are gone. Again, in lardaceous or amyloid disease of the kidney, we have an inflammation of the vascular tufts, constituting the glomeruli, causing enlargement of them, but the epithelial cells lining the tubes are unaffected, the result being a large quantity of urine of low specific gravity, no excess of urea, and no tendency to uræmic poisoning (except in very advanced disintegration when the renal tubules also participate).

These are pathological facts in support of the view that the epithelial cells are alone concerned in the secretion of the solids of urine, viz., urea and the insoluble salts, whilst from the glomeruli we have a transudation of blood serum and the salts soluble in the blood serum, and from the intercellular substance of the renal tubules the urinary pigments.

THE CAUSE OF SUDDEN DEATH DURING THE FIRST STAGE OF CHLOROFORM INHALATION.

BY A. C. GAVILLER, M.S., TRIN. MED. COL., TORONTO.

The question of sudden death during the first stage of chloroform inhalation is one which has been energetically discussed by many able therapeutists, and many and various have been the causes assigned for it. Perhaps the most universally received opinion is, that when suddenly inhaled without due admixture of air, it proves fatal by producing direct cardiac paralysis. Now as it is

well known that chloroform is primarily a stimulant, how is it that its first action in these cases should be to produce a paralysis? This phrase, "cardiac paralysis" seems to me to be likely to lead to much confusion in the minds of students, notwithstanding the statement of Dr. Brunton, that it was due to "an irritative action of chloroform on the fifth nerve." Now neither of these explanations are well calculated to give students a very clear idea of the mechanism of death in these cases, and it is not till we consult the physiology of the nervous system that the explanation becomes apparent. In this research several important facts are elicited. We find first, that the larynx and general respiratory tract are supplied with sensory filaments by the pneumogastric nerve, and second, that the heart has a double nervous supply, receiving motor impulse from the sympathetic, and inhibitory filaments from the pneumogastric the latter having the power of restraining, or holding in check, the heart's action. From this arrangement we cannot fail to perceive the close connection between the heart and the respiratory system. The first action of chloroform by inhalation, is to produce a powerful irritative effect on the sensory filaments of the pneumogastric distributed to the air passages. This irritation being propagated to the medulla may be thus reflected along the inhibitory fibres of the pneumogastric distributed to the heart, whose action is thus suddenly and powerfully depressed. Clearly here is an explanation of the sudden cessation of the heart's action, not due to paralysis of its structural and nervous supply, but to the strong inhibitory action of the overexcited pneumogastric, while the chloroform has not yet reached the sympathetic nerves supplying the heart with motor power, so that they have not as yet received any stimulus. This mode of explanation is somewhat analogous to that of the mode in which chloroform excites spasms in a tetanic patient. Here the irritation applied to the sensory nerves of the respiratory tract is propagated to the centre for respiration in the medulla, thence reflected through the spinal cord and nerves to the muscles of respiration. But the spinal cord being in a state of hyperexcitement, the impulse becomes so exaggerated as to produce in many cases tetanic spasms, thus causing death by asphyxia.

Correspondence.

ELECTRO-THERAPEUTICS.

To the Editor of the CANADA LANCET.

SIR,—Dr. Rockwell, while admitting that my description of general faradization and central galvanization, are "in general very good," claims that my proposed modification of general faradization "is by no means satisfactory."

In the article referred to, I state that the perineum, the outer side of the thigh, the calf of the leg, and the soles of the feet are not sensitive to the faradic current, that the negative electrode may be applied to any of these parts as is most convenient, and that on account of the great inconvenience of stripping the feet, and keeping them warm during a prolonged seance, I dispensed with the copper foot-plate and made the application either to the thigh, the calf of the leg, or even to the popliteal space. Dr. Rockwell asserts, that if the negative electrode is applied in this manner, it will cause disagreeable muscular contractions long before the current is sufficiently strong at the other pole.

I can simply say in reply that such is not my experience; and, in making the application with the positive pole, I frequently exceed the rule to make the application "only pleasantly painful."

Of late, I have been using the wide flat electrode similar to the spinal electrode. With female patients, the electrode is passed underneath the drawers above the knee; and with males, underneath the stocking against the calf of the leg, and I seldom find it necessary to divide the current between the two limbs, as suggested in my article.

I cannot forbear saying that I strongly dissent from the idea implied, rather than expressed by Dr. Rockwell, that the administration of electricity requires too much skill to admit of its being used by general practitioners, and that it should be left in the hands of specialists, who can boast of an experience "in not only thousands, but in scores of thousands of applications." I fear that a somewhat similar idea prevails with many members of the profession in Canada, and one object I had in view in writing a series of articles on electricity, was to demonstrate that the administration of electricity is quite within the power of every physician,

and need not be relegated either to the skilled specialist or to the advertising "Electro-Therapist."

It may not be inappropriate to add that after the publication of my article on general faradization and central galvanization, I received a complimentary note from Dr. George M. Beard of New York, in which I understand him to express his approbation of the views therein expressed.

Respectfully,

A. M. ROSEBRUGH.

Toronto, March 15.

To the Editor of the CANADA LANCET.

SIR,—As Dr. Kennedy has failed to show that the fatty concretions produced in the evacuations by large doses of olive oil are gall-stones or the debris of gall-stones, I think it would be in bad taste to allow this discussion to drop without any explanation being furnished as to the cause of their production. I hope, therefore, that he will not deem it out of place if I call his attention to the connection that exists between disease of the pancreas and the occasional discharge of large quantities of fatty matter from the bowels. An admirable digest of the literature of the subject, up to the present time, may be found in an article in Ziemssen's *Cyclopædia*, vol. viii., by Friedreich. Reference is here made to the writings of Kuntzmann (1820), Bright and Elliotson (1833), Gould (1847), Lussanna (1851), and a host of others, in which "fat in the stools" was ultimately set forth as an important diagnostic symptom of organic or functional disease of the pancreas. Especial reference is also made by the same writer to sixteen cases collected by Dr. Reeves, which may be found in the *Monthly Journal of Medical Science*, Edin., for March, 1854. The following cases, taken from Dr. Reeves' paper, are worth reproducing:

"For years," says Howship, "an elderly lady had suffered from bilious attacks, attended by severe pain in the hepatic region, with thirst, high-colored urine, and jaundiced tinge of skin. The attacks would be violent for some days, and then decline, a large quantity of fatty matter, in the form of small masses, sometimes from aperient medicines being passed. In 1809 the attacks returned; gall-stones being suspected, an emetic

was given, without benefit. Dr. Simpson, of New Maldon, advised the exhibition of a large dose of olive oil, as he had seen benefit result. It was had recourse to, and induced copious evacuations, in which fatty masses were seen varying in size, the largest being equal to a grape."

"Dr. Babington met with a similar case in a lady who had been for several years subject to an affection which was considered to be gall-stones; she had recourse to olive oil in doses of two or three ounces, followed by the discharge of fatty masses, varying in size from a pea to a grape."

"A female," says Cappezzuoli, "who was supposed to be suffering under disease of the liver, passed fatty masses of the size of almonds of a greenish hue."

"A friend of mine," says Dr. De la Motte, "often passed fatty concretions like biliary calculi; they were attended by a sense of weight in the right hypochondrium."

"Hufeland mentions having seen them passed by a person who suffered from much constipation." Other cases are cited from Hildamus, Arnot, Mérat, Scott, Schneider, Tulpius, Elliotson and others,—all resemble in essential particulars the above,—the concretions varying in size from a pea to a hen's egg, and as many of them as were thrown in the fire, burnt. Of the sixteen fatal cases collected by Reeves, eleven cases had disease of the pancreas or of its duct; in five cases only was the pancreas healthy. Of the twenty-four cases of fat in the stools collected by Griscom, fourteen died, and in eight of the cases disease of the pancreas was proved at the post-mortem examination. It would appear, then, that, though not pathognomonic, fat in the dejections is an important diagnostic symptom of organic or functional disease of the pancreas or of its duct.

Space will not permit me to enter in detail into the experiments of Bernard, who produced, by the admixture of freshly-obtained pancreatic juice with olive oil, a perfect emulsion similar in appearance to milk or chyle; he continued the experiment by ligaturing the pancreatic ducts of a dog, when fats and oils passed through the small intestines unaltered. "The intestinal secretions (especially those of the duodenum)," says Dr. John R. Wardell, "the pancreatic fluid and the bile are the conjoint factors which emulsionize and saponify the fatty ingesta, but the pancreatic secretion is by

far the most important agent in this office, and the disease of this gland explains the voidance of fat in the dejections." But disease of the gland itself is not the only cause of defective secretion, as it is also produced by mechanical causes, as when tumors of the stomach, liver and other parts press upon the duct,—when it is blocked up by a calculus, or obstructed by duodenal disease. In the absence of pancreatic secretion the alimentary canal loses its moisture and the fæces are apt to be hard and indurated, hence the tendency to produce fatty concretions, when olive oil is administered, with a view of removing habitual constipation. As the pancreatic duct opens in common with the ductus choledochus, it is easy to understand why occlusion should occur in the passage of gall-stones in cholelithiasis. "I myself have observed one case," says Friedreich, "in which the stools consisted entirely of fat—partly amorphous, tallow-like lumps, and partly crystalline. We had evidently to deal with a case of plugging of the ductus choledochus, and where the mouth of the pancreatic duct had been also occluded."

Another condition for the production of fat in the dejections is, when the quantity of oil in the ingesta is so large as to be out of all proportion to the amount of pancreatic juice that finds its way into the duodenum, by which it is emulsified and digested. That this occurs in healthy persons is shown by Reeves, who says that in Spain, France and Italy, where olive oil enters largely into the diet, fatty concretions in the stools are of common occurrence.

But Dr. Kennedy thinks that I have avoided the main issue in this discussion—the "relief obtained" by the use of olive oil in the cases reported; if he means relief of the constipation I agree with him; if of the cholelithiasis I disagree with him most emphatically, for in the case of Robert C—, to which he has frequently called my attention for this purpose, the attacks of hepatic colic continued at stated intervals while the patient was under his charge, as they had done previously, and the severest attack that he experienced during his illness occurred some three or four weeks after he had commenced the oil treatment. The calculi were, therefore, not "dissolved," nor were they "painlessly expelled," and no evidence is produced to show that he would not have recovered as well or better under a more rational treatment; and I

do not understand what object Dr. Kennedy can have in view in furnishing any explanation of the *modus operandi* of this agent, until he has produced some proof of, and fully satisfied himself that there was an *operatio*.

Yours truly,

A. RUTTAN, M.D.

Napanee, March 12, 1881.

Reports of Societies.

TORONTO MEDICAL SOCIETY.

TORONTO, Feb. 24th, 1881.

The President took the chair at 8.15. The minutes of the last meeting were read and confirmed. Dr. James Ross, jun., was duly elected a member of the society.

Under the head of cases in practice, Dr. Oldright mentioned some cases in which severe pulmonary symptoms suddenly developed, and upon examination the urine was found to be highly albuminous. These cases may or may not be associated with a pregnant condition—we should always in pregnant women make enquires about œdema, and if it is present proceed to examine the urine, for the case unless treated may eventuate in eclampsia and death.

Dr. Covernton mentioned a case with a similar train of symptoms, which he had lately seen—not pregnant.

Dr. Reeve brought before the notice of the society a new remedy for dilatation of the pupil—it was prepared synthetically—and was called Hydrobromate of Homotropine. It was used in $\frac{1}{2}$ to a 2 per cent. solution, and acted quickly—the paralysis of accommodation passing off in 12 to 48 hours—whereas that from atropine remained a week, and duboisia 5 or 6 days.

A general discussion followed upon mydriatics, and especially upon the double action of pilocarpin, which was attributed to its containing two alkaloids, jaborin and pilocarpin, one of which dilated, the other contracted the pupil.

Dr. Davidson then read his paper upon "Fractures of the Femur." After a short introduction he entered upon the predisposing cause of fracture, mentioning syphilis, rickets, cancer, caries, atrophy, &c., and gave a case of multiple fractures from very slight causes. The displacements of the

upper fragment occur easily, and are difficult to reduce and retain—the fragment is drawn up by the contraction of the muscles attached to it, or it is pushed upward by the lower fragment which is acted upon by the larger muscles attached to it. There is also generally an angular displacement outwards—fractures of the lower third are usually transverse.

The treatment is by long splints and weights—short splints encircling the thigh are not often required, and prevent the surgeon ascertaining if the fragments preserve their proper position. In children and restless persons a double long splint is sometimes required.

Shortening to the extent of $\frac{1}{4}$ inch he considered as evidence of the proper consolidation of the fragments. As a permanent dressing after removal of the long splints, he recommended the gum and chalk bandage, the details of the application of which he gave concisely.

Dr. Oldright remarked, that in regard to the measurements it behoved one to be very careful and have the pelvis straight, illustrating by diagrams the errors one may fall into.

Dr. Workman considered insanity a predisposing cause of fracture, and said that insane patients frequently had fractures, and gave no evidence of pain therefrom.

Dr. Burns said that in taking the measurements in fractures, it was advisable to bear in mind that many men had normally uneven legs.

Dr. Covernton mentioned a case where a medical man was condemned by an intelligent jury to pay a large sum for having one-half inch shortening in a fractured limb, although the shortening made the legs of equal length.

Dr. Cameron asked if the reader had observed hydrarthrosis of the knee as a symptom of fractured femur—it was strongly insisted upon by the French surgeons. Many nervous diseases acted as predisposing causes to fracture—such as insanity, locomotor ataxy, &c.

Other members of the society took part in general discussion, and Dr. Davidson replied to their remarks.

Dr. Burns was announced to read a paper on some new remedies at the next meeting.

The meeting then adjourned.

March 10th, 1881.

The Society met at 8 p. m. Dr. Lett took the

chair. The minutes of the previous meeting were read and adopted.

Dr. Cassidy, Dr. James Baldwin and Dr. McCullough were proposed as members of the society.

Dr. Davidson exhibited a portion of the right ventricle of the heart of a little girl 9 years of age, who while convalescent from scarlet fever died suddenly. The post mortem revealed vegetation growing from the tricusped valves and a thrombus was found in the left middle cerebral artery near its bifurcation.

Dr. Cameron exhibited specimens from the post mortem examination of an old woman 80 years of age, who died suddenly. Several weeks before death she complained of headache and constipation and was jaundiced. The headache passed away, and she felt well, the constipation and jaundice however persisting. On the day of her death she fell out of bed, but got up and into bed again without assistance, and her intelligence remained unimpaired. In 6 hours she was dead. The body was intensely jaundiced, a large inguinal hernia existed, the sac containing beside a small knuckle of intestine a large portion of omentum through which were scattered hard nodules of malignant nature. The broad ligaments of the uterus contained four or five parovarian cysts of small size, filled with a clear fluid. The liver was largely permeated with cancerous masses; the gall bladder was indistinguishable, the head of the pancreas being with the gall bladder a confused mass of cancer. The brain contained a large clot of blood, situated at the posterior and right side of the cranial cavity. The clot consisted of two distinct portions, one the central and upper, firm, dense and almost decolorized; the under and lower portion was black and softer, evidently of more recent formation; the brain was considerably flattened by pressure.

Dr. Cameron related the details of another case of apoplexy in a man $\text{æ}t. 70$. He was in his usual health until the morning of his death when he woke up, vomited, and sank into profound unconsciousness; stertorous breathing; pupils neither contracted nor dilated, nor responding to light; the face slightly drawn to the right; the right arm rigid and presenting fibrillary tremor. At the p.m. the left ventricle was distended by a large semifluid black clot. Blood was also suffused along the base, pushing

the brain upwards, all the vessels were torn from their attachments and were rigid with calcareous matter. The dura mater was adherent to the skull, so that it was impossible to remove the brain without great force, and consequent disturbance of the clot. He also gave the clinical details of a third case of apoplexy which occurred to him that week.

Dr. Robinson mentioned a case of atropine poisoning in a child two years of age, who had sucked the cork of a bottle containing atropia sulph. Tr. opii. 2 minims were given every hour and the child recovered.

Dr. Carroll related a case of poisoning by aconite in a child where 30 minims of Tr. aconite were given at 7 a.m., and no symptoms appeared until a second dose at 10 was given, when vomiting, accompanied by alarming symptoms of prostration set in. Large doses of ammonia were given and the child recovered.

Dr. Cameron related a case of poisoning by acetate of lead, of which an unknown quantity was taken by a man with suicidal intent. A prompt emetic was given, and beyond the supervention of some intestinal cramps no harm resulted.

Dr. Burns then read a paper upon "Some New Remedies," in which he considered *grindelia robusta*, *yerba santa*, *chaulmoogra* oil, *nitro-glycerine*, *tonga*, &c. He briefly gave the botanical descriptions, and pharmaceutical preparations, described the best methods of administration and commented upon their behaviour in his hands.

Dr. Oldright asked if there was any limit to the dose of *grindelia robusta*. He had used *chaulmoogra* oil in rheumatic gout with benefit.

Dr. Sheard said that he had seen *chaulmoogra* oil used with great benefit in lupus of the face, and according to Jonathan Hutchinson its action on all tubercular growths was beneficial.

Drs. McPhedran, Cameron, Reeve, and others took part in the discussion. Dr. Burns replied.

It was announced that Dr. Oldright would read a paper at the next meeting upon "Infection and Contagion."

The meeting then adjourned.

ONTARIO MEDICAL COUNCIL—EXECUTIVE COMMITTEE.

The Executive Committee met March 1st, 1881, in the College Building. Present:—Drs. Bergin,

Husband, Macdonald, Allison, Burns and Edwards. Minutes of last meeting read and confirmed.

Dr. Menzies, who matriculated in McGill College in 1874, requested to be allowed to come up for his primary and final examination in the spring, on paying all fees and producing certificate of matriculation as above.—Granted.

After the reading of some letters from parties, the Matriculation Examination of the Council was discussed, after which it was moved by Dr. Allison, seconded by Dr. Edwards,—“That the subject be referred to the Council.”—Carried.

The matter as to Dr. Sullivan, the Council's Examiner in Surgical Anatomy, and as stated in the Announcement of the Kingston School, teacher of this subject in addition to his other duties, was again taken up, when Dr. Lavell who was present, stated that Dr. Sullivan did not lecture on Surgical Anatomy and that the statement in the Announcement was a mistake. The Committee accepted this statement; the petition regarding Dr. Sullivan was therefore not granted.

It was resolved that all primary candidates who, at the examination of 1880, had passed in three or more subjects, should be allowed for such subjects.—Carried.

Dr. Sinclair, who had been in active practice for 12 years, applied to be allowed to present himself for his professional examination, without having to matriculate.—Granted.

A request from Mr. W. F. Mills to have the 9 months' course in Ann Arbor accepted as a 6 months' course in Ontario, was granted.

It was then moved by Dr. Allison, seconded by Dr. Burns,—That those gentlemen who, in the Matriculation Examination of August, 1880, made 45 per cent. of the aggregate marks, be permitted to register as matriculated medical students from that date, and that the Registrar will please notify the gentlemen affected by this resolution.—Carried.

It was then resolved that the Registrar inform the Candidates who passed on any subject at the Matriculation Examination in August, 1880, that such subject is to be allowed them at the coming examination.

Arrangements were then made for the conduct of the several examinations in Toronto and Kingston respectively, in April next,—which were ordered to be advertised.

Selected Articles.

RESECTION OF THE STOMACH.

Dr. S. J. Mixer reports the following in the *Boston Medical Journal* of March 10th.

It is well known that resection of the stomach has, up to the present time, never been successful; but it gives me much pleasure to state that the operation has at last been performed with the most satisfactory results. On January 29th, Professor Billroth, in an operation which I had the advantage of witnessing, removed the pylorus and about one-third of the stomach for carcinoma, and the patient has made a good recovery.

In his public clinical lecture on the 31st, Professor Billroth gave an account of the case, as well as a short history of the operation and the experiments that have led to its successful performance. The substance of this lecture appears in the *Wiener Medizinische Wochenschrift* of February 5th.

The history of the operation is as follows: In 1810 Merrem published a work on this subject, giving the results of his experiments on dogs, two out of three having survived the extirpation of the pylorus and sewing together of stomach and duodenum. In spite of these results, the operation was not attempted on man, and, though surgeons of different nationalities investigated the subject, no material advance was made until Lambert discovered the true method of uniting all wounds of the intestinal tract; namely, apposing the serous surfaces. After this, recovery after sewing up of intestinal wounds became more frequent.

In 1871, Billroth excised a part of the œsophagus in a large dog, the operation being followed by recovery. Czerny first performed this operation on man with good results. This was shortly followed by the experiments of Gussenbauer, Winiwarter, Czerny and Kaiser on resection of different portions of the intestinal tract in dogs. These operations when performed with antiseptic precautions, were very successful, and in one case the whole stomach was removed, and the œsophagus and duodenum united with good result.

In 1877, Billroth operated on a gastric fistula following abscess by opening the abdomen at that point, excising the thickened, adherent edges of the gastric opening, sewing up the wound, and returning the stomach to the abdominal cavity. The patient made a good recovery.

In 1879, Péan, of Paris, first resected the pylorus for carcinoma in a patient who was greatly exhausted by the disease, and who died on the fourth day. Catgut sutures were used.

The present case is that of a woman, forty-three years of age, who had had the usual symptoms pointing to cancer of the stomach for more than a year. The patient was very anæmic and

weak, having been able to retain only very small quantities of sour milk for several weeks. A freely movable tumor could be felt in the epigastrium, through the thin, flaccid abdominal wall lying slightly to the right of the median line.

The operation was performed in the small room always used for large abdominal operations, the temperature being high and the air moist. The stomach was washed out, and a nearly horizontal incision, eight centimeters long, was made over the tumor, which was drawn out through the opening. It was found to involve the pylorus and about one-third of the stomach.

First, the greater, and then the lesser omentum were ligatured and cut through close to the tumor, and the whole stomach being drawn out of the abdominal cavity, was divided, the cut beginning at the lesser curvature and passing through the stomach, one centimeter from the infiltrated portion. The duodenum was incised in like manner, and six trial sutures were passed through the cut surfaces but not tied. It being found that the edges could be easily brought together, the incisions were continued through both stomach and duodenum, and the tumor thus wholly removed.

The oblique wound in the stomach was then sewed up, beginning at the greater curvature, until an opening was left which corresponded in size with the duodenum, which was then stitched into the opening. Lambert's stitch was used throughout, fifty-four carbolized silk sutures being applied.

The stomach was then washed with two per cent. carbolic solution, and the whole returned into the abdominal cavity which was closed in the usual manner. A carbolized gauze dressing was applied, which was not removed until the sixth day. The spray was not used. Hemorrhage throughout the whole operation was very slight, and no blood or fluid was allowed to get into the abdominal cavity, warm carbolized compresses being packed behind the stomach while it was open.

The mass removed measured on the greater curvature fourteen centimeters; the pylorus opening allowed only a large probe to pass.

Since the operation there have been no unfavourable symptoms; no fever, no vomiting, scarcely any pain, in fact, the patient has been much more comfortable than for weeks before the operation. The external wound has entirely healed.

Wine and peptone enemata were given for two days, and since then only wine. By the mouth, only ice for the first twenty-four hours, then milk in small quantities. On the eighth day *bouillon*, with egg, and later, meat and apple *purées*, have been taken without bad effect.

Now, on the fourteenth day, the patient is allowed to sit up, and in a day or two will be able to take meat and other solid food.

The success of this operation marks a great ad-

vance in abdominal surgery, and enlarges still farther the field of the surgeon. The technical difficulties of the operation are not greater than in many other cases; even the difficulties of diagnosis are now much lessened when the abdominal cavity can be opened and its contents examined, with almost no danger to life, and the methods of illuminating and exploring the stomach are being daily more and more perfected.

The operation may not always be successful or applicable to all cases, but it will relieve, even if it does not permanently cure many patients whose sufferings are generally intense, and who have no hope of cure by the means hitherto employed.

HYDRATE OF CHLORAL IN TREATMENT OF TETANUS AND PUERPERAL CONVULSIONS.

As far as the indications for treatment are concerned, it matters little whether the former is produced by a rusty nail in the foot, a pistol shot in the hand, or by an incised wound of any part of the body; or whether the latter is due to uremia, anemia, plethora, protracted labor, or to any of the other supposed causes. It is *the violence of the spasm that kills*, and to its mitigation must your efforts be directed if you would save your patients.

In a case of tetanus I administer ten, fifteen, twenty, or thirty grains of chloral, according to the age of the patient, every two, three, four, or five hours, as the severity of the spasm requires, alternated with one-fifth, one-fourth, one-third, one-half, or three-fourths of a grain of morphia by the mouth or hypodermically, and continue it faithfully for days and weeks until the disease begins to decline, when I decrease the dose gradually till the patient no longer requires it.

In puerperal eclampsia, if the patient can swallow, I give thirty grains of chloral by the mouth, and twenty grains more in an hour if the convulsion returns; or if she is unconscious, as is most generally the case, I administer sixty grains per rectum, and repeat the same dose in two hours if necessary. Usually a dram used in this way is all that is necessary to prevent a return of the spasm and to induce a natural and refreshing sleep, from which the patient will awake in five or six hours perfectly rational and safe, and surprised to hear that her labor is over. I use an ounce of sweet milk as a vehicle for the chloral, and inject it into the bowel with a Davidson, Mattison, or any other ordinary syringe.

CASE I.—In February, 1877, G. H., age nineteen, cut his foot with an axe. Ten days after tetanus supervened. I gave him twenty grains of chloral every four or six hours, and one-fourth to three-fourths grain of morphia hypodermically

three or four times daily for a month. He recovered, but with some deformity, which is gradually disappearing.

CASE II.—In July last, R. G., age fourteen, shot himself through the first phalanx of the little finger of right hand. In a few days stiffness of the muscles of mastication appeared, and a few days subsequently he was as rigid as a frozen cadaver. His urine for ten days had to be drawn off with a catheter. During the greater part of his illness he could not cover the bulb of the thermometer in the axilla, so great was the rigidity of the muscles in that region. I gave him ten grains of chloral alternated with one-fifth of a grain of morphia every three to six hours for six weeks. He recovered, but like case first, with some little deformity, which, however is rapidly disappearing.

The cases of eclampsia are as follows:

CASE I.—Mrs. B., age nineteen; primipara, in May, 1878, after an ordinary labor of several hours, with the os fully dilated, was seized with a terrible convulsion. As soon as I could procure it (in ten minutes probably), I threw into the rectum one dram of chloral, sent for the forceps, and delivered her at once. The spasm returning, I repeated the dose, the patient soon fell into a quiet sleep, which lasted six or eight hours, when she awoke to consciousness and to safety.

CASE II.—Mrs. S., age eighteen, primipara, in August, 1879, three hours after delivery by midwife, was attacked by convulsions, which recurred every thirty minutes, and increased in severity with each recurrence for four hours, when I was called to see her. I gave her at once sixty grains of hydrate of chloral by the rectum. Three hours afterward she had another light seizure. She was then given twenty grains by the mouth, after which she slept for six hours, and upon waking expressed great surprise that she was a mother.

CASE III.—Mrs. B., age twenty, primipara, in July, 1880, eight hours after an easy and natural delivery by my friend, Dr. Cannon, was seized by an eclamptic fit. We saw her together about an hour afterward, and found her unconscious with stridulous breathing. We administered per rectum the "regulation" dose—sixty grains of chloral. There was no return of the spasm, and the patient did well.

I wish to say in conclusion, that while I regard chloral as one of our most active and certain remedies, I consider its range of applicability very limited.—*Dr. Easley, in Louisville Medical News, Jan. 8, '80.*

"FORT MIT DEM SPRAY!"

Fort mit dem Spray!—Away with the Spray!— is the title of an interesting clinical lecture by Professor von Brun of Tubingen (*Med. Times and*

Gaz.) There are now many earnest believers in so-called antiseptic surgery—that is Listerism—who are beginning to ask whether the spray is really a necessary part of a thoroughly antiseptic system of dressing wounds. There can be little doubt that most surgeons would gladly dispense with it if it could be shown to be superfluous, for it materially interferes with their personal comfort, as well as that of any lookers on; then, again, the steam spray-producers are articles of considerable cost, not only to purchase at the outset, but to keep in efficient working order afterward. Nor are they entirely free from the danger attending all other steam-engines; and, lastly, they involve loss of time. Thus for many and varied reasons, though all of very secondary consideration, the suppression of the spray would be a gain, provided a thorough system of antiseptics could be secured without its help. Dr. von Brun recognizes that the use of the spray as the necessary part of any complete system of antiseptic treatment of wounds is allowed by most operating surgeons, whether the spray be carbolic acid, thymol, or other substance; while some go so far as to consider that even a momentary intermittence during an operation is sufficient to nullify an otherwise accurate carrying out of the plan. But he confesses that from the very commencement of the Listerian method he had always felt skeptical as to the value of and necessity for the carbolic spray, and it was only with reluctance he could decide on its systematic use at his operations. He was led, however, to adopt it by the desire to avoid unmerited reproaches for withholding from his clinic what is considered so important, rather than by any belief in the utility of the carbolic spray. On the contrary, his doubts as to the all-sufficiency of the spray had, in the course of time, gradually grown stronger, until, he says, as the result of careful study of the natural science of the subject—and more especially of the work of C. von Nageli, one of the best authorities in this matter—he had come to the conclusion that the employment and need of the spray during operations have not been sufficiently justified; and indeed that its use from a theoretical view must be considered as an unnecessary addition to the antiseptic treatment of wounds. “In proportion,” he tells us, “as this idea gained upon me I endeavoured by experience, and apart from all theory, to test the value or the worthlessness of the spray; and to this end, in the course of the year 1878, I performed a gradually increasing number of operations without the spray, which I published in 1879. Since this time, and especially since the spring of 1879, I have entirely banished the spray producer from my wards, doing both my operations and dressings without it, and experience has confirmed my views entirely. The result of all published major operations, undertaken elsewhere *with* the

spray, and here *without* it, not only as regards mortality, but also course and duration of the healing process, has proved more durable in this than in any other hospital. The results are so substantial that they warrant the following assertion: The carbolic spray in surgical operations is not only useless and unnecessary, but also disagreeable and productive of interruption—it should therefore be abolished.”

Von Brun expresses a consciousness that the above assertion will at the present time be considered very heretical, and he reserves its complete substantiation for a new work on the antiseptic method as practiced in his wards, which will shortly appear. But he now presents the following brief statements, which he considers contain sufficient material proof of the correctness of the first part of the above dictum for his present purpose. For the second part of this dictum, no especial proof will be necessary; for most surgeons who admit that the first part is proved will probably accept the second without further proof.

“Figures,” von Brun says, “will be necessary to prove the correctness of my assertion that the spray can be left off. Therefore, let the works of my clinical wards speak. They are large enough and extend over a sufficient length of time to allow even those who differ from me to accept them. I will only speak of osteotomies of the long bones, exarticulations, resections and amputations. These operations not only form a well-defined group in themselves, and are everywhere carried out under the carbolic spray, but they constitute the class of cases which formerly contributed so large a proportion of the hospital mortality through the so-called wound-diseases—pyæmia, septicæmia and erysipelas. I will just remark further, that *instead* of the spray I employ temporary irrigation—lasting a few seconds only—with a two per cent. and five per cent. carbolic solution several times during any long operation, and at the termination of short operations. In addition to this I wash the whole wound-surface with the five per cent. solution at the completion of the operation; and in the case of amputations, after the drainage-tubes are put in, I wash out the wound through the tubes with the same solution if there should appear to be any bleeding. The same applies to the dressing of wounds after an operation—I simply use a two per cent. solution for irrigation. In all other respects the antiseptic method is most carefully carried out.”

He lays especial weight on changing the dressings as seldom as possible. Thus after amputation, for instance, the first change of dressing, as a rule, is made on the eighth to the twelfth day. In two cases of complete resection of the knee the first dressing was not changed for twenty-eight days, and in two others thirty days elapsed before changing dressing. The following statistics are

given in support of the opinion expressed:—Forty-seven large amputations (limbs), including twelve of the thigh and fifteen small ones (fingers and toes)—in all sixty-two cases; ten ostetomies; twenty-six excisions of joints, including two hip-joints and twelve knees; thirteen resections in the continuity of bone; and thirty-three necrosis operations. Thus there were one hundred and forty-four operations involving bone. Not one of the cases had a fatal result. Many other minor operations were performed in the wards during the same period, but they are not included. Total number of patients in the wards during this period was one thousand one hundred and seventy-five, and the total mortality from all causes was only thirty-six, which gives about three per cent. There was not a single death from pyæmia, septicæmia or erysipelas. These figures certainly ought to be considered sufficient to prove that the spray is not always necessary either during an operation or after-dressings which it may necessitate. "For myself at least," says the learned professor, "and I hope for every one who is not prejudiced, in view of the above facts, there can be no doubt of the inutility of the spray, and I consider myself fully justified in using the dictum at the heading of this lecture—'Fort mit dem Spray!'"—(*Berlin Klin Woch.*)—*Louisville Med. News.*

PLACENTA PRÆVIA.

At a previous meeting of the Medico-Chirurgical Society of Louisville, Ky., a case of placenta prævia having been reported by Dr. Clemens, it was then decided to devote the present session to the discussion of that subject. The case, as stated by Dr. Clemens, is as follows:

I was called to see a woman seven months pregnant with her fifth child. She had been suffering from hemorrhage for two weeks, but had lost no considerable amount of blood until the night before I was called to see her. In the afternoon, some two or three hours before I was called, she had a fearful flow, and was thought to be dying. On examination I found the os dilated to about the size of a silver dollar and the placenta protruding. I sent immediately for ergot, but before it came I had succeeded by artificial means in establishing uterine action, and by introducing two fingers I dilated the os, and as soon as the ergot arrived she was given a drachm of it and I soon succeeded in delivering her. An unfavourable prognosis as to her recovery was given, and I explained to the family the danger of septicæmia from the drain of lochia over the mouths of the vessels where the placenta had been attached. I ordered ergot to be procured and given in case she should suffer an attack of hemorrhage, and viburnum prunifolium for slight hemorrhage, and also McMunn's

elixir to be given night and morning. I repeated the instructions two or three times to a stupid nurse, and placed the bottles separately on the mantelpiece—one at each end and one in the middle. She succeeded in getting them mixed, and gave the ergot two or three times, although there had been no hemorrhage. When I returned the next morning the lochia was arrested, and I was not able to restore it. I believe the imprudent administration of the ergot had much to do in bringing about the fatal result which followed. Without it the drain might have been sufficient to prevent septicæmia.

I detached the placenta as rapidly as possible, as the best means of arresting the hemorrhage.

DR. LARRABEE.—The point of the greatest interest and practical bearing to the physician is this which Dr. Clemens has referred to—the detachment of the placenta. We find, according to statistics, that the mortality under the older management was much higher than at present. In attempting to deliver without this procedure, we have, according to English statistics, a mortality of 33½ per cent. to the mother and 65 per cent. to the children. While after the plan of Simpson, going in boldly and detaching, the mortality is reduced to one in fourteen to the mothers, while the mortality to the children is increased to 69 per cent.

Nægele gives the proportion of the cases occurring in practice as 11 to 600. It is somewhat strange, this being the case, that I have attended four cases at full term, and this winter saw one case at the seventh month, the result being that, out of the four cases at full term, two were lost and two were saved. The last case was saved, of course, and had I sooner seen one of the cases mentioned as fatal, I think I would have saved it. A midwife was in charge for two days, and on the occurrence of hemorrhage a physician was called in, who tamponed the vagina, and upon being recalled, made a hasty visit, prescribed some ergot and left, after which he never could be found at home when wanted. I saw the case at the urgent request of the parties, with the knowledge that another physician had been in attendance. I found the woman in articulo mortis, sitting up in bed with a face as white as marble, there being a pool of blood on the floor. The first thing done was of course to put her in the horizontal position; she gasped several times and finally gained respiration, breathing tolerably well. I placed my hand in the vagina, introduced my finger into the os, and made a partial detachment; then, with a piece of ice as a wedge, completed it and delivered the child, but the woman died as it emerged from the vulva. The other fatal case was lost by reason of the hemorrhage, the woman had suffered for three months, which from her account was excessive. When she came into labor she could not lose, without compromising her life, six ounces

NEW PRINCIPLE FOR THE FAT ASSIMILATION OF FAT

HYDROLEINE "HYDRATED OIL."

"HYDROLEINE" may be described as partially digested oil, which will nourish and produce increase in weight, in those cases where oils or fats, not so treated, are difficult or impossible to digest. In CONSUMPTION and other WASTING DISEASES, the most prominent symptom is emaciation, of which the first is the starvation of the fatty tissues of the body, including the brain and nerves. This tendency to emaciation and loss of weight is arrested by the regular use of HYDROLEINE. The ordinary so-called emulsions of Cod Liver Oil and other fats, whether pancreatized or not, merely remain in the form of a coarse mechanical mixture for a short time after agitation. The digestion of oil, having in no sense been artificially produced, still devolves upon those functional powers, the deficiency of which is the most prominent symptoms in these cases.

A great misconception as to the real characteristics of a true pancreatic emulsion has been entertained by many, and but few appear to have studied the different aspects presented by such an emulsion as is produced on fat by the energetic action of pure soluble pancreatin, as contrasted with the coarse mechanical mixtures of oil or fat and water, which are commonly supposed to represent this function of fermentative digestion.

Some seem to think that if a bottle of oil is shaken up with the compounds sold as the active principle of the pancreas, and a yellowish cloud is diffused for a time through the oil, an emulsion has been obtained. So it has, but not the true pancreatic emulsion, which forms an integral portion of the process by which fats are digested and assimilated. From the unvarying result of many hundred trials with the pure, active principles of healthy pancreatic fluid, taken at the time of digestion, I am perfectly convinced that no valuable result has been attained, unless the emulsion formed is as highly refractive of light as milk. The color may vary, according to the oil or fat used, from a far whiter fluid than the densest milk to the opacity and color of Devonshire cream, but unless at least the equivalent of the density of the best milk is produced in oil, when a third of water is held in suspension, no real pancreatic emulsion has been formed.

The mere mechanical mixture formed by common pancreatin is rarely better or more persistent than may be produced by rubbing up oil or fat with a solution of mucilage, or by a warm application of dissolved gelatin, shaken with oil until it becomes cold.

The first essential towards the digestion of fats or oils in the human body is that it shall assume the state of the very finest and most permanent emulsion, and this is only known to be attained when the oil and water is perfectly opaque, from the minuteness of the globules. This is the first function of the pancreatic emulsifying principle, and by this alone can we be certain that it possesses its proper fermentative activity."—Prof. Bartlett's Treatise.

(HYDRATED OIL)

HYDROLEINE

(WATER AND OIL.)

The efficacy of this Preparation is NOT CONFINED to cases of CONSUMPTION, as from its valuable tonic effect on the nervous system, in addition to its special stimulating action on the organs concerned in the production of Fat in the body, it causes a rapid increase in weight in persons of naturally thin habit, who do not present any evidence of disease.

The principles upon which this discovery is based have been described in a treatise on "THE DIGESTION AND ASSIMILATION OF FATS IN THE HUMAN BODY," by H. C. BARTLETT, Ph. D., F.C.S., and the experiments which were made, together with cases illustrating the effect of Hydrated Oil in practice, are concisely stated in a treatise on "CONSUMPTION AND WASTING DISEASES," by G. OVEREND DREWRY, M.D., of London.

In these treatises, the Chemistry and Physiology of the Digestion of Fats and Oils is made clear, not only by the description of a large number of experiments scientifically conducted, but by cases in which the deductions are most fully borne out by the results.

Copies of these valuable works will be sent free on application.

FORMULA OF HYDROLEINE.

Each dose of two teaspoonsful, equal to 120 drops, contains:

Pure Oil.....	80 m (drops.)
Distilled Water.....	35 "
Soluble Pancreatin.....	5 grains.
Soda.....	½ "
Boric Acid.....	¼ "
Hyochoic Acid.....	1-20 "

DOSE.—Two teaspoonsful alone, or mixed with twice the quality of soft water, to be taken thrice daily with meals.

Unlike the ordinary preparation of Cod-Liver Oil, it produces no unpleasant eructation or sense of nausea, and should be taken in such very much smaller doses, according to the directions, as will insure its complete assimilation; this, at the same time, renders its use economical in the highest degree.

To brain-workers of all classes, Hydrated Oil is invaluable, supplying, as it does, the true brain food. Economical in use—certain in result. Tonic—Digestive and Highly Nutritive. Full particulars sent on application to

HAZEN MORSE,

57 Front Street East, TORONTO

THE

NEW

HYDROLEINE

HYDRATED OIL

HYDROLEINE

ENGLISH
REMEDY

AN ARTIFICIALLY DIGESTED COD LIVER OIL.

Over 1,500 bottles sold during the first four months of its introduction into Canada (from April to August, 1880) entirely through Physicians' prescriptions.

All the leading medical men in Toronto and Montreal are using Hydroleine with success; I would refer to some of them: viz:

WM. T. AIKINS, M.D., Toronto.

Lic. Med. Board, 1849. M.D. Jeff. Coll. Phil., 1850; Lect. Surg. J. S. Med. Surg. Tor. Gen. Hosp; Mem. Med. Council, 1866-69 Mem. Coun. Coll. Phys. Surg. Ont. 1863-1880.

CHAS. D. O'REILLY, M.D., "

Res. M.D. General Hospital; M.D. C.M. Univ. McGill Coll., 1867.

O. S. WINSTANLEY, M.D., "

Mem. Coll. Phys. Surg. Ont., 1877;

JAS. A. TEMPLE, M.D., "

Mem. Coll. Surg. Eng., 1865; M.D. C. M. Univ. McGill Coll., 1865; Fell. Obstet. So. Lond., Eng., 1872; Lect. Mid. Prof. Med. Jur. & Tox. Tri. Med. Sc.

E. H. TRENHOLME MD BCL., Montreal

JAS. H. RICHARDSON, M.D., Toronto.

Mem. R. Coll. Surg., Eng., 1847; M.D., Univ. Tor., 1850; Prov. Lec., 1847; Lect. Anat. Tor. S. Med; Mem. Med. Council, 1866-69.

JAS. H. BURNS, M.B., "

Mem. Coun. Coll., Phys. Surg., Ont., 1880.

JAS. E. GRAHAM, M.D., "

M.B., 1869; M.D., 1868, Univ. Tor. Lic. R. Coll. Phys. Lon. 1871.

J. J. DUGDALE, M.D., LRCPS. Montreal.

I publish one of the numerous testimonials I have received relative to the merits of Hydroleine, showing the opinion held by medical men:—

32 BEAVER HALL, MONTREAL, 25th May, 1880.

Mr. Hazen Morse:

Dear Sir—My experience with Hydroleine has been more than satisfactory, and I know no remedy like it in cases of a scrofulous or tubercular diatheses. In some of my cases the effect of the remedy has been really marvellous. I am, dear sir, Yours truly, E. H. TRENHOLME M. D.

The following statements show the value of Hydroleine more conclusively than anything else could possibly do, as the sale in each instance has been created without a dollar's advertising and entirely through Physicians:—

MESSRS. JOHN LEWIS & Co., Victoria Square, Montreal, sold ten dozen bottles Hydroleine in one month at the beginning of the introduction of the Hydroleine.

MR. HENRY R. GRAY, St. Lawrence Main street, Montreal, sold six dozen bottles Hydroleine in the same period (one month).

MR. WM. S. ROBINSON, 35 Yonge St., Yorkville, Ont., under date of July 21, 1880, writes as follows:
Hazen Morse, Esq:

Sir—Since the introduction of Hydroleine into this locality I have sold over three dozen bottles, and find that it gives every satisfaction; it is an excellent preparation and I have no doubt of it becoming very popular. I am, yours respectfully, WM. S. ROBINSON.

HYDROLEINE PRODUCES IMMEDIATE RESULTS.

One bottle of Hydroleine will accomplish greater results than can be obtained by using ten bottles of Cod Liver Oil.

PRICE LIST.

Hydroleine half pound bottleper dozen \$10
" " " " "per bottle \$1

N.B.—I will forward to any Medical man desiring to test its virtues for himself one full sized bottle Hydroleine upon receipt of fifty cents (half price), express charges prepaid. This offer only applies to the first bottle.

HAZEN MORSE

57 FRONT STREET EAST.
TORONTO.

Sole Agent for the sale of Hydroleine
in the Dominion of Canada.

MALTOPEPSYN

(REGISTERED AT OTTAWA)

FORMULA

SACCHARATED PEPSINE (Porci).....	10 Grains
" PANCREATINE.....	5 "
ACID LACTOPHOSPHATE OF LIME.....	5 "
EXSICCATED EXTRACT OF MALT (Equal to one tea- spoonful of liquid extract of Malt.).....	10 "

The new Canadian remedy for Dyspepsia, Indigestion,
Cholera Infantum, Constipation and all Disease
arising from Imperfect Nutrition.

It is also exceedingly valuable as a relief for Vomiting in Pregnancy.

TO THE MEDICAL PROFESSION.

Having been employed in the manufacture of Pepsine, Pancreatine, etc., in the United States for the past seven years, and knowing that nine-tenths of the numerous brands of Pepsine and Combinations thereof, in the market to-day, are almost worthless and inert, and knowing further, that the few really good articles are absurdly high priced—one dollar per ounce and upwards—I have decided to offer to the profession, **Maltopepsyn**, an article **unequaled in quality and reasonable in price** (fifty cents per two ounce bottle, containing nearly one and one-half ounces of powder).

I will guarantee **Maltopepsyn** to be compounded exactly as per formula and each ingredient to be of the **best quality** possible to be made, and therefore I claim the following advantages over the ordinary preparations now dispensed, viz:—

First—The Saccharated Pepsine (Porci) is of a quality superior to any in the market, it is perfectly soluble, tasteless, odorless, very active, and, being saccharated, will preserve its qualities for years, while made in any different manner it will not. N.B. Pepsine is very difficult to procure free from Mucous Creatine and the other impurities of the stomach, and is usually sold containing all these hurtful substances, which not only kill its digestive properties but give it a dark brownish color, disagreeable odor and acrid taste. Pure Pepsine should be light colored, nearly odorless and tasteless.

Second—The Pancreatine is fully equal to that made in London, England, the only Pancreatine in the market at all reliable, and that is so high priced (\$3.00 per oz.) as to almost prohibit its use.

Third—The Exsiccated, or dry extract, is a more effective, palatable and convenient preparation of the nutritive article, Malt, than the liquid extracts usually dispensed.

Fourth—The Acid Lactophosphate of lime is carefully purified and of the best quality. Its therapeutic value is too well known to need further comment.

Upon application from any of the Medical Faculty, I will be pleased to forward samples, which will substantiate the claims made for Maltopepsyn, and I hope for your assistance in this my endeavour to introduce a good preparation at a low price.

HAZEN MORSE, 57 Front Street East, TORONTO.

MALTOPEPSYN

Combines all the digestive principles that act upon
food, with the nutritive qualities of Extract of Malt and
the brain food of the Acid Phosphates.

PRICE LIST.

Maltopepsyn, (2 oz. bottles, containing nearly 1½ ozs. powder), 50c. per bottle.	
“ “ “	\$5 00 per dozen.
“ in half pound bottles	\$5 00 per pound.

Less than half the price of any good preparation of Pepsine in the market, and guaranteed to excel the best in the results.

Nearly 2,000 bottles have been sold during the first five months of its introduction, entirely through physicians' prescriptions.

The following is a sample of the great number of testimonials I have received from medical men :—

Hazen Morse, Esq.,

BRUSSELS, JUNE 28th, 1880.

Dear Sir,—I believe Maltopepsyn to be equal, if not superior, to Lactopeptine or Pepsine, in the use of which I have had a very large experience.

Yours, etc.,

WILLIAM GRAHAM, M.D.

CASE ATTENDED BY DR. BURNS, TORONTO, APRIL, 1880.

Child of Mr. Edgell, Toronto, about two years old, suffering from Diarrhœa brought on by indigestion; passed undigested food, etc. Dr. B——had tried many remedies without giving any relief; finally prescribed Maltopepsyn. After the child had taken six doses, there was marked improvement, and before one-half the bottle was used had entirely recovered.

I will make the same offer to medical men on Maltopepsyn as I do on Hydroleine, viz: I will forward upon application, to physicians only, a full sized bottle of Maltopepsyn upon receipt of twenty-five cents, (half price). This offer only applies to the first bottle.

HAZEN MORSE, 57 Front Street East, TORONTO.

more of blood. She had a fluttering heart when she commenced to have the pains.

The other two cases Dr. Thompson saw with me. Being prepared for these, I took a Davidson's syringe and—using ice-water—Dr. Thompson manipulated the syringe while I directed the nozzle of it, detaching the placenta. As soon as it was delivered the uterus contracted firmly upon my wrist. I met with little difficulty, however, in getting hold of a foot and pulling it down, and at the completion of the delivery the woman had lost but little blood—not so much as the day previous from the dilatation.

In the case delivered at the seventh month, the hemorrhage began at the fourth month, and the bleedings were mistaken for menstrual periods. When I was called I placed her in the horizontal position, and kept her so, using the viburnum three times a day. The hemorrhages however became more severe, and I was called to her one night with profuse hemorrhage, when I found it was not a central attachment, but a flap; I could feel it distinctly. It seemed to have been detached and rolled upon itself. In this case the mother made a good recovery. The child breathed a few times, but died. This mode of using the syringe is not original with me. I read it long ago in Galliard's journal, when it struck me as being sensible, and under similar circumstances I would use it again.

Dr. THOMPSON.—I had one instance of this kind six or seven years ago. The case was one of partial placenta prævia only. The hemorrhage was not very severe, but the discharges after a time had a fetid odor, which induced me to give an unfavourable prognosis. In spite of all efforts to ward it off, puerperal fever set in two days after labor and terminated the case fatally.

Dr. HOLLOWAY.—I must confess I am not posted as to any new plan of treatment of placenta prævia. I have had three cases at nearly full term—the children viable—and I have saved all of the mothers, two of the children being dead before I was called; in the other case, the child at the seventh month, lived three days. My plan has been—I judge from what Dr. Larrabee says—the old plan of introducing my hand and arm, and as soon as possible getting hold of the feet of the child, allowing my hand and arm to act as a plug to prevent hemorrhage until I can get the child down to take its place. With reference to Dr. Larrabee's partial occlusion of the os, I would say we do not call those cases placenta prævia alone, but placenta prævia modified. In these cases it is the simplest thing in the world to pass the hand beside the placenta, and turn the child and deliver. Waiting to detach the placenta, it seems to me, would increase the danger. Again, it is not always that the doctor has an assistant to labour with him. In the partial placenta prævia the plan strikes me as unnecessary, and altogether it shocks me. If

you detach the placenta first you are going to lose the child, and it seems inevitable that just in proportion as it is detached, hemorrhage will be severe; while if it is still attached a little, it offers more hope for the salvation of the child. It appears to me, sirs, that I would pay little attention to new plans of procedure when I found it necessary to put my hand in there to stop the bleeding. It must be a large vagina that my arm will not fall up, and I know they cannot bleed so very much so long as my arm is in there; and so soon as my arm is removed, I take care to have the child substitute it. Professor Williams called me to the country to see a case he had been watching for some time. I advised him to introduce his hand and deliver the child. In doing so he penetrated the placenta, and the woman did not lose enough blood to affect the pulse. I must say I am free to condemn this procedure of waiting to detach the placenta rather than to turn and deliver.

Dr. BAILEY.—There are some questions of interest in the management of these cases of which I would like to speak; the proper time to interfere and whether it is proper to give ergot in cases of this kind at full term. I have my views as to the propriety of administering ergot for the control of hemorrhage in these cases, inasmuch as in the majority of cases relief comes by turning, which manipulation will be somewhat compromised or hindered by the influence of ergot; and moreover, whether by uterine contraction hemorrhage is controlled, or whether it is not rarely increased. The effect of uterine contraction to complete dilatation would be to separate the section of the placenta next to the os, and I see no reason why by each contraction hemorrhage should not be increased. I would hesitate, then, if I had a case of placenta prævia, to administer ergot, because I would expect to have to turn the child and deliver, and I believe that in such cases more can be accomplished without, than with it.

The intention, I think, was first, in this method of detaching the placenta for the purpose of controlling hemorrhage, to remove the placenta by means of that procedure from that portion of the os least covered by it, leaving it attached elsewhere with the view of prolonging the life of the child. I was astonished to hear that the total detachment of the placenta before delivery does not increase the mortality to the children over four per cent. I do not see how it is possible to save 31 per cent. of children where the placenta is brought away before the child.

I would like to speak of one other point, and that is at the present the practice of allowing these cases to go to full term. I know that a practitioner has been criticised by many of the best and ablest practitioners and obstetricians in the city, because he permitted a case to go to full term, and then by plugging the vagina and waiting for dilatation, that

he lost both woman and child. It is held by those who criticised, that the woman ought to have been delivered as soon as the child was viable; and I think myself that the sooner delivery is accomplished after that period is reached, the less the liability to death of the mother. In partial placenta prævia the detachment of the flap causes the hemorrhage to stop, whether labor comes on or not, and that I regard as good practice; but I cannot indorse that practice which would go on to the complete detachment. It is very seldom an attachment completely central will be found, but the edge on one side will be reached soonest. When it is completely central I think it not only possible, but good practice, to go right through it and deliver the child, or detach first and then deliver.

For my part, I do not think the salvation of the child is at all comparable with that of the mother. When it comes to a question between the child and the mother I would have no hesitancy; and if I had a case now of placenta prævia, I would, if possible, conduct it on to such time as the child was viable and then deliver. I would assume that responsibility just as soon as there was a prospect of saving the child, but I would not feel warranted in giving ergot previous to delivery.

DR. SENTENY.—I would like to say a word in reference to the statistics of cases of placenta prævia compared to the whole number of cases of labor. I wish simply to say this: that statistics upon this subject, as upon most others, are, in my judgment, unreliable. I arrive at this conclusion, however, from my own experience. I have been practicing about forty years, and I suppose that in about twenty years of that time I had upon an average fifty obstetric cases per year, and the other twenty, perhaps twenty cases each year, making in all about 1,400, and in all that number of cases I have seen but one of placenta prævia complete. I have seen two others—possibly three—where there was a flap of the placenta covering over the os, but which did not interfere particularly with the result of the case. There was some hemorrhage in this case; though not enough to endanger the life of the child or the mother. In the case of central attachment, both the mother and child died. This occurred, however, in my early practice, when I was a little under the influence of older men, and being called to the case because another physician, who was the family doctor, could not be obtained. The case had gone to nearly full term and the flow was very alarming. I tamponed, as was the practice in those days, and sent for another physician, who had seen a great deal of the obstetric practice. When he came he said I could do nothing but wait. I told him then, what I thought would be the result of waiting. "Well," he said, "you can't do anything but wait." He stayed an hour or two and left. Being called to the case under those circumstances, and not feel-

ing that it was my own case, and having the opinion of this man who had had a great deal of practice, I felt my way hedged in, and I did wait. Labor-pains set in; the head came down and advanced tolerably rapidly, the placenta preceding the head, and both placenta and child were delivered while the woman was yet alive; but she was so much exhausted from the loss of blood that she also died.

Should I have another similar case, I would adopt the expedient spoken of by Dr. Bailey. In speaking of the little value of statistics, I base my opinion wholly upon my own experience; but of course I do not intend to set that up in opposition to that of men who have had perhaps five times as much experience. I am inclined to think, however, that every case where there is partial attachment of the placenta attended by hemorrhage has been called placenta prævia.

DR. CLEMENS.—I wish to say that, in speaking of the treatment of placenta prævia, I had reference only to the case I had in hand at seven months, with an attachment almost central. The woman was thought to be dying when I came. The os was dilated to about the size of a dollar, and it was impossible for me to force my hand and arm in there; and as to the perforation, I do not believe that plan is practicable in even a large per cent. of cases. If it is a central attachment it is exceedingly difficult to go through near the cord, where the membranes are much stronger than elsewhere, and reinforced also by the umbilical vessels. It does not occur to me as being a practical plan, though it may serve in some instances.

I have been impressed with the value of a treatment I saw reported in the proceedings of the Obstetrical Society of Cincinnati. I have forgotten the name of the author of the paper, but he reported most excellent results in two or three cases of placenta prævia by the injection of Monsel's solution of iron, which completely and at once arrested the hemorrhage, and thus enabled him to conduct the cases to a successful termination, both as respects the women and the children. I do not remember whether they were central attachments or not; my impression is that the os was covered, and it struck me as being a valuable method of treatment. I concur in the opinion that the nearer to full term the case can be conducted the better. I do not see how anything can be gained by inducing labor prematurely.

TREATMENT OF OBSTINATE MALARIAL ATTACKS.

The case before us is a simple ordinary one of intermittent fever. He has a chill every other day. The fever is, therefore, of tertian type, and, after

the chill, the hot stage lasts two or three hours, and is terminated by sweating. This has been kept up for some time, and will prove what I say, that an attack of intermittent fever in a malarious district is not to be despised. After checking the disease with quinine, the paroxysms will recur, and the treatment will thus often be brought into discredit, unless some few points are borne in mind, as regards the method of administration. Give the quinine at least three hours before the expected paroxysm. Shall we give small doses frequently repeated, or large doses less often? The latter is the true mode. You will then give fifteen grains three hours before the expected paroxysm. I prefer this to the former method, for this reason, which I regard as indisputable: Quinine, though not eliminated from the system with great rapidity, yet is eliminated, and chiefly by the urine. If we were to give it in small doses early in the morning, by afternoon it would be eliminated, and would require to be repeated, and in larger amount, in order to check the paroxysm. Therefore it is more economical, as well as more effective, to give a single large dose, which is also more agreeable to the patient; for I affirm that fifteen grains given at once will give much less distress than one grain every hour until the same amount be taken. Large doses obtund the sensibility of the cerebral centres, while smaller ones cause excitement of the brain and tinnitus.

By giving a single large dose of a gramme of quinine at least four or five hours before the time for the appearance of the expected chill, we break up the paroxysms. What shall we do to prevent their return? We ordinarily hear that the chills are apt to return at septenary periods; but if you will look into the matter you will find that they recur in multiples of the original number. Thus, tertian would return in six days, or if not, then on the ninth, twelfth, fifteenth, eighteenth, or the twenty-first day; and in quotidian they are apt to be manifested in multiples of two. On these critical days, the remedy should be repeated. If we break up the chill to-day, on the day after to-morrow, although he may not have a decided chill, he will have some significant symptoms, that are evidences of systemic disturbance; he will excrete more urine, he may have a diarrhoea, general muscular soreness, or something else indicating the influence of the malarial poison. We must therefore give our quinine again, and repeat it on subsequent days, multiples of the original attack, administered in anticipation of the former hour of the attack. On the morning of the sixth and seventh, the thirteenth and fourteenth, the nineteenth and twentieth and twenty-first days, doses of ten grains shall be given on each of these days.

What else? Do you abandon your patient in the interim? Ten grains of quinine will not be sufficient to relieve a damaged liver, or to reduce

an enlarged spleen; in other words, the condition of chronic malarial poisoning. Treatment must be directed to this object as well as to breaking up the chills, or they will inevitably return. Lugol's solution, in five drop doses, given in water before meals, and Fowler's solution, three drops after meals, always prove most efficient aids. It is best, about the twenty-first day, to give a full antiperiodic dose of quinine for three days, for by this time there is a much greater accumulation of morbid material in the blood than at the other periods named.

Please bear in mind these rules which I have just given you, for you will find that they will stand you in good stead in all these cases of obstinate malarial attacks.—*Dr. Bartholow, in College and Clinical Record.*

QUACK ADVERTISEMENTS IN RELIGIOUS JOURNALS.

The following is from a recent article on this subject in the *N. Y. Medical Record*:

There is something almost repulsive in the incongruities which the union of religion and patent medicines brings out. Can the mind pass easily from "Helps to Prayer" to "Vinegar Bitters"? Can "Golden Thoughts" retain their ethical value by the side of cancer-cures and "the only genuine kidney cure"? We had become much interested in a tender and pathetic poem of which the first verse was as follows:

"In pastures green not always He
Who knoweth best in kindness leadeth me
But——"

and at this moment our eyes fell on the adjacent column: "9,000,000 bottles of this wonderful remedy sold in one year"! or words to that effect. It is revolting to have a tribute to the compassion of our Lord thus cheek by jowl with Congo Balsams and South African Blood-Purifiers and Catarrh Cures!

There pervades through many of the religious journals the woodcut of an ancient lady who sits, *splendide mendax*, over an announcement of a wonderful compound that lifts up the fallen womb and cures all the diseases of women. "Stand fast by the faith" is a beautiful religio-journalistic motto which may apply to more columns than was intended.

How very weak the gospel truths appear when set off by the advertisement of a cancer-cure!

Perhaps we have said enough for the present. We shall have more to say by-and-by. Every week increases the richness of our therapeutical collection from religious literature. It will soon form a little pharmacopœia of itself—a pharmacopœia not hampered by the restraints of scientific method,

but copious in language, magnificent in promises, and as full of ingenious falsehoods as if the Father of Lies himself were pharmacist, author, and rhetorician.

In conclusion we appeal to the clergy to use their influence in checking this abominable practice of advertising nostrums in religious journals, a practice which, we repeat, they cannot but characterize as inconsistent with high morality, injurious to religion, and pernicious in every way. We are glad that some religious journals, notably the *Evangelist* and the *Appeal*, indulge in the practice but mildly, and appear to have a dim consciousness that it is not noble or Christian to bolster up religion with patent medicine lies. As for the clergy and Christian people in general, we feel sure that it only needs a full and frank statement of the facts in order to excite their condemnation of the practice.

STRYCHNINE POISONING TREATED SUCCESSFULLY WITH BROMIDE OF POTASSIUM AND CHLORAL.

The following case is reported by Dr. Prideaux, in the London *Lancet*:

On arriving at the house I found the patient, a woman of about fifty years of age, lying upon a mattress on the floor, unable to speak and perfectly rigid, and in a condition of constantly recurring opisthotonos, the convulsions succeeding one another with great rapidity, with all the appearances of acute strychnia poisoning. The pulse was slightly quickened but otherwise fair. As soon as the jaws were relaxed I administered half an ounce of bromide of potassium in solution with one dram of chloral. After a quarter of an hour the spasms began to materially abate, and the muscles relaxed in a marked degree. I then repeated the bromide, and in half an hour there was almost perfect relaxation, with slight spasms recurring at much longer intervals. After remaining with the patient for some time and finding the spasms did not recur in their intensity, we left, leaving another ounce of bromide to be given in divided doses of two drams every four hours during the night.

The next day I visited the patient early in the morning, anxious to know the progress of the case. I found her in a very feeble state, and to my surprise quite unable to raise herself, and able hardly to move a muscle; indeed she seemed like a sheet of wet blotting-paper, and was almost completely paralyzed; her water had run away in great excess, and a large quantity of liquid fæces. Her pulse was slow and markedly feeble. She had taken half of the quantity of bromide left. I stopped its administration and ordered strong beef tea and milk, with a little brandy at frequent intervals. On the evening of the same day there was little alteration.

From this time she progressed toward convalescence very slowly and gradually, her recovery being much retarded owing to the inability of her friends to obtain sufficient and proper nourishment. After three days she was able to raise herself, and had regained power over the sphincters, and on the fifth day was able to sit up. She was then removed to the Union House, where she rapidly recovered.

We were shown also an old wineglass with the foot broken off, and told that she had poured out the medicine into this without measuring it, taking nearly or about a full glass, as she said, "to make up for not taking any during the day." I took away the glass, and found it to hold full two ounces and a half.

The woman must have taken, from the size of the glass she used, fully two ounces of the wrong mixture, each ounce containing forty minims of liq. strychniæ, P. B.—that is, eighty minims in all—nearly three quarters of a grain of strychnia. I have not been able to find any record of the administration of so large a dose of bromide of potassium, but it appeared to me necessary to give as large a dose as possible, inasmuch as the poison had been in the stomach for a considerable time, and it had all, or nearly all, been absorbed. The symptoms had been increasing in severity, and from their intensity were evidently attaining their maximum, and must have soon produced death by interference with the function of respiration, so that to give smaller divided doses would have been useless. The effect of the first dose was remarkably complete, temporary muscular relaxation occurring in a few minutes, the succeeding convulsions becoming rapidly altered in character.

I believe that the complete muscular paralysis which occurred, and was so slowly recovered from, was owing to the partial abolition of the functions of the spinal cord, caused by the exhibition of the remedy, and was not due to nerve or muscular exhaustion consequent upon the extreme excitation and activity induced by the poison.

GREATLY IMPROVED DOVER'S POWDER.—The nauseating effect so frequently produced by Dover's powder is corrected by a preparation introduced by Mr. R. B. Ferguson, pharmacist, of Washington, D.C., which he calls opium and ipecac *lactose* (Walsh's Retrospect). The formula is the same as Dover's powder, except that deodorized opium is used instead of ordinary opium, and sugar of milk is substituted for potassium sulphate. The relation of the lactose to Dover's powder is exactly the same as elixir (or deodorized tincture) of opium with laudanum. This is certainly a great improvement. All that is valuable in Dover's powder is retained, while the nauseating effect and disagreeable taste are both avoided.

INTRA-CRANIAL TUMOURS.

Dr. Byrom Bramwell (*Edin. Med. Jour.*, Feb.) gives the following report of cases:—

CASE I.—J. W., æt. 5, Feb. 27; his illness commenced three months previously, with headache and vomiting. The vomiting was slight, and only occurred once or twice. The headache was generally frontal, and was worse at night; for some weeks before admission it had been so severe that he had cried the greater part of the night. There had been no fever. He had never had a fit. His parents knew no cause for his illness. Two years before admission he had fallen down stairs, and had injured his head.

His face was somewhat pale, and puffy about the eyelids, but the urine was free from albumen. (It contained some excess of phosphates.) The pupils were equal and dilated. *Sight* was good, but on examining the fundus oculi with the ophthalmoscope marked optic neuritis was seen in both eyes. The *appetite* was voracious. The *pulse* and *temperature* were normal.

The left wrist-joint was swollen, and evidently in a state of scrofulous degeneration. There was, however, no pain, not even tenderness on pressure. The other systems and organs seemed normal. There were no signs of congenital syphilis.

Diagnosing the case as one of intra-cranial tumour, I ordered a mixture containing iodide and bromide of potassium.

After a few days of this treatment the headache disappeared. The patient slept soundly and quietly all night, and seemed quite well.

On *20th March*, an internal squint of the right eye appeared. The iodide was increased from 5 to 10 grains.

On *26th March* has been very dull and heavy, and has slept a great deal. An antiseptic incision was to day made in the left wrist-joint, and a quantity of thick, cheesy pus evacuated.

On *5th April* he had a series of severe epileptiform convulsions. Both sides of the body were affected. He was insensible for three hours. Next day, *6th April*, he looked pale and stupid, but was able to walk about and to eat as usual. The squint was less marked, and on *20th April* it had disappeared.

For the next two months he remained *in statu quo*, making no complaint, eating voraciously, and sleeping too constantly. He gradually became more and more stupid, his eyesight began to fail, and ophthalmoscopic examination showed that optic atrophy was commencing. All this time the general condition as regards nutrition continued to be good, and there was never, until the final catastrophe, any trace of paralysis.

On the *17th August* he vomited several times, and was again seized with convulsions. The attack lasted several hours. When it passed off, the left

arm and left leg were found to be paralyzed. The patient remained in a semi-comatose condition until *21st August*, when he died.

The chief post-mortem appearances were as follows:—The scalp and skull-cap and membranes were natural. The convolutions were greatly flattened, the sulci effaced. On cutting into the brain tissue several nodules of new growth were found. The largest, which was fully the size of a pigeon's egg, had completely replaced the anterior part (the head) of the left corpus striatum. Another nodule, about the size of a cherry, was found in the anterior part of the corpus callosum; a third, somewhat smaller, occupied the tip of the left occipital lobe; a fourth and fifth were found in the upper and middle right temporal convolutions.

All the nodules were of a greenish-yellow colour, firm in texture, looking to the naked eye as if they contained a good deal of fibrous tissue. Their borders were well defined, but not encapsuled. None of them were softened in their interior. On microscopical examination they presented the usual appearances.

Symptomatology.—It not unfrequently happens that an intra-cranial tumour is found post-mortem, whose presence had never been suspected during life. A notable instance of this occurred in the late Professor John Hughes Bennett (case 2). He died after the operation of lithotomy. At the post-mortem a tumour the size of a hen's egg was found about an inch above the right ear. Had this tumour produced any *characteristic* symptoms, its presence must have been suspected during life by Professor Bennett, who was one of the greatest clinicians of his day. We must conclude, then, that intra-cranial tumours are not necessarily attended by *characteristic symptoms*. In the case of Professor Bennett, the tumour was evidently of very slow growth—probably stationary. It was probably congenital, for the Professor had frequently directed attention to a depression in the skull over the position of the tumour, and had stated that it had existed as long as he could remember—since childhood.

The chief symptoms met with in cases of intra-cranial tumour are:—1. Certain changes in the optic discs (optic neuritis and optic atrophy). 2. Headache. 3. Vomiting. 4. Giddiness. 5. Alterations in the motor nerve supply of muscles (spasms and paralysis). 6. Alterations in the sensory nerve supply to the face, limbs, or trunk. 7. Psychological disturbances or alterations in the mental state. 8. Phosphatæuria, a symptom common to this and many other nervous affections. 9. A voracious appetite. According to Drs. Lawson and Bevan Lewis, this symptom often occurs early in the course of the disease, *i.e.*, before hebetude or decided alteration in the mental condition have appeared.

Optic neuritis is met with in the great majority of cases of intra-cranial tumour, and is the most

important of all the symptoms. The appearances of the fundus in this condition are well represented in the water-colour drawing which I show you. The disc, you will observe, is much swollen; its edges blurred, and in places effaced; its colour in some parts reddish-gray, in others deep red, and it has a mossy, striated appearance, which is very characteristic. The veins in this case are large and tortuous, the arteries small, and in places invisible. In the immense majority of cases the optic neuritis is double. This rule is not, however, absolute. The important practical fact to remember is, that *double optic neuritis is present in the great majority of cases* (this statement should be qualified by the words, *at some period or other of their course*), and that it is the most important of all the symptoms of inter-cranial tumour.

CASE III.—The patient, a well-nourished, fairly healthy-looking girl, æt. 20, was admitted to this infirmary under my care on January 5th of the present year (1877), complaining of headache, giddiness, and vomiting. She had suffered occasionally for some years past from the same symptoms, but had been able to follow her employment until a short time previous to the date of her admission.

Her tongue was foul; the bowels constipated. There was no apparent organic disease. *Sight was good, for she could read with ease the smallest type.* The case thus far looked a very ordinary one. An ophthalmoscopic examination, however, which showed the presence of double optic neuritis, at once gave a very different complexion to it. My diagnosis was an intra-cranial tumour, and since there was no suspicion of syphilis I ventured to give an utterly unfavorable prognosis.

The patient improved under treatment (rest, ice to the head, and iodide of potassium); in fact, in a few weeks she thought herself quite well, but the very night before she was to leave the hospital she took a convulsion and died. A large tumour had destroyed the greater part of her left frontal lobe.

Optic neuritis, then, is not necessarily attended with any loss of central vision, a fact of the greatest practical importance, for it shows the fallacy of trusting to vision as an index of the condition of the fundus, and teaches the necessity, as Dr. Hughlings Jackson has so repeatedly pointed out, of a *routine use of the ophthalmoscope*. In other words, whenever you have the least reason to suspect intra-cranial disease, as, for example, in a case of persistent or repeated headache, make a careful examination of the fundus.

Headache.—I have placed this as the symptom of most importance after double optic neuritis. It is very generally present, and is often the most prominent feature of the case. The character of the pain varies. In some cases it is only slight, with paroxysmal exacerbations. In others the

patient hardly passes a day without the most fearful suffering. In syphilitic cases the pain is generally worse at night. This is not pathognomonic of syphilitic tumours, for in other non-syphilitic cases, as in the case of the boy already reported, the same period of exacerbation may be observed. The pain is sometimes referred to the whole head, at other times it is localized, and in some cases it corresponds more or less exactly to the position of the tumour. In subtentorial (cerebellar) tumours, for example, the pain is usually referred to the back of the head (occiput). When the pain is localized there is often tenderness on percussion over the painful spot.

Vomiting.—Next to double optic neuritis and headache, vomiting is the most frequent symptom. The great characteristic of cerebral vomiting is, that it is *purposeless, i. e.*, that it occurs without any obvious cause, at irregular intervals and at irregular times, and bears no fixed relationship to the digestion of food or drink. Cerebral vomiting is often (though by no means always) associated with a clean tongue. In many cases it is due to the disturbance of the cerebral circulation which attends any sudden alteration in the position of the patient. Hence it frequently occurs first thing in the morning, when the patient rises from the recumbent position.

HYPOSULPHITE OF SODA IN THE TREATMENT OF DIPHTHERIA.—Dr. Edwin Burd, of Lisbon, Iowa, gives the following as his plan of treatment:

R Sodæ hyposulphitis ℥viiij;
Quinæ sulphatis ℥ss;
Spiritus frumenti fl. ℥iv. M.

Sig. For a child five years of age, one teaspoonful every four hours, day and night.

R Potassæ chloratis ℥ij;
Tinct. ferri chloridi fl. ℥ij;
Syr. simplicis fl. ℥iv. M.

Sig. Teaspoonful every four hours, day and night.

Insufflations of sulphur to be used several times a day. Food is urged on the little patients in as large quantities as can be digested.

In all cases where the above treatment has been strictly carried out from the start the result has been surprising. The spread of the exudation is at once arrested, and prostration does not ensue. The fetor of the breath also soon leaves, and the patient soon becomes bright and cheerful. If applied as soon as the first signs of exudation appear, the whole process seems to end right here, and in a few days the patient is well, with no unpleasant sequelæ.—*Med. and Surg. Reporter.*

MR. LISTER ON THE CATGUT LIGATURE.—(*Med. Press and Circular*). The effect produced on catgut by a one-in-twenty water solution of carbolic acid is greater than that by carbolized oil; hence by blending the two the best result is obtained, and a most admirable preparing-fluid is formed. The mixture which finally made the catgut to answer all the requirements named, and to produce these in so short a time as forty-eight hours, consists of chromic acid, one part, pure distilled water, four thousand parts, pure phenol (carbolic acid), two hundred parts. The amount of catgut introduced into the mixture should equal in weight the chromic acid employed, and at the end of forty-eight hours it ought to be removed, dried, and kept in carbolized oil, one to five. The quality of the catgut is necessarily to some extent dependent upon the sheep from which it has been obtained. The intestines ought to be fresh, and it is wise to procure the supply from a maker in whom implicit trust can be placed. When in store the ligatures should be kept well coiled, to insure that they will not give in the wound, the tension to which they are subjected while stored being regulated to insure that this shall not take place. Catgut of common size prepared as thus recommended should stand a strain of about thirteen pounds. A portion, two and two thirds one-hundredths of an inch in diameter, when tested broke under thirteen pounds six ounces. Was then steeped for half an hour in serum at 98°F., and at the end of that time, being again tested, it bore eleven pounds four ounces before giving. Mr. Lister expressed his conviction that the catgut in a wound does not undergo chemical solution, but that actual *absorption* of it occurred in the same way as non-putrid bony sequestra are absorbed. The time usually occupied in the process of absorption is about twenty-one days. Erosion first begins about fourteen days after the introduction of the ligature, and in proof he exhibited a ligature removed at the end of ten days, on which no action had been exerted. He also showed the carotid artery of a calf, on which it had first been demonstrated that the catgut ligature is replaced by organized tissue. Mr. Lister concluded his exhaustive and admirable address by protesting against the misrepresentation which made him appear to declare that the catgut ligature in a wound becomes actually revitalized. He had never been guilty of such an absurdity, but asserted only that living tissue replaces the catgut as absorption advances.—*Lou. Med. News*.

INJECTION OF MORPHINE AND ATROPIA BEFORE CHLOROFORM INHALATION.—Dr. Roberts Bartholow, in the Cartright Lectures, (*New York Med. Jour.*), says *Chloroform certainly should not be administered*, under ordinary circumstances at least, without the preliminary injection of morphia and atropia. A sudden death from paralysis of the

heart in a case of ether narcosis which happened in London last month, ought to warn us in regard to the fancied security against cardiac paralysis from ether inhalation, which Schiff especially has inculcated. We ought to recognize the fact that the condition of anæsthetic sleep is a condition of danger which is merely relative in respect to the agent used, and employ antagonists to the fatal tendency—paralysis of heart or lungs. The antagonist on which, it appears, much dependence may fairly be placed, is the subcutaneous injection of morphia and atropia. The danger which attends the administration of chloral may be to a large extent averted by the simultaneous prescription of atropia, as some recent cases of accident unequivocally show. I several years ago demonstrated in a paper read before the Neurological Society of New York, that while morphia and bromide of potassium intensified the effects of chloral in every way, atropia antagonized the effects of the heart, and would thus apparently save life after lethal doses. I then also called attention to the danger of the combination of chloral and potassium bromide as a poison to the heart, which the subsequent experiments of Husemann and abundant clinical experience have since confirmed.

CONIUM IN BRONCHIAL CATARRH.—Dr. Barnes' *Brit. Med. Jour.* gives the following:—Being dissatisfied with the results obtained from the ordinary routine remedies for this complaint, so prevalent during our inclement and variable English winters, it seemed to me that, from what had been investigated of the properties of conium maculatum, that drug presented a feasible inducement for trial in this complaint. Conium is by no means a new therapeutic agent in bronchial catarrh, as it is mentioned in connection with affections of the "arteria trachea" by Galen, who himself also quotes from Andromachus and Criton. In modern times, its properties have been exhaustively investigated by Guttman, Kölliker, Harley, and others. It has been used extensively, with more or less success, in the treatment of chorea.

It has been especially pointed out that the succus is the only preparation of constant properties, and, therefore, the only reliable criterion for reference as to its action. It may not seem altogether superfluous to explain here, inasmuch as the term catarrh is somewhat ambiguous, that simple excessive activity of function of the mucous membrane is here spoken of, and not those structural changes denoted by the term bronchitis.

I have administered the succus in small doses, from fifteen to twenty minims, every four hours or oftener, according to the age, sex, etc., in forty or fifty instances; in all, save two, the treatment was entirely successful, about two days of treatment usually effecting a cure. The cases in question were those in which irritation of the tracheo-bron-

chial mucous membrane was the one salient feature following the antecedent exposure to cold or draught; for, where pyrexia and general malaise obtained, conium did not seem to be of much service for colds. In a few cases of chronic bronchitis, associated with emphysema, where it was administered, conium did not appear to be of any appreciable utility in diminishing cough.

Conium probably acts in these cases through the sedative action on the nervous centres, in connection with the respiratory tract, of one of its derivatives, methylconia.

TREATMENT OF COUGH IN BRONCHITIS AND PHTHISIS—Dr. T. Lauder Brunton says, (*Lancet* Jan., 1881), that as coughing is a reflex act, excited by irritation applied to a sensory nerve and reacting through a nerve-centre upon the respiratory muscles, it is obvious that it may be lessened either by removing the source of irritation or by diminishing the excitability of the nervous mechanism through which it acts. Both methods are employed in medicine. One of the commonest is that of lessening irritation by the use of glutinous and saccharine substances. These probably act by soothing that part of the irritation which is situated about the root of the tongue and the fauces, thus relieving the cough, though the irritation in the bronchial tubes or lung may remain as before. The power of substances to relieve cough, depends, no doubt, to a great extent either on their covering the inflamed and irritated surface directly with a mucilaginous coat and thus protecting it from the action of the air, or from irritation by other substances passing over it, or by exciting an increased flow of saliva or mucus, which has the same effect. Sedatives, as opium, hyoscyamus, and chloroform, have a certain amount of local action on the peripheral ends of sensory nerves and lessen their sensibility to impressions. This action, though slight, is increased when they are given to a mucilaginous vehicle. Of course there is also a less direct action through absorption by the stomach.

When the source of irritation is in the afferent nerves of the bronchi or of the lung itself, mucilaginous and sedative drinks are of course useless. Here vapor of conium or hydrocyanic acid tends to lessen irritability. Other inhalations, as of spray of ipecac and essential oils and terebinthinate substances, alter the nutrition of the mucous membrane in such a way as to diminish the irritation which the abnormal condition of the membrane exerts upon the nerves. In laryngeal phthisis local applications with a brush or by blowing powders directly on the diseased surface are the best means. A useful application is a powder of one-sixth grain of morphia to two grains of starch. This mixture is placed in a tube and blown down the throat at the moment the patient takes a deep

inspiration. The following prescription of Dr. Warburton Begbie, is analyzed by Dr. Brunton:—

℞ Liq. morphiæ hydrochlorat.,
Acidi hydrocyanici,
Chloroformi, aa Mxviiij;
Spiritus chloroformi,
Acidi nitrici dil., aa fʒj;
Glycerinæ, fʒij;
Infus. cascariillæ
(seu infus. quassia), fʒij.—M.

A sixth part to be taken three or four times a day.

Here the sedatives—morphia, hydrocyanic acid, and chloroform—tend to lessen the excitability of the respiratory centre; the glycerine tends to retain the sedatives in longer contact with the throat, and acts also to some extent as a nutrient; and the nitric acid and bitter are supposed to have a tonic effect on the stomach. In what way this tonic effect is produced we cannot at present say; but we will imagine that they will in some way partially counteract the effect of the congestion which the cough produces, and, exciting appetite, will counteract the influence of the morphia. Nitric acid has also, as Dr. Brunton points out, a definite effect on the secretions of the lungs themselves. Considering those drugs which tend to lessen congestion, Dr. Brunton mentions digitalis, and gives the following prescription from Beasley, as used by Sir A. Crichton:—

℞ Succi limonis, fʒss;
Potassii carbonat. ad saturand.;
Decoct. sarsaparillæ, fʒx;
Tinct. digitalis, Mx ad xxx;
Mucilag. acaciæ, fʒx.—M.

To be taken every sixth hour. The tincture of digitalis here tends to contract the vessels, diminish pulmonary congestion, and lessen cough. The potash renders the pulmonary secretion more fluid and abundant. Warm food, as beef tea, Dr. Burton says, is a good expectorant, as also is cod-liver oil. Ice, hydrocyanic acid and alum are recommended in the vomiting of phthisis.

MEDICAL ATTENDANCE ON THE POOR.—The London *Lancet* has the following very sensible remarks:—There is a very comfortable doctrine abroad that doctors are at everybody's service in an emergency, and that they are bound to rise from their beds and go to a distant alley to save a life or ease a pain, without the least prospect of recompense. But is such mercy to be shown only by doctors? Why does not the public share with doctors the cost and the credit of such service? It is society's duty, not that of any single profession, to see that no human creature, however poor, dies without medical aid. A country like this should make provision for the emergencies of its poor, and not throw the whole onus on the much enduring and little paid members of our profession.

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TORONTO, APRIL 1, 1881.

QUACKERY AND THE RELIGIOUS PRESS.

Religious journals are more eagerly sought after by the advertisers of patent medicines than any other class of newspapers. The reason for this is obvious: they have a stronger hold upon the confidence of their readers, and are supposed to be guided by a higher ethical standard than ordinary newspapers. They are also supposed to have a higher object than mere financial success, so that the appearance in their columns of a quack medicine, is *prima facie* evidence to the majority of ordinary readers, that the remedy is endorsed or recommended by the editor as a reliable remedy for the disease or diseases for which it professes to be a certain cure, and is not advertised merely for the sake of the money derived for the space occupied. It is a notorious fact, therefore, that the religious journals are the most powerful allies of the quack nostrum vendors, in this country. The public are becoming slowly aroused to the importance of this fact, and require but to have their attention more specially called to the evils of quack advertising in religious journals. A series of very excellent articles upon this subject have appeared in recent numbers of the *N. Y. Medical Record*, one of which will be found in another column. These articles have had the effect of arousing some of the religious journals in the United States to a sense of their responsibility in this respect. One of these, the *Christian Register*, of Boston, comes nobly to the front in denouncing the wicked practices of many of its contemporaries. As the *Register* does not publish

any quack advertisements, it has a right to be heard, and this is what it says:

"One can hardly take up a single number of the denominational journals without finding that the order and decency which reign in the editorial columns seem to be wholly neglected in the advertising department. We have heard an experienced advertising agent say that the publisher of a prominent weekly religious journal would take absolutely anything in the way of an advertisement, without regard to quality, so long as it was paid for, and amusing instances are related of his willingness to oblige advertisers by taking pay "in kind." This laxity of taste and judgment is most strikingly revealed in the case of quack medicines. They flood the columns of the religious press. They are displayed in conspicuous type, and illustrated by ridiculous and disgusting travesties of the engravers art. If we sought for a basis of agreement among the religious papers, we should find it not in the panaceas which they offer for the soul, but in those which they unite in offering for the body. The same advertisement runs through a host of journals. Whatever be the "ologies" or "isms" that these papers stand for, they come together in delightful brotherhood concerning the virtues of a specific for the liver, or the properties of some unfailing cathartic. This beautiful catholicity loses something of its charm when we remember that every paper is paid a round sum for circulating these sentiments."

We commend this extract to the tender consciences of the editors of some of our religious journals in Canada. The evil is just as great on this side of the line as on the other. Our religious journals teem with advertisements of consumption cures, cancer cures, liver pads, female regulators, famelines, spermatorrhines, etc., *ad nauseam*, many of them bolstered up by flattering testimonials from clerical gentlemen. Can anything be more humiliating, or more inimical to the advancement of truth and righteousness among the people, than the continual propagation of falsehood by those very journals whose sacred office should be the dissemination of truth? No well educated and intelligent person can read over the glowing announcements of some of these great "curealls," without coming to the conclusion that they contain many exaggerations and falsehoods which to ordinary mortals might pass for truth, and more

especially because they may have read them in a religious journal. Is it therefore christian-like, that for the sake of "filthy lucre," the editors of religious papers should become the instruments through which the patent medicine vendors may not only deplete the purses, but also in many instances, imperil the constitution of those who are accustomed to look to them for spiritual and temporal advice? We conclude by entering our emphatic protest against the advertisement of quack nostrums in religious journals, and hope to be sustained in our action by the voice of public opinion, and the good sense and christian spirit of a certain class of religious journals.

INCREASED REPRESENTATION IN THE ONTARIO MEDICAL COUNCIL.

At the meeting of the Ontario Medical Council in July last, a resolution moved by Dr. Bray of Chatham, and seconded by Dr. Logan of Ottawa, was adopted, to the effect: "That it is expedient in view of the increased, and increasing number of Teaching Bodies in this Province, who send members to this Council, that a change in the Act should be made, and that a Committee be appointed whose duty it shall be thoroughly to enquire into the matter, and report at the next meeting of the Council, with a view of making a change in Section 6 of the Medical Act. The following gentlemen were appointed on the Special Committee. The President, (Dr. Allison,) Drs. Bergin, Geikie, Lavell, Wright, Mostyn, Macdonald and the mover and seconder. This committee met in pursuance of notice, in this city, on the 1st ult. In the absence of the mover, Dr. Bray, Dr. Logan explained the object and scope of the resolution. After discussion, Dr. Macdonald moved, and Dr. Lavell seconded the following resolution: "That it is not advisable, to increase the number of representatives of the Medical Council."

It was moved in amendment by Dr. Geikie, seconded by Dr. Mostyn: That in the opinion of this Committee, it is not desirable that Colleges or Bodies other than those which actually teach, or examine and confer degrees in medicine, should send representatives to the Council. Also that it is expedient to increase the number of Territorial Representatives in the Council to the extent of the

number of seats formerly filled by the representatives of the body lately known as Eclectics." The amendment was lost.

In connection with the proceedings of this special Committee, the mover of the resolution which was carried, gave amongst other reasons, why in his opinion it was not desirable to increase the number of Territorial Representatives—while he opposed the exclusion of those sent by Colleges, even although such Bodies might neither teach medicine nor examine for degrees—that the Territorial Representatives in the Council, were disposed as a class to be aggressive, while representatives from the Bodies referred to were generally in the habit of taking a more conservative course in any matter coming up. He suggested the possibility of grouping certain bodies which are now represented singly, apparently forgetting that just as he reduced the numbers of the class whose views he most approves, the power of the "aggressive" Territorial members would increase.

The Medical Council is the representative body of the medical profession, and has, in the public interest, the control of medical education, and it is folly to draw distinctions, where none should in reality exist. The outside profession desires to have the curriculum laid down by the Council, a wise one in all respects, and both the profession and the public wish to have it thorough. To secure these essential results, the cordial co-operation of the profession and the schools are required—the profession taking a pride in the efficiency of our Ontario medical schools, and giving them every possible encouragement, while the schools will in return do their best to deserve the highly prized confidence.

Nothing can be more reasonable than that the general profession should have a few more responsible representatives in the Council, and without enlarging it very greatly a few more seats could be readily filled in this way, with great advantage to the public, to the profession and to the Council. On the other hand nothing is less reasonable than to have the Council filled with representatives of Bodies, which, however useful, and even indispensable as far as general education is concerned, have yet no interest in medical education, as they neither teach nor examine in medicine, and would suffer no wrong if not represented on the Medical Council.

LUNATIC ASYLUM REPORTS.

We have before us the Annual Reports for 1880 of the New Brunswick Asylum, St. John, by Dr. Steeves, and the London (Ontario) Asylum by Dr. Bucke, medical superintendents respectively.

In the New Brunswick Asylum there have been under treatment during the year 409 patients. Of these 50 were discharged cured; 17 improved; 5 unimproved; and 25 died, leaving 312 in the Asylum on the 31st October, 1880. Dr. Steeves in his report says the past year has been characterized by substantial work and steady progress in the accomplishment of the main objects of the Institution. A larger number of patients than in any previous year has been under care and treatment, and with results generally satisfactory. The number of recoveries was more than the average; the mortuary list was comparatively small, and the health of the household was unusually good.

So fine a summer as the past, has seldom, if ever, been observed in St. John. On this account the patients were much out of doors, and thus escaped the consequences of indoor congregation and inertia during the usually unhealthy season.

In the London Asylum, there have been under treatment during the year 902 patients; of these 67 were discharged, 43 died, and 7 eloped. The number of patients discharged as recovered or improved was 58 or 36.2 per cent of the admissions. The death rate for the year was 4.76, which is less than last year. A large number of repairs and improvements were made in the asylum during the year, and more are recommended in the report. The plan of having separate buildings something on the cottage plan for violent cases, those of filthy habits, &c., has, notwithstanding the adverse opinion of experts, proved a success so far as carried out in this asylum. Dr. Bucke says that he is firmly persuaded that a still further division of an asylum into buildings under separate roofs, than is here practised, might be adopted with great advantage, and that many of the problems in asylum construction may be solved by the abolition of the large single building, and the use of a number of smaller buildings in its place. Some of the advantages of the latter system would be, more perfect isolation of one class of patients from all other classes, and the greater facility of systematic classification of patients; greater facility for lighting the

buildings; better ventilation without fans and steam power than can be had with these in a very large building, and consequently better health of the patients, a lower death rate, and less cost of construction. To construct an asylum for a thousand patients, he would have it composed of not less than ten or twelve separate buildings, the largest to contain not more than two hundred patients, and the smallest between fifty and a hundred. All these buildings, as well as the houses for the medical staff and bursar, the store, sewing room, shops, chapel, etc., should be heated from a central boiler house, which would also supply steam for the one laundry and the four or five kitchens which would be required. Close to the engine house would be placed the motor for generating electricity to light the grounds, roads, and all the buildings. Beside it, or in connection with it, would be the engines for supplying the institution with water for domestic and fire purposes. On the plan thus briefly indicated, an asylum could be constructed at once cheaper to build, cheaper to maintain, and more adapted to the end in view, than any of the existing institutions in this country.

PROFESSIONAL CARDS.

Since the issue of the article in the CANADA LANCET on "Qualified Quacks," we have received a large number of professional cards of all kinds, clipped from town and country newspapers. Some of these are very modest, containing only the name and address of the physician, his office hours, etc.; while others are much more pretentious, setting forth the eminent qualifications of the learned and experienced practitioner, or the number of specialties in the treatment of which he excels—as disease of the heart, liver, lungs, skin, women, etc. Nor does this species of advertising obtain only with the junior members of the profession, who may be excused for taking some method of letting their presence in a town or city be known; but many, who have been years in practice, are the greatest transgressors in this respect.

A priori, it may be said that there can be no objection to the use of mere professional cards, but if so, where is the line to be drawn? Shall the practitioner be allowed to give his name, titles and address only? or shall he be permitted to

state the specialties which he has adopted, and if so, how many? Seriously, practitioners do sometimes make themselves appear ridiculous in the eyes of the profession and the public, by assuming an air of greatness, and a superior knowledge in the treatment of a number of diseases for which they are no better qualified than their fellow-practitioners. We again commend to their notice and to all who have an itching for cheap notoriety, the following extract from the Code of Medical Ethics adopted by the Canada Medical Association:—

Art. 1, Sec. 3. It is derogatory to the dignity of the profession to resort to public advertisements, or private cards, or handbills, inviting the attention of individuals affected with particular diseases—publicly offering advice and medicine to the poor gratis, or promising radical cures; or to publish cases and operations in the daily prints, or suffer such publications to be made; to invite laymen to be present at operations, to boast of cures and remedies, to adduce certificates of skill and success, or to perform any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular physician.

We are glad to be able to say, that notwithstanding the dereliction of a few recalcitrant members of the profession, the Code is very well observed in Canada, and that neither professional cards nor any other method of advertising is resorted to by our best physicians in town or country.

ONTARIO MEDICAL COUNCIL MATRICULATION.—We are not surprised to see that the final settlement of the difficulties connected with the Matriculation Examination has been left to the Council. These difficulties might never, indeed should never, have been created, and had the intermediate examination with Latin been simply adhered to it would have been ample, and carried out with no trouble. We trust the Council will see this and carry it out without losing much precious time in discussion.

To give the primary candidates of 1880 credit for any three or more subjects passed at that time, is only fair, because it places them on a par with those coming up at the ensuing examination.

The Committee has ordered the registration of all students who made in August, 1880, at the Matriculation Examination, 45 per cent. of the aggregate marks. This gives relief to some 34

students, whose standing may be judged of by the fact, which we had taken the pains to verify by examination of the official figures, that 33 of the 34 obtained close upon 50 per cent. and upwards in English; 33 of the 34 obtained 33⅓ per cent. and upwards in Mathematics; only 5 of the 34 are under 30 per cent. in Latin, and only 1 under 30 per cent. in Optional work—surely this speaks volumes.

The Committee did by this resolution only an act of justice which should have been done six months ago, and thus have enabled many of the students who have lost the entire winter, to pursue their studies.

KINGSTON MEDICAL EXAMINATIONS.—The following gentlemen have successfully passed the examinations of Queen's University. Finals, without an oral—W. J. Gibson, J. S. Magurn (equal); B. Wallace. E. Oldham, J. F. Oshea, J. M. Dupuis, F. R. Alexander, A. W. Kerrington, J. H. Betts, D. Johnston. With an oral—R. D. Coughlan, D. H. Rogers, B. J. McConnell, T. J. Symmington, S. H. Snider, John Jamieson and John McDowell.

Primaries, without an oral—R. W. Garrott, J. M. Stewart, D. B. Rutherford, A. P. Cornell, G. H. Denike, C. E. Jarvis. With an oral—R. S. Anglin, A. D. Cameron, C. C. Clancy, L. Davis, C. F. Fry, A. J. Grange, Jno. A. Hamilton, A. A. Mordy and C. G. McCammon. Those who passed without an oral are given in order of merit; the others are not.

RESTORING THE HEART'S ACTION.—Dr. J. C. Reid, *Brit. Med. Journal*, relates a vivisection experiment of his college days. He had killed a mouse by a blow upon the head, and opened the thorax in order to see the heart beat. It did not beat until he pricked it with a needle and set it agoing. A second prick temporarily revived the pulsations when they ceased. He also cites two cases, one occurring in his own practice and one in his father's, in which the heart's action had ceased entirely, and the patients were thought to be dead, but the action of the heart was restored by means of a douche of hot water, a stream being allowed to fall upon the præcordium from a height of several feet.

COLLEGE OF PHYSICIANS AND SURGEONS, QUE.—The semi-annual meeting of the Quebec Medical Board, will be held in Montreal on the 11th of May. Candidates for examination or for License, must send in their papers accompanied with the fee for the license, \$20, at least ten days previous to the meeting.

The preliminary examination for admission to the study of medicine, will be held on the 23rd of September next. The fee for this examination is \$10, which should be sent to either of the Secretaries, Dr. A. G. Belleau, Quebec, or Dr. F. W. Campbell, Montreal, at least ten days previous to the examination.

TREATMENT OF CYSTITIS.—Much difficulty is sometimes experienced in the treatment of this affection. Dr. A. J. C. Skene of Brooklyn gives the following which he regards as almost specific in its influence, especially in the earlier stages, affording rapid and lasting relief :

R. Acidi Benzoici.
Sodii Biboratis aa grs x.
Inf. Buchu ʒij —M.

Sig.—This quantity to be taken three or four times a day. The diet should also be carefully regulated and the skin and bowels kept in an active condition.

FOR THE ANÆMIA OF CHLOROSIS.—The following is highly recommended by Dr. Thomas of New York in the treatment of anæmia of chlorosis :

R. Ferri vini amari ʒviijss
Tinct. nucis vomicæ ʒiv
Liq. potass. arsenit ʒij—M.

Sig.—A dessertspoonful in a glassful of water after each meal.

In addition to this he advises general tonic treatment and the observance of good hygiene.

SUSPENSION OF U. S. MEDICAL COLLEGES.—The notorious Dr. Buchanan has made a full confession of his misdeeds, and the misdeeds of others, since his incarceration, and has given the authorities a clue to many diploma vendors in the United States. As a result of the *exposé* the charters of the Livingstone Medical University of Charleston, Va., and the New England University of Arts and Sciences, of Boston, have been repealed.

WALNUT LEAVES IN DIPHThERIA.—Among the many remedies that are being constantly brought to the front in the treatment of this affection, may be mentioned a decoction of the leaves of the black walnut (*Juglans nigra*). Dr. Curtis, of St. Mary's Hospital, Quincy, Ill., U. S., has made trial of this treatment for some time past, and reports the results in an article in the *Boston Med. Jour.*, March 10, 1881. He was led to the use of walnut leaves from the fact that they were highly recommended by M. Nelaton, in the treatment of malignant pustule. His success in the cases of diphtheria, in which he has used it, warrants a further trial of the remedy.

REMOVAL OF RETAINED PLACENTA.—In cases of early abortion, retention of the placenta is very common, and, if not removed, serious trouble may sometimes occur. Dr. Reiler, in the *Pittsburgh Medical Journal*, recommends the following method of removal: He places the patient on the left side and introduces Sims' speculum. He then seizes the posterior lip of the os with a vulsellum forceps and brings it into view. He then separates the placental attachment with a curette, seizes the mass with a pair of toothed forceps, and with rotation and gentle traction withdraws it entire.

BIRDS OF A FEATHER, ETC.—We observe from the Belleville papers that Dr. S. L. Nash, formerly of Picton, has joined hands with M. H. Williams, M. D., of Detroit "Institoot" notoriety. These travelling gentry have established a "Branch Office" —"Throat and Lung Institoot" in Belleville, where all and sundry afflicted persons may be speedily cured of every ailment. Consultation free, and prices within the reach of all. "Write for list of questions" and "Medical Treatise," and address Drs. Williams & Nash, Dafoe House, Belleville, Ont.

TRIBASIC PHOSPHATE OF SILVER IN NERVOUS DISEASES.—This salt of silver has been used recently with marked success in the treatment of inveterate epilepsy, locomotor ataxia, acute myelitis, &c. Dr. McLane Hamilton, of New York, states that a persistent use of this remedy will do more for the patient than any of the drugs hitherto used. The dose is from 1/3 to 1/2 a grain, given in glycerine and water.

SIMPLE CONTINUED FEVER.—Dr. Fothergill of London, England, gives great prominence to the following formula for the treatment of simple continued fever. It is especially indicated where there is great cerebral disturbance. He says it will probably constitute, *par excellence*, the fever mixture of the future :

R. Acid. Hydrobrom.....ʒi.
Syr. Simp..... ʒij.
Aq.....ʒj.—M
Sig.—To be taken every hour.

BELLEVUE MEDICAL COLLEGE.—We learn with deep regret that the Bellevue Hospital Medical College has been obliged to return to the old requirements for graduation instead of the requirements of three year's attendance, in force during the session of 1880-81. The signal failure of this popular school to maintain for a longer period than one term, an advanced standard of medical education, is a bad omen as regards the future improvement of medical education in the United States.

HEALTH LEGISLATION.—The speech delivered in the Senate by Hon. Dr. Brouse, on public health, referred to in the LANCET for March, is published in full in the *Canada Health Journal* for March, 1881. Persons wishing copies may obtain them by addressing the editor of that journal.

DR. MOSTYN.

We regret to announce the death, by drowning, of Dr. Wm Mostyn, of Almonte, Ont., ex-M.P.P., and member of the Medical Council of Ontario. He and a companion were returning from Appleton in a skiff, when the accident occurred through the upsetting of the boat. Dr. Mostyn was a graduate of Queen's University, and has been in practice since 1858. He served in the Ontario Medical Council from 1869 to 1872, and was elected again in June last to serve a term of five years. He was a member of the Provincial Government preceding the present. His loss will be greatly deplored in the community in which he resided. His death causes a vacancy in the Ontario Medical Council.

APPOINTMENTS.—David H. Muir, Esq., M. D., of Truro, N. S., has been appointed a member of the Provincial Medical Board.

Dr. Webb, of Waterloo, has been appointed Physician to the Waterloo County Poor House, *vice* Dr. Walden, resigned.

It is rumoured that Dr. Lafferty, of Pembroke, has been appointed General Medical Superintendent of the Canadian Pacific Railway.

Dr. J. W. Mount has been appointed physician to the Montreal gaol.

Books and Pamphlets.

THE POPULAR SCIENCE MONTHLY FOR APRIL, 1881.

The April number of "The Popular Science Monthly," contains fifteen articles of an interesting and instructive character, and several of them of great practical value. Herbert Spencer opens the number with the sixth paper on "The Development of Political Institutions," in which he discusses the subject of "Political Heads," or the causes and conditions that determine the concentration of authority in power in chiefs, kings, etc. Dr. Felix L. Oswald continues his common-sense treatment of the subject of "Physical Education" in an article on "Out-door Life." He claims, and with reason, that as a natural preventive of disease nothing equals active exercise in the open air; and for respiratory ailments especially, it is superior to anything else as a curative agent. "Some Notes on a Doctor's Liability," by Oliver E. Lyman, is a discussion of the legal responsibilities of physicians, which, in these days of frequent prosecutions for malpractice, both patients and doctors will do well to read.

A TREATISE ON THE PRINCIPLES AND PRACTICE OF MEDICINE. By Austin Flint, M.D., Professor of the Principles and Practice of Medicine and Clinical Medicine in the Bellevue Hospital Medical College, etc. Fifth edition, revised and largely re-written. 8vo. pp. 1150. Philadelphia: Henry C. Lea's Son & Co. 1881. Toronto: Willing & Williamson. Cloth, \$5 50; leather, \$6 50; half-Russia, \$7.

The author, in the preparation of the present edition, has relinquished a large share of the work of revision, and especially the pathological portions of it, to Dr. Wm. H. Welch, lecturer on Pathological Histology in the Bellevue Hospital Medical College. He also states in his preface that he "has not been influenced by any sense of obligation to maintain consistency of views with the

previous editions of this treatise, or with other works which he has written," and that whenever statements are found to vary from those made at a prior date, it is because that from enlarged knowledge they seem to him no longer tenable. Dr. Welch has performed his part of the work well, as a careful perusal of the first seven chapters will show. Though strongly biased in favor of the teachings of Cohnheim, he does not accept the *ipse dixit* of that illustrious teacher. He is cautious not to commit himself to the doctrine of a *contagium vivum*, although seemingly inclined in that direction. In the second part of the work a new section has been added on the diseases of the hematopoietic system; nervous affections have been based on their anatomical relations instead of upon their symptomatology as formerly, and several diseases are treated of which were omitted in former editions. The new edition of this standard work will be cordially received by the profession in America, as it is not only a thoroughly scientific work, but also a pre-eminently practical one.

A MANUAL FOR THE PRACTICE OF SURGERY. By Thomas Bryant, F.R.C.S., Surgeon to Guy's Hospital, London. Third American, from the third revised and enlarged English edition. Edited by John B. Roberts, A.M., M.D., Philadelphia. Large 8vo., pp. 1005, with 735 illustrations. Philadelphia: Henry C. Lea's Son & Co. Toronto: Willing & Williamson. Cloth, \$6 50; leather, \$7 50; half-Russia, \$8.

It is not long since this admirable text-book on surgery was noticed in these columns. The present edition has undergone several important improvements; much new matter has been added, and several errors corrected. It is a work which has made for itself more than a mere passing reputation, and the present edition will be eagerly sought after by those who know its value as a reliable guide to the surgeon. We cordially recommend the work.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. By Louis A. Duhring, M.D., Prof. of Diseases of the Skin in the Hospital of the University of Pennsylvania. Second edition, revised and enlarged. 8vo. pp. 644. Philadelphia: J. B. Lippincott & Co. 1881. Toronto: Hart & Rawlinson. Cloth, \$6.

Dr. Duhring's work on skin diseases is favorably

known to the profession, both in Canada and the United States, and the present edition bears out the high character of the previous volume. New matter has been liberally added, and will be found on almost every page, and every effort has been made to present the subject of Dermatology in the light of the latest researches. This specialty has grown so rapidly within the past few years that revised editions are frequently demanded. The volume before us is well worthy of the support of the profession.

OZÆNA CURED BY ODOFORM.—Dr. George Leetzel (*Algem. Med. Central. Zeitung*, June 5th, 1880) was induced to use iodoform in ozæna by the favorable results which followed its use in otorrhœa. He used a powder consisting of 2 parts of iodoform and 10 parts of pulverized gum arabic. This is used as a snuff, being drawn into the nostrils from three to six times a day. In the six cases treated by this method the results were exceedingly favourably. Two cases, which had lasted for months, and in which every means which could be thought of had been tried without any benefit, were completely cured within ten or fourteen days. The other four cases, which were less severe, were cured in from six to eight days. Before using the powder, Dr. Letzel cleanses the nose as thoroughly as possible with the nasal douche, and removes all scabs by means of the ear-scoop, so as to allow the powder to come directly in contact with the mucous membrane. With reference to the unpleasant smell of the iodoform, he says that it is at least, less disagreeable than the odour caused by the ozæna itself. This treatment commends itself for its simplicity; but it should be mentioned in using the nasal douche, that Dr. Roosa, of New York, and others have found that, unless very great precautions are observed, it is liable to lead to deafness. Dr. Lennox Browne, who is attached to a hospital where both throat and nasal and ear diseases are treated, states that he has frequently observed this result. Browne on *Diseases of the Throat*, pp. 65 and 166.—W. C. D., in *Virginia Med. Monthly*.

REMOVAL OF THE VAGUS WITH A CERVICAL TUMOR—CURE.—Professor Lü (*Cbl. f. Chir.*, 1880, No. 36) reports the following case. A woman whose sister had died with lymphoma malignum of the neck applied for relief from a tumor, oval in shape, rather hard, movable, and situated in the right submaxillary region. It was removed without difficulty, and the wound healed by first intention. On examination of the tumor by Professor Recklinghausen, it was pronounced a

hyaline cancrroid, connected with but not implicating the salivary gland.

About two years later the patient again applied for treatment, the disease having returned in the cicatrix and also under the right sterno-mastoid. There was no functional disturbance; the patient's health was fair. The smaller tumor in the scar was removed with some difficulty, being found to lie more deeply than appeared from its growth externally. There was much venous hemorrhage. The new, larger tumor was laid bare by an incision along the edge of the muscle, which was closely connected with it. On cutting this above and below, the carotid was found separable from the tumor, but the latter had grown completely around the jugular vein and the vagus. The vein was close to the upper border of the clavicle and above the tumor and with a portion of the vagus twelve centimeters (four inches) in length.

No noteworthy alteration in respiration and pulse occurred at the moment of section. The wounds healed rapidly. Five months later the patient showed easily excited but otherwise normal respiration, the right arm was slightly weaker than the left, and the shoulder could be raised with difficulty. The right side of the neck was flattened; the pulsations of the carotid could be felt along the whole course of the scar. Pressure on the latter, particularly at the upper and lower stump of the muscle, aroused fits of coughing. There was suspicious hardness in the submaxillary scar, but no positive return to the growth. The right side of the face, particularly about the cheeks, showed a hypertrophic condition, most likely the result of the ligature and removal of the common jugular vein.—*Med. Times.*

THE POWER OF THE PRESS.—The returns so far received for *Hubbard's Newspaper Directory of the World*, to be published early in 1881, by H. P. Hubbard, New Haven, Conn., indicate that the papers and magazines published in the world are divided about as follows:—United States, 9,600; Germany, 5,000; Great Britain, 3,000; France, 2,500; South America, 1,150; Italy, 1,000; Austria, 1,000; Australia and Pacific Islands, 1,000; Spain, 950; Russia, 650; Canada, 540; Switzerland, 500; Sweden, 350; China and India, 300; Denmark, 350; Japan, 250; Norway, 250; Portugal, 250; Africa, 230; Mexico and West India, 150; Turkey, 70. Total, 29,040. This list will probably be increased slightly, so that the aggregate will not fall far short of 30,000. Of this number over 15,000 are printed in the English language.

DIFFERENTIAL DIAGNOSIS OF GASTRIC ULCER AND CANCER.—Trousseau says on this subject, "Should the supposed cancerous tumor not be accessible to investigation, as in the case to which

I have just alluded, there remains a valuable diagnostic sign which I must indicate to you. This sign, to which over fifteen years ago, I first called the attention of the profession, consists in the appearance of a *venous thrombosis*. When you are in doubt as to the nature of a gastric disorder, and are hesitating between a chronic gastritis, a simple ulcer and a cancer, a *phlegmiasa alba dolens* of the lower or the upper extremity will put an end to your indecision, and it will be allowable for you to assert positively the existence of a cancer.—*Pacific Med. Journal.*

TREATMENT OF SUB-INVOLUTION OF THE UTERUS.—Dr. Braithwaite has had excellent results from a plan first made known to him by Dr. Wynn Williams. A delicate whalebone applicator, armed with cotton, is dipped into a mixture of equal parts of iodine, iodide of potassium, and alcohol, and carried up to the fundus where it is allowed to remain for a few moments. The introduction is facilitated by passing a sound beforehand. Strong muscular contraction at once occurs, unless there is endometritis, in which case the affection of the endometrium should first be subdued by the use of ordinary tincture of iodine or carbolic acid. This strong solution of iodine seldom has to be applied more than three or four times, as it causes a speedy reduction of the size of the uterus.—*Ob. Jour. Gr. Brit. and Ire.—N. Y. Med. Four.*

HOW TO COVER THE ODOR OF IODOFORM.—Several methods have been proposed, the following of which, according to *New Remedies*, are the best. 1. Tannin mixed with the iodoform in equal parts. 2. Oil of peppermint in the proportion of a drop to every drachm. 3. Lavender water and eau de cologne have been recommended, but are not so effectual as the peppermint. 4. Balsam of Peru, 3 parts; iodoform, 1 part; vaseline, 8 parts; or, in place of the latter, alcohol, collodion, or even glycerin. 5. Oil of sweet almonds added in equal quantity to the iodoform. 6. Oil of bitter almonds. One or other of the first two methods is probably to be preferred.—*British Medical Journal*, vol. ii., 1880, p. 692.

Births, Marriages and Deaths.

On the 26th of February, at Parrsboro, N. S., Henry B. Forman, M. D., aged 69 years.

At Brockville, on the 13th ult., Wm. B. Malloch, M. D., aged 36 years.

In Montreal, on the 24th of February, Robert F. Godfrey, M. D., aged 30 years.

* * * *The charge for notices of births, deaths and marriages is fifty cents, which should be forwarded in postage stamps with the communication.*

A NEW REMEDY CALLED INGLUVIN.

By A. F. SHELLY, M. D.

[From the Medical and Surgical Reporter, February 3, 1877]

"This is obtained from the gizzard of the domestic fowl (chicken) and is a *Specific for Vomiting in Pregnancy*. I have used this remedy for twenty-five years, and it has never failed. It is also the most *powerful* and *reliable* remedy for the *Cure of Indigestion, Dyspepsia, and Sick Stomach*, caused from debility of that organ. It is useful in all cases where pepsines and pancreatines are used, but with more certainty of its good results, for it puts all those preparations in my experience, in the back ground.

In complicated affections of the Stomach, such as *Inflammation, Gastralgia, Pyrosis, etc.*, it may be combined with Subnitrate of Bismuth and opiates; and in Diarrhoea and Cholera Infantum, with astringents, both vegetable and mineral. I have given the article to several prominent physicians, who have used it with the happiest results, among whom I may mention Prof. E. WALLACE, of the Jefferson Medical College; he gives me the results of seventeen cases as follows:—

IN VOMITING OF PREGNANCY, OUT OF NINE CASES HE CURED SIX, AND PALLIATED TWO, and in one case the remedy was not taken according to direction, and therefore had no effect.

He used it in seven cases of Sick Stomach, caused by chronic inflammation of the uterus; cured five, and two remained doubtful. He also used it in a case of very obstinate Sick Stomach caused by irreducible hernia, and says this was the only remedy that gave any relief.

We, who have some experience, all know that Vomiting of Pregnancy is a sore affliction, and in some cases almost endurable, nay, indeed, putting life in jeopardy; but in INGLUVIN we have a remedy which will prove to be a great blessing to mothers, who, as yet, think vomiting must be endured as a natural consequence.

If I am able, by this publication, to induce the medical fraternity to make use of the remedy, I am positive that a great boon will be conferred upon a class of sufferers who claim our sympathy.

The dose is from five to ten grains, hardly ever more than five, except in obstinate cases. For children, from one to five grains. My mode of administering it is in a spoonful of water or tea, or it may be strewn on a piece of bread and covered over with a little butter; it is, however, nearly tasteless. In Dyspepsia and in Vomiting of Pregnancy, I direct it to be taken half an hour or so before each meal. In other affections of the Stomach and bowels, every two to four hours. I give it uncombined, except in complicated cases, as heretofore mentioned.

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11 RUE NEUVE DES CAPUCINES,

PARIS, February 20th, 1879.

Editors North Carolina Medical Journal.

GENTLEMEN:—

* * * I cannot conclude this letter without saying a word in regard to a medicine which has recently been introduced into France by our enterprising countrymen, Messrs. Wm. R. Warner & Co. of Philadelphia. Among other specimens of their exhibit at the recent Exposition, their agent in Paris very kindly sent me several bottles of **Ingluvin*—prepared from the gizzard of the chicken,—with the request that I would give it a fair trial in the treatment of gastric irregularity and disturbance. I am pleased to be able to chronicle the fact, that, in three cases of pronounced atonic dyspepsia and in one case of chronic indigestion, it has acted like a charm—promptly relieving all disagreeable symptoms and restoring the stomach to its proper functions. My patients, who had previously tried without benefit all ordinary forms of pepsine, bismuth, cerium, nux vomica, &c., &c., are delighted with this new remedy and assure me that they experienced benefit from the first dose. Hereafter I shall prescribe it liberally and with great confidence in its therapeutic value.

Assuring you of my abiding interest in the success of the JOURNAL.

Very truly and respectfully yours,

EDWARD WARREN, (BEY) M. D., C. M.

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(PEPSINA PORCI.)

This preparation of Pepsin is manufactured from the fresh stomach of the pig, in a pure and palatable form, without heat. It represents the digestive principle of the gastric juice, in a very active state, and in the form most convenient for administration. It is prepared with every possible care from the inner coating of the stomach, first removed from the other tissues of that organ. Combined with sugar of milk it will be found free from the disagreeable taste of many Pepsins.

Ten grains dissolved in acidulated water will digest from one hundred and twenty to one hundred and fifty grains of coagulated albumen at 100° F. in from four to six hours.

The experience of physicians has been so favorable to the use of Pepsin as an aid to impaired digestion and kindred affections, that it is only necessary to say the Saccharated Pepsin we manufacture exhibits the principle most fully, and will give therapeutic results to the entire satisfaction of the physicians wishing to prescribe this remedy.

Liquor Pepsinæ.—Each tea-spoonful of the Liquor Pepsinæ prepared by us represents the full dose of our Saccharated Pepsin, five grains, combined with Lactic and Muriatic Acids, Glycerine and water.

JOHN WYETH & BRO.

Manufacturing Chemists,

PHILADELPHIA.

TO PHYSICIANS AND DRUGGISTS.

Five Awards from the United States Centennial Commission.

We have for many years claimed superiority for the MEDICAL PREPARATIONS OF OUR MANUFACTURE, and the articles we control, over similar pharmaceutical products made by other houses. It gives us great pleasure to announce to physicians and druggists, that the United States Centennial Commission, after CRITICAL ANALYSIS, EXAMINATION and comparison, have endorsed our claim to their "superiority," and have given us three awards, as follows:

(WE WILL GIVE FULL TEXT OF AWARDS AS SOON AS RECEIVED.)

For our PHARMACEUTICAL PREPARATIONS.—embracing ELIXIRS, SYRUPS, MEDICINAL WINES, Saccharated Pepsin, etc., etc. "These Elixirs, etc., etc., seem to be a REAL ADVANCE in pharmacy, as they represent strength and virtues with comparatively much less disagreeable taste than the same ingredients, as usually made and extemporaneously prepared."

For our Compressed Pills.—"In our judgment, these Compressed Pills are, for above reasons, viz.: smaller size, absence of excipients and speedy solubility, superior to any other similar pills manufactured."

For our Papoma (Food for Infants and Invalids).—"The most nutritious, most easily digested and most strengthening food," etc.

For our Suppositories.—"For precision in admixture of drug, regularity in size of cone, and skill in incorporating the various ingredients, is worthy of special mention."

Two awards were also given to the manufacturers of the preparations for which we have the sole agency, and have met with such deserved favor from physicians, viz.: to Marvin Bros. & Bartlett, for their Pure Medicinal Cod Liver Oil.—"For freedom from disagreeable taste and odor, careful preparation, and representing in every respect the elements required in Cod Liver Oil."

To Ed. Loebund, Stuttgart, Germany, for his Concentrated Extract of Malt.—"Its great richness in Sugar of Malt, complete absence of drugs and products of fermentation, such as alcohol and carbonic acid, and agreeable and pleasant taste."

MEDICINAL FLUID EXTRACTS

In compliance with a long-existing demand, we have made arrangements for the manufacture of a full line of

FLUID EXTRACTS,

which we are now prepared to furnish to the trade. Our list will include not only the officinal articles of this kind, but a number of others, not mentioned in the Pharmacopœia, whose recognized therapeutical value induces many physicians to employ them in their practice.

Those who order our fluid extracts, Physicians in prescribing them as well as Druggists in supplying them, may rest assured that they will find each one thoroughly reliable as representing the properties of the original drug.

In order to fulfil this promise, we have secured supplies of crude material of the very best quality, obtained at the right season, from plants properly grown. This is of the highest importance in regard to plants indigenous to the United States. As to the narcotics, Hyoscyamus, Belladonna, Conium, Digitalis, Aconite, etc., we have entered into an agreement with one of the most reliable cultivators of medicinal plants in England, by which we secure an article in each case far superior to the ordinary commercial leaves and roots.

Our appliances for manufacture have been constructed without regard to first cost, this outlay being justified by the extent of our business. For completeness and economy of working, these arrangements cannot be excelled; and by means of them, with our experience in this branch of pharmacy, we are enabled to prepare fluid extracts of unsurpassed purity and reliable strength, at the most reasonable rates.

Our process of manufacture is in accordance with the most advanced science in regard to the properties of each drug. The crude material, selected with the before-mentioned precaution, is treated with the greatest care, with such menstrua as will secure all the available active principles, to the exclusion of inert matters.

We have, therefore, no hesitation in claiming for these preparations superiority to all others in the market in purity, activity and beauty; and feel confident that this claim will be sustained by the judgment of any unbiased expert.

The strength of our officinal fluid extract is always that prescribed in the United States Pharmacopœia. That of the unofficinal is uniformly one troy ounce of the drug to one fluid ounce of the extract.

Physicians who wish to use them should designate our manufacture (WYMAN & BRO.) when prescribing, to insure ours being dispensed.

SCOTT'S EMULSION

PURE COD LIVER OIL,

With HYPOPHOSPHITES of LIME and SODA,
PERFECT, PERMANENT, PALATABLE.

The high character, and wide reputation **Scott's Emulsion** has attained through the agency of the Medical Profession, and the hearty support they have given it since its first introduction, is a sufficient guarantee of its superior virtues. The claims we have made as to its permanency—perfection and palatableness—we believe have been fully sustained, and we can positively assure the profession that its high standard of excellence will be fully maintained. We believe the profession will bear us out in the statement that no combination has produced as good results in the wasting disorders, incident to childhood; in the latter as well as the incipient stages of Phthisis, and in Scrofula, Anæmia and General Debility. We would respectfully ask the profession for a continuance of their patronage, and those who have not prescribed it to give it a trial. Samples will be furnished free upon application.

FORMULA.—50 per cent. of pure Cod Liver Oil, 6 grs. of the Hypophosphite of Lime, and 3 grs. of the Hypophosphite of Soda to a fluid ounce.

SEE TESTIMONIALS OF PHYSICIANS.

Messrs. SCOTT & BOWNE: I have prescribed your emulsion of Cod Liver Oil with Hypophosphites for the past two years, and found it more agreeable to the stomach, and have better results from its use than from any other preparation of the kind I have tried.
 Halifax, N.S., Nov. 19, 1880.
 W. M. CAMERON, M.D.

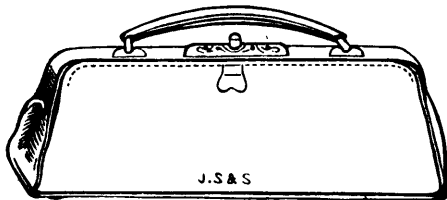
Messrs. SCOTT & BOWNE: Gentlemen—After three years experience, I consider your Emulsion one of the very best in the market.
 Truro, N.S., Nov. 15, 1880.
 W. S. MUIR, M.D., L.R.C.P. & S., Ed.

Messrs. SCOTT & BOWNE: I have much pleasure in stating that for the last three years I have used your Emulsion of Cod Liver Oil and Hypophosphites in my practice, in cases of Phthisis, Nervous Prostration and Anæmia, and always derived marked benefit from its use. That it does not decompose, is very palatable, and remains in the most fastidious stomach, are some of its greatest merits.
 I have the honor to be, yours truly,
 St. John, N.B.
 T. J. O. EARLE, M.D.

Messrs. SCOTT & BOWNE: I have used for some time, and prescribed Scott's Emulsion of Cod Liver Oil, and find it an excellent fixed preparation, agreeing well with the stomach, easily taken, and its continued use adding greatly to the strength and comfort of the patient.
 Petitediac, N.B., Nov. 5, 1880.
 A. H. PECK, M.D., Penn. Med. Co lege.

SCOTT & BOWNE, Manufacturing Chemists, New York.

The Practitioners' Obstetric Bag John Reynders & Co.,



15 inches long, 6 inches high, containing Barnee's Craniotomy Forceps, Midwifery Forceps, Perforators, Frenum Scissors, Blunt Hook and Crotchet, Catheter, 4 Stoppered Bottles, 1 Chloroform Drop Bottle. Price \$26.

Bag only, Superior Morocco, Gilt Fittings, \$6.00
 do. do. Plain Fittings,
 Lined with Chamois Leather \$4.50

THE IMPROVED CLINICAL THERMOMETER WITH MAGNIFIED AND IMPERISHABLE INDEX.



The mercury is easily seen, and there being no air spec, the liability to loose the registering needle is obviated, should by any accident the whole of the mercury be shaken into the cup it will register the next time it is driven up by the temperat re.

PRICE IN CASE, \$2.50
 ORDINARY REGISTERING CLINICAL THERMOMETERS 1.50

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The Practitioners' Obstetric Bag John Reynders & Co.,

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UNDER THE COLLEGE OF PHYSICIANS AND SURGEONS,

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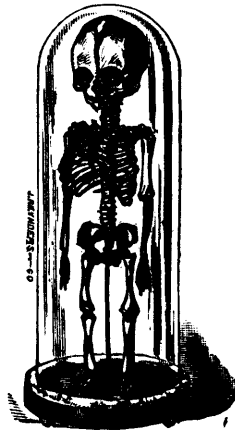
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Dr. J. Collis Browne's Chlorodyne

IS THE ORIGINAL AND ONLY GENUINE.

ADVICE TO INVALIDS.

If you wish to obtain quiet refreshing sleep, free from headache, relief from pain and anguish to calm and assuage the weary aching of protracted disease, invigorate the nervous media, and regulate the circulating systems of the body, you will provide yourself with a supply of that marvellous remedy discovered by DR. J. COLLIS BROWNE (late Medical Staff), to which he gave the name of

CHLORODYNE,

and which is admitted by the Profession to be the most wonderful and valuable remedy ever discovered.

CHLORODYNE is admitted by the Profession to be the most wonderful and valuable remedy ever discovered.

CHLORODYNE is the best remedy for Coughs, Consumption, Bronchitis, Asthma.

CHLOROD effectively checks and arrests those too often fatal diseases—Diphtheria, Fever, Group, Ague.

CHLORODYNE acts like a charm in Diarrhœa, and is the only specific in Cholera and Dysentery

CHLORODYNE effectually cuts short all attacks of Epilepsy, Hysteria, Palpitation, and Spasms.

CHLORODYNE is the only palliative in Neuralgia, Rheumatism, Gout, Cancer, Toothache, Meningitis, &c.

Extract from *Indian Economist*.

"We direct the attention of medical men to a fact observed some years since by ourselves, and corroborated by our subsequent experience, that Dr. J. Collis Browne's Chlorodyne is in many cases of Low Fever immensely superior to Quinine in curative power. We cannot persuade ourselves that the true value of Dr. J. Collis Browne's Chlorodyne is yet properly appraised in India. . . . It may be given with absolute safety even to a child three days old. Were medical men but to make a fair and exhaustive trial of it we are persuaded that it would work a revolution in the treatment of two-thirds of the diseases to which children are subject. Its curative power is simply amazing."

"Earl Russell communicated to the College of Physicians that he had received a despatch from Her Majesty's Consul at Manila, to the effect that Cholera had been raging fearfully, and that the ONLY remedy of any service was CHLORODYNE."—See *Lancet*, Dec. 1, 1864.

From W. VESALIUS PETTIGREW, M.D., Hon. F.R.C.S., England.

Formerly Lecturer of Anatomy and Physiology at St. George's School of Medicine.

"I have no hesitation in stating, after a fair trial of Chlorodyne, that I have never met with any medicine so efficacious as an Anti-Spasmotic and Sedative. I have tried it in Consumption, Asthma, Diarrhœa, and other diseases, and am most perfectly satisfied with the results."

From Dr. THOMAS SANDIFORD, Passage West, Cork.

"I will thank you to send me a further supply of Chlorodyne. It was the most efficacious remedy I ever used, affording relief in violent attacks of Spasms within a minute after being taken. One patient in particular, who has suffered for years with periodical attacks of Spasms of a most painful nature, and unable to obtain relief from other remedies, such as opium, &c., finds nothing so prompt and efficacious as Chlorodyne."

From Dr. B. J. BOULTON & Co., Horncastle.

"We have made pretty extensive use of Chlorodyne in our practice lately, and look upon it as an excellent direct sedative and Anti-Spasmotic. It seems to allay pain and irritation in whatever organ, and from whatever cause. It induces a feeling of comfort and quietude not obtainable by any other remedy, and seems to possess this great advantage over all other sedatives, that it leaves no unpleasant after effects."

From J. C. BAKER, Esq., M.D., Bideford.

"It is without doubt, the most valuable and certain Anodyne we have."

CAUTION.—BEWARE OF PIRACY AND IMITATIONS.

CAUTION.—The extraordinary medical reports on the efficacy of Chlorodyne render it of vital importance that the public should obtain the genuine, which bears the words "Dr. J. Collis Browne's Chlorodyne."

Vice-Chancellor WOOD stated that Dr. J. COLLIS BROWNE was undoubtedly the Inventor of CHLORODYNE: that the whole story of the Defendant, FREEMAN, was deliberately untrue.

Lord Chancellor Selborne and Lord Justice James stated that the defendant had made a deliberate misrepresentation of the decision of Vice-Chancellor Wood.

Chemists throughout the land confirm this decision that Dr. J. C. BROWNE was the Inventor of CHLORODYNE.

Sold in Bottles at 1s 1½d., 2s 9d., 4s 6d., each. None genuine without the words "Dr. J. COLLIS BROWNE'S CHLORODYNE" on the Government Stamp. Overwhelming Medical Testimony accompanies each bottle.

SOLE MANUFACTURER—J. T. DAVENPORT, 33 GREAT RUSSELL STREET, BLOOMSBURY, LONDON.

BELLEVUE HOSPITAL MEDICAL COLLEGE. CITY OF NEW YORK.

SESSIONS OF 1881-82.

At and after the Session of 1881-82, the College will return to its former requirements as regards fees and graduation; viz., those in force before the session of 1880-81.

THE COLLEGIATE YEAR in this Institution embraces the Regular Winter Session and a Spring Session.

THE REGULAR SESSION will begin on Wednesday, September 21, 1881, and end about the middle of March, 1882. During this Session, in addition to four didactic lectures on every weekday except Saturday, two or three hours are daily allotted to clinical instruction. Attendance upon two courses of lectures is required for graduation.

THE SPRING SESSION consists chiefly of recitations from Text-Books. This Session begins about the middle of March and continues until the middle of June. During this Session, daily recitations in all the departments are held by a corps of Examiners appointed by the Faculty. Short courses of lectures are given on special subjects, and regular clinics are held in the Hospital and in the College building.

Faculty.

ISAAC E. TAYLOR, M.D., Emeritus Professor of Obstetrics and diseases of Women and Children, and President of the Faculty.
 JAMES R. WOOD, M.D., LL.D., Emeritus Professor of Surgery.
 FORDYCE BARKER, M.D., LL.D., Professor of Clinical Midwifery and Diseases of Women.
 BENJAMIN W. MCCREARY, M.D., Emeritus Professor of Materia Medica and Therapeutics, and Prof. of Clinical Medicine.
 AUSTIN FLINT, M.D., Professor of the Principles and Practice of Medicine, and Clinical Medicine.
 W. H. VAN BUREN, M.D., LL.D., Prof. of Principles and Practice of Surgery, Diseases of Genito-Urinary System, and Clinical Surgery.
 LEWIS A. SAYRE, M.D., Professor of Orthopædic Surgery and Clinical Surgery.
 ALEXANDER B. MOTT, M.D., Professor of Clinical and Operative Surgery.
 WILLIAM T. LUSK, M.D., Professor of Obstetrics and Diseases of Women and Children, and Clinical Midwifery.
 A. A. SMITH, M.D., Professor of Materia Medica and Therapeutics, and Clinical Medicine.
 AUSTIN FLINT, JR., M.D., Professor of Physiology and Physiological Anatomy, and Secretary of the Faculty.
 JOSEPH D. BRYANT, M.D., Professor of General, Descriptive and Surgical Anatomy.
 R. OGDEN DOREMUS, M.D., LL.D., Professor of Chemistry and Toxicology.
 EDWARD G. JANEWAY, M.D., Prof. of Pathological Anatomy and Histology, Diseases of the Nervous System, and Clin. Medicine.

PROFESSORS OF SPECIAL DEPARTMENTS, ETC.

HENRY D. NOYES, M.D., Professor of Ophthalmology and Otology.
 J. LEWIS SMITH, M.D., Clinical Professor of Diseases of Children.
 EDWARD L. KEYES, M.D., Professor of Dermatology, and Adjunct to the Chair of Principles of Surgery.
 JOHN P. GRAY, M.D., LL.D., Professor of Psychological Medicine and Medical Jurisprudence.
 ERSKINE MASON, M.D., Clinical Professor of Surgery.
 JOSEPH W. HOWE, M.D., Clinical Professor of Surgery.
 LEROY MILTON YALE, M.D., Lecturer Adjunct on Orthopædic Surgery.
 BEVERLY ROBINSON, M.D., Lecturer on Clinical Medicine.
 FRANK H. BOSWORTH, M.D., Lecturer on Diseases of the Throat.
 CHARLES A. DOREMUS, M.D., Ph. D., Lecturer on Practical Chemistry and Toxicology, and Adjunct to the Chair of Chemistry and Toxicology.
 FREDERICK S. DENNIS, M.D., M.R.C.S., } Demonstrators of Anatomy.
 WILLIAM H. WELCH, M.D., }

FACULTY FOR THE SPRING SESSION.

FREDERICK A. CASTLE, M.D., Lecturer on Pharmacology.
 WILLIAM H. WELCH, M.D., Lecturer on Pathological Histology.
 CHARLES A. DOREMUS, M.D., Ph.D., Lecturer on Animal Chemistry.
 T. HERRING BURCHARD, M.D., Lecturer on Surgical Emergencies.
 ANDREW R. ROBINSON, M.D., L.R.C.P. & S., Edin., Lecturer on Normal Histology.
 CHARLES S. BULL, M.D., Lecturer on Ophthalmology and Otology.

FEES FOR THE REGULAR SESSION.

Fees for Tickets to all the Lectures, Clinical and Didactic.....	140 00
Fees for Students who have attended two full courses at other Medical Colleges, } and for Graduates of less than three years' standing of other Medical Colleges }	70 00
Matriculation Fee	5 00
Dissection Fee (including material for dissection).....	10 00
Graduation Fee	80 00
No fees for Lectures are required of Graduates of three years' standing, or of third-course Students who have attended their second course at the Bellevue Hospital Medical College.	

FEES FOR THE SPRING SESSION.

Matriculation (Ticket valid for the following Winter).....	\$ 5 00
Recitations, Clinics, and Lectures	85 00
Dissection (Ticket valid for the following Winter)	10 00

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SECRETARY BELLEVUE HOSPITAL MEDICAL COLLEGE.

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We respectfully refer to the following Eminent Physicians:

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Prof. Francis Mjnot, M.D.
H. H. A. Beach, M.D.

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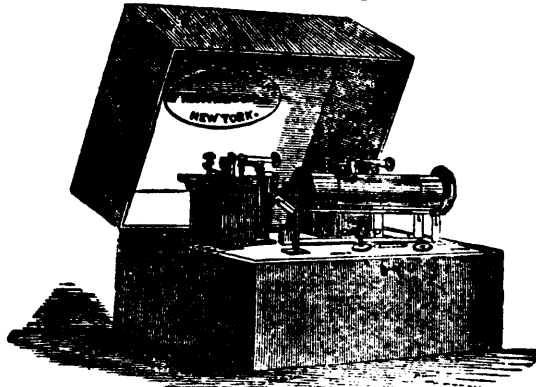
Prof. N. S. Davis, M.D.
Prof. James S. Jewell, M.D.

DETROIT.

Prof. Theo. A. McGraw, M.D.
Prof. James F. Noyes, M.D.
Prof. Albert B. Lyons, M.D.
Prof. Leartus Connor, M.D.

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Prof. J. K. Bauday, M.D.
Prof. Jas. B. Johnson, M.D.



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PHILADELPHIA.

Prof. Robert E. Rogers, M.D.
Prof. B. Howard Rand, M.D.

CANADA.

Dr. Theo. Mack, M.D., St. Catharines.
Dr. Fife Fowler, M.D., Kingston
Dr. John R. Dickson, M.D., Kingston.
Dr. B. H. Lemon, M.D., Toronto.
Drs. Orton & Alexander, M.D., Fergus.
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Send for Catalogue, with a concise and practical Guide for their use.

DR. WHEELER'S

ELIXIR FERRI ET CALCIS PHOSPH. CO.

LACTO-PHOSPHATES prepared from the formula of Dr. DUSART, of Paris.

Compound Elixir of Phosphates and Calisaya.—A Chemical Food and Nutritive Tonic.

THIS elegant preparation combines with a sound Sherry Wine percolated through Wild Sherry Bark and Aromatics, in the form of an agreeable cordial, 2 grs. Lacto-Phosphate of Lime 1 gr. Lacto-Phosphate of Iron, 1 gr. of Alkaloids of Calisaya Bark, Quinia, Quinidina, Chinchonia, and fifteen drops of free Phosphoric Acid to each half ounce.

In the various forms of Dyspepsia, resulting in impoverished blood and depraved nutrition, in convalescing from the Zymotic Fevers (Typhus, Typhoid, Diphtheria, Small-pox, Scarlatina Measles) in nervous prostration from mental and physical exertion, dissipation and vicious habits, in chlorotic anæmic women, and in the strumous diathesis in adults and children it is a combination of great efficacy and reliability, and being very acceptable to the most fastidious it may be taken for an indefinite period without becoming repugnant to the patient. When Strychnine is indicated the official solution of the Pharmacopœia may be added, each fluid drachm making the 64th of a grain to a half fluid ounce of the Elixir,—a valuable combination in dyspepsia with constipation and headaches. This compound is prepared with great care, and will be maintained of standard purity and strength.

DOSE.—For an adult, one table-spoonful three times a day, after eating; from seven to twelve, one dessert-spoonful; from two to seven, one tea-spoonful.

Prepared by T. B. WHEELER, M. D., MONTREAL, D. C.

FIRST PRIZE FOR ARTIFICIAL LIMBS

AND

SURGICAL APPLIANCES.



APPARATUS of every description made to order, for Paralysis, Hip-joint Disease, Weak Ankles, Club Feet, &c.

JAMES AUTHORS,
16 King Street East, Toronto.

TORONTO, Sept. 17, 1874.

I have much pleasure in being able to testify to the skill, ingenuity, and excellence of workmanship shown in Mr. Authors' surgical appliances. They will bear comparison with those manufactured in any part of the world.

JAMES H. RICHARDSON, M.D., University of Toronto, M.R.C.S., England.

tains may be absorbed by the system. With the lean of animal food this change is effected in the stomach by the action of the gastric juice, but when this juice is deficient in quality, or quantity, it is incapable of affecting the centre of the morsels of food presented to it, and they in this unprepared state leave the stomach, bearing with them the causes of dyspepsia and its train of concomitant evils.

The theory of JOHNSTON'S FLUID BEEF has however solved the hitherto insurmountable difficulty, and furnishes all the desirable results of meat diet to those who are otherwise unable to digest animal food. In its manufacture the albumen and fibrine (or rather the entire lean of beef) is by a special process desiccated and mechanically pulverised to such a minute degree of subdivision that it is almost imperceptible in water. By this means the entire surface of every microscopic atom is presented to the direct action of the solvent juice, which, acting chemically and in combination with the digestive properties of meat essence, at once prepares the food for assimilation, and with the least possible expenditure of vital force, furnishes to the blood all that is necessary to impart tone to the nerves and substantial food for brain, bone and muscle.

CHEMICAL ANALYSES.

By WM. HARKNESS, F.C.S., L., Analytical Chemist to the British Government.—Laboratory, Somerset House, London, England.—I have made a very careful chemical analysis and microscopical examination of Johnston's Fluid Beef, and find it to contain in every 100 parts:

Albumen and Gelatine	- 27.81	Flesh-forming Food.	Ash or Mineral Matter	- 14.57
Fibrine in a readily soluble form	- 37.48		Moisture	- 26.74

The mineral matter is rich in phosphates. The microscopical examination shows the Fluid Beef to contain good, sound beef, ground to a very fine powder. There is not the slightest trace of fungus, spores, or any other organism which would tend to produce decomposition. I consider this a most valuable preparation, combining as it does, a concentrated extract of beef with the solid beef itself, the latter being in a form easily digested. It is also free from the burnt flavor so much objected to in ordinary extracts of meat. IT IS ONE OF THE MOST PERFECT FOODS I HAVE EVER EXAMINED.

By Dr. J. BAKER EDWARDS, Ph. D., S.C., L.; F.C.S., Professor of Chemistry and Inland Revenue Food Analyst, Montreal.—I hereby certify that I have made a careful analysis of the proximate constituents of "Johnston's Fluid Beef," and find it to contain:

Salts of Flesh and Moisture, Beef Tea Food	- 33.30	Fibrin or Meat Food	- 35.50
Albumen or Egg Food	- 22.50	Mineral or Bone Food	- 1.70

I consider this an invaluable preparation, containing as it does, in addition to the well-known Liebig's Extract—which has been aptly named "Wine of Meat," the nutritive value of EGG diet and MEAT diet in a form readily soluble in the gastric juice. It is therefore a more complete and perfect food for children and invalids than Meat Extract alone; and moreover, having inspected the process of manufacture, I am satisfied that it may be relied upon as a uniform and very superior preparation.

By STEVENSON MACADAM, Ph. D., F.R.S.C., F.C.S., Lecturer on Chemistry.—Analytical Laboratory, Surgeons' Hall, Edinburgh, 6th March, 1878. I have made a careful chemical analysis of a sample of Beef Powder, manufactured by J. L. Johnston, and find it contains as follows:

Albuminous or Flesh Matter	- 61.38	Moisture	- 13.23
Ash or Saline Matter	- 10.62	Oils and Fatty Matter	- 12.77

This is a highly nutritious article of diet, contains all the elements of Flesh Food in a concentrated form, is very palatable and easily digested, and is eminently suited for dietetic purposes, especially for invalids.

Extract from "Papers on Health," by Professor KIRK, Edinburgh.—"Suppose we take such a substance as Johnston's Fluid Beef, which we feel sure must become a most popular food for invalids. This readily passes into the circulation, and is changed into the actual living substances that make up the body of man. It does not cause accumulation of fat, for instance. Those who, to our knowledge, have been strengthened by its use, have got firm in muscle and nerve, but less stout than before they used it.

In submitting the following extracts from the letters of our leading local physicians, we feel justified in stating that few if any of the gentlemen named have ever before given a certificate for any proprietary article. Unsolicited testimonials from medical men reach us daily.

Dr. NICHOLS, 681 Spruce Street, Philadelphia, says:—"I have used it in a case of a child suffering from extreme debility after an attack of cholera infantum, the child began to improve immediately, and is still taking the Fluid Beef. I find it very palatable and nourishing, easily digested, and am satisfied that the contained fibrine is perfectly assimilated by the tissues of the body, as shown by a great gain of strength, &c. I feel assured it will meet with general favor."

**SIR THOMAS WATSON, QUEEN VICTORIA'S PHYSICIAN,
PREScribes JOHNSTON'S FLUID BEEF.**

Dr. NOLAN, of the Academy of Natural Sciences of Philadelphia, says:—"Johnston's Fluid Beef has given entire satisfaction."

JAMES TYSON, M.D., Professor of Gen. Pathology, Morbid Anatomy, in the University of Pennsylvania, says:—"I am using Johnston's Fluid Beef with a confidence which I have in no other preparation."

Dr. MALCOLM MACFARLANE, 1806 Chestnut Street, says:—"It is with unusual pleasure and confidence that I give my recommendation to Johnston's Fluid Beef. It is in the best form and the best preparation with which I am acquainted or have used."

Dr. LEONARDO JUDD, of Philadelphia, says:—"I can endorse thoroughly all that is claimed for Johnston's Fluid Beef, and am delighted with its superior excellence."

Dr. HORNER, of Philadelphia, says:—"It is the most elegant preparation of the kind in the market."

Dr. SAMUEL ASHHURST, 1428 Walnut Street, Philadelphia, says:—"I have tested Johnston's Fluid Beef and find it to be strictly what it is represented. I prefer it very much to any extract of beef with which I am acquainted, and unhesitatingly recommend it as a most desirable preparation."

Dr. C. S. MIDDLETON, of Philadelphia, says:—"Johnston's Fluid Beef has given me the most satisfaction of any article of the kind heretofore brought to my notice."

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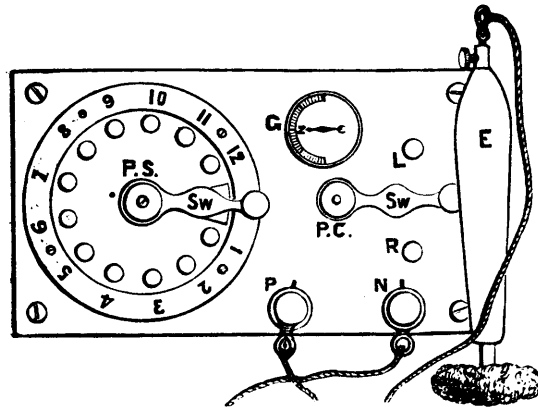
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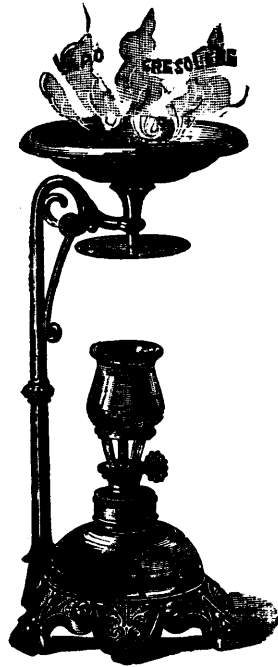


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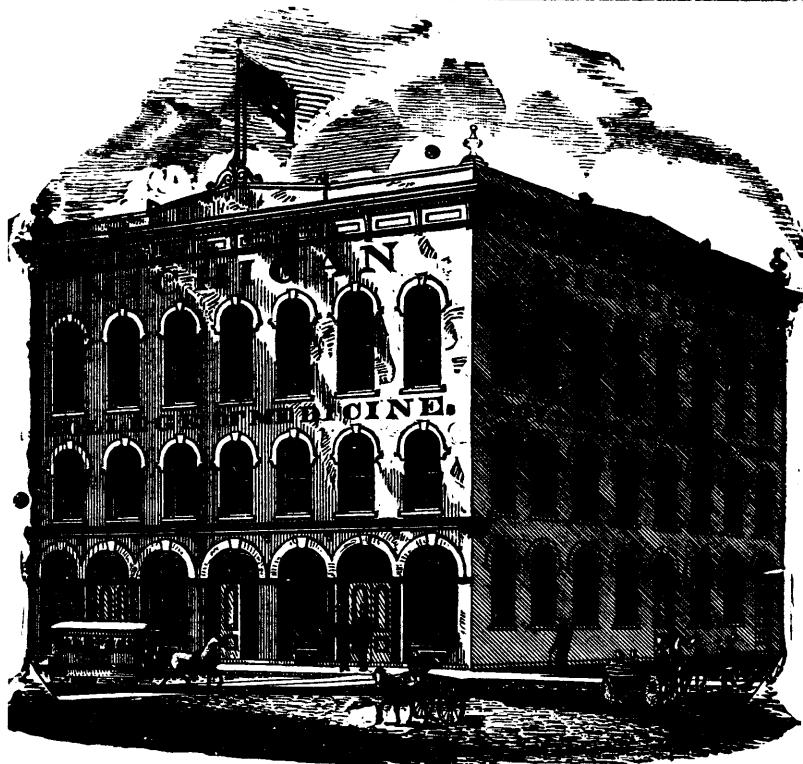
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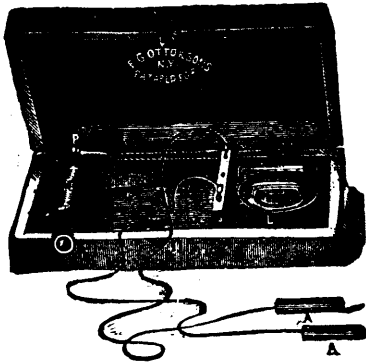
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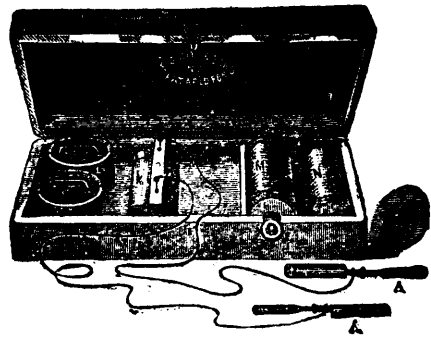
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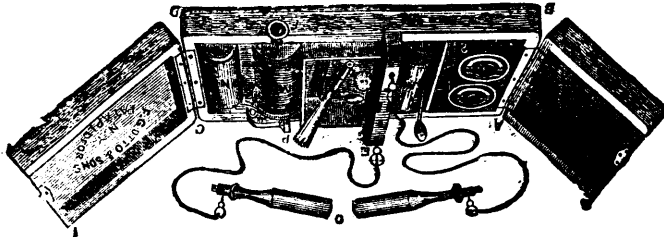
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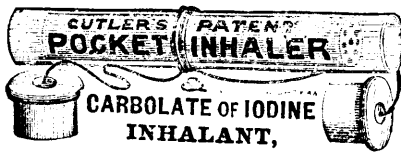
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Aether, Nit.....	8 oz. bot.	0	22	" Arsenic.....	"	0	20	" Potass. Tart.....	"	0	88
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Gum, Aloes Soc.....	"	0	90	" Bromid.....	"	0	60	" Hyosciam.....	"	0	20
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See page 188 CANADA LANCET, Feb. 1st, 1888, on Carbolic Acid Spray in Coughs, Asthma, &c.



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