# Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below. L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

Coloured covers / Couverture de couleur		Coloured pages / Pages de couleur
Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées
Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées
Cover title missing / Le titre de couverture manque	$\square$	Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
 Coloured maps /		Pages detached / Pages détachées
Cartes géographiques en couleur	1	Showthrough / Transparence
Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)	$\square$	Quality of print varies / Qualité inégale de l'impression
Coloured plates and/or illustrations / Planches et/ou illustrations en couleur	<b>—</b>	Includes supplementary materials /
Bound with other material / Relié avec d'autres documents		Comprend du matériel supplémentaire
Only edition available / Seule édition disponible		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que certaines pages blanches ajoutées lors d'une
Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.		restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.

 $\checkmark$ 

ł

Additional comments / Commentaires supplémentaires: Continuous pagination.

# THE CANADIANDUFLICATE Dr.J.H.Cameron jan 76 Iournal= Medi

Vol. II.

TORONTO, MAY, 1877.

## CONTENTS.

Page

м	127	TO	NR	•

Clonic Spasm Cured by Large Doses of Arsenic ...... 149 SURGERY :-Contributions to Aural Surgery-ByW. B. Dalby, F. R. C.S. 149 A New Saw-Results of Ovariotomy in London Hospitals -The Treatment of Atheromatous Cysts of the Neck 152 MIDWIFERY :

Lacerations of the Perineum from Childbirth-By Wm.

1	age
A Case of Complete Ablation of the Uterus	160
Action of Chloral on the Rectum	160
MATERIA MEDICA :	1
A New Method of Administering Quinia-Hunyadi	
Janos Mineral Water	161
Nitrite of Amyl-Anæsthetic Mixture-Antihydopin-	
Formulæ-Glycerine of the Oxide of Zinc for Fissure	
of the Anus (Rollett)-Lotion for Vaginal Discharges	162
MEDICAL JURISPRUDENCE :	
The Border-Land of InsanityBy Eugene Grisson, M.D	163
Spiritualism and Insanity	163
TRANSLATIONS	167
EDITORIALS	169
MEDICAL COUNCIL-Examination Papers	170
BOOK NOTICES	173
COMMUNICATION	174
MISCELLANBOUS ITEMS	176

No. 5

#### MEDICAL BOOKS. AVB PRAY

- ATTFIELD (John). Chemistry General, Medical, and ....**≵**3 25
- 5 00
- 5 50
- .. 5 00
- 5 50

- 4 50
- 279 1 80
- ..... 3 25 pp. 484. Cloth

- 2 70
  - 2 25
  - TANNER (Thomas Hawkes).— Memoranda of Poisons.

  - Any of the above Books MAILED FREE to all parts of Canada. Get our Catalogues.

TTA MS LLTN( PUBLISHERS. IMPORTERS AND 12 KING STREET EAST. TORONTO,

\*

# GOODYEAR'S POCKET GYMNASIUM, Or Health-Pull.

We deem it highly important that every Family in the land should become familiar with the advantages to be derived from the use of the

# POCKET GYMNASIUM.

Physicians of all schools are now of one mind with regard to certain leading physiological princip'es, however they may differ with regard to remedial agencies. All admit that three things are ABSOLUTELY NECESSARY to vigorous health-viz., Good Air, Good Food, Good Exercise: and that with either of these lacking, the natural powers of BODY AND MIND are rapidly diminished.

**FOOD** ACCEPTING THAT WITH EITHER OF THESE TACKING, the natural powers of BODY AND MIND are rapidly diminished. To provide the first two, various intelligent agreecies are at work. New York City has an association of scientific men, knewn as the HEALTH FOOD COMPANY, who are enthusiastically labouring to suggest and provide wholesomer, more digestible, and more nutritive foods. The same city has a society which adopts as its motto the words, "FIRE ON THE HEARTH," the leading object of which is to provide a perfect substitute for the old-fashioned fire-place, with the addition of greatly increased heating power and perfect ventilation. These enterprises are of inestimable value to mankind. Our province is to provide the simplest and MOST PERFECT MEANS FOR INCREASING VIGOUR THROUGH EXERCISE. With this object secured, the trio of ABSOLUTE ESSENTIALS to physical and mental well-being is completed.

With the universal administrative composition of the well without exercise, we have also the assertion that violent, straining, exhausting exercise is not salutary, —is, in fact, dangerous. Dr. Winship, the "Strong Man," whose enormous muscular development enabled him to lift more than 1600 pounds with his hands alone, told a physician, in 1573, that he had not done wisely by his system of heavy lifting, and expressed that GENTLE EXERCISE WAS TRUE EXERCISE. A short time before his sudden death, this Champion Lifter applied for the Agency of

# Goodyear's Pocket Gymnasium,

for Boston and vicinity, believing that it should supersede all systems of exercise in vogue. If he had lived, he would no doubt have been selected by the proprietors to introduce this popular exercising device, and would have thus been able to undo by his wide influence the errors which he had before inculcated.

wide influence the errors which he had before inculcated. THE MOVEMENTS employed in using the POCKET GYMNASIUM are many and graceful. They are adapted to the old and young of both sexes, and of all degrees of muscular development. The feeble invalid may use them in a small way, and gain new strength day by day. The little child may be taught some graceful movements, and will rapidly acquire strength of limb, erectness of posture, and the rosy tint of health. The mother, the father, brothers and sisters, —each member of the household will employ these life-giving tubes with keen satisfaction and increasing benefits. THEY SHOULD BE IN EVERY HOME IN THE LAND. Our intention is to give every intelligent person an opportunity to fully understand this beneficent system of exercise, and to secure HEALTH AND STRENGTH by employing it. In this good work we have the co-operation of scores of the best people, — ministers, a premium to their subscribers, and thus carry it into many families. Physicians recommend it to patients, and secure for it recognution as a valuable adjunct to remedial measures. Teachers commend it to pupils and instruct them in its use. Whole families are supplying themselves with these beautiful appliances, and are setting apart an evening hour for mutual exercise with

# THE POCKET GYMNASIUM.

We need the help of all thoughtful persons in the introduction of the GYMNASIUM. We grant exclusive agencies in all uncecupied territory, on terms which which will surely enrich the active man or woman. EXERCISING PARLORS are being opened in various sections, and great good is being accomplished by this system. We ask all to send to us for our Illustrated Circular, showing a multitude of graceful movements.

# PRICE LIST.

No. 1. F	or Child	dren fro	om 4 to 6 years			\$1 00	No. 5. For Ladies and Children, 14 years and up	<b>\$1 40</b>
No. 2.	"	"	6 to 8 years		••	1 10	No. 6. " Gentlemen of moderate strength	1 50
No. 3.	"	"	8 to 10 years		••	1 20	No. 7. " Use by Ladies, Children, or Gents	2 00
No. 4.	**	"	10 to 14 years	••		1 30	No. 8. " Gentlemen of extra strength	2 50

Full set (family use) ONE each (1 to 6), Two 7s and Two 8s, \$16. No. 7 and No. 8 are fitted with a screw eye and hook, to attach in the wall or floor. A pair of No. 7 (\$4 00) or 8 (\$5 00) make a complete Gymnasium. Extra hooks 5 cents each, or 60 cents per dozen. N.B. - Extra size made to order.

We send these goods to any address, postpaid, on receipt of price. Sold by Rubber Goods, Toy, Fancy, Sporting, Book and School Supplies Dealers and Druggists generally throughout the United States and the Dominion of Canada. Trade supplied by

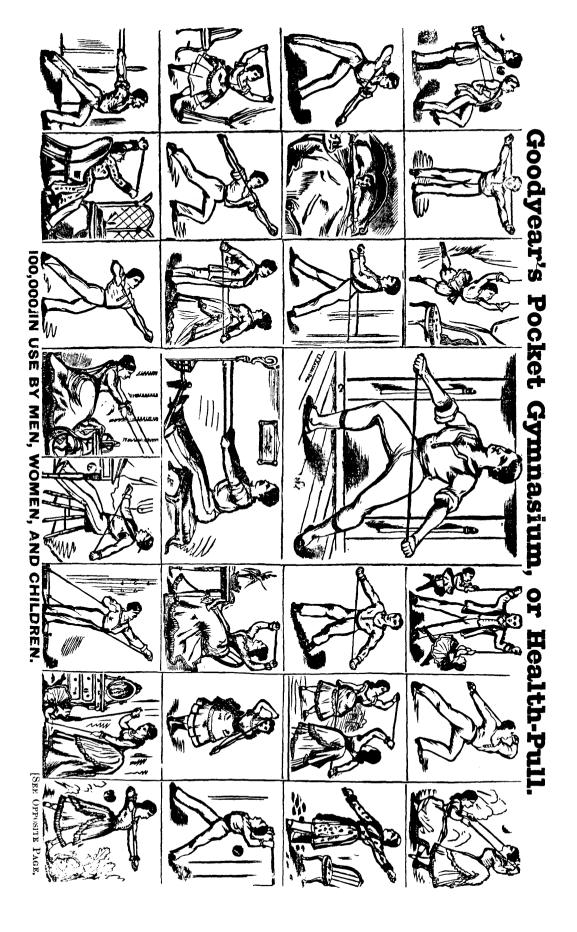
# **GOODYEAR'S INDIA** RUBBER CURLER COMPANY,

**P.O. Box 5156.** Exclusive Manufacturers under Letters Patent.

697 Broadway, New York.

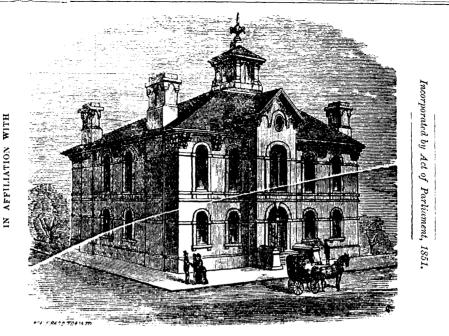
Blood and Breath.— $^{T}$ 

This interesting volume of 65 pages, by Prof. I. E. FROBISHER, author of "Voice and Action,"
 is sent to any address by mail on receipt of price, 25 cents. It is illustrated with full outline movements to accompany GOODYEAR'S POCKET GYMNASIUM.



#### ADVERTISEMENTS.

'ORONTO SCHOOL & MEDICINE,



#### **Opposite the Toronto General Hospital**

# facultu.

HENRY H. CROFT, D.C.L., F.L.S., Professor of Chemistry and Experimental Philosophy, University College; Emeritus, Professor of Chemistry.

Or,

- M. T. AIKINS, M.D., Surgeon to the Toronto General Clinical Lectures will be given at the General Hospital by Dr. Ilospital and to the Central Prison, Consulting Surgeon to the Children's Hospital, Lecturer on Principles and Practice of Surgery. -78 Queen Street West. Clinical Instruction will be given at the Toronto Dispensary by WM.
- of Surgery. --78 Queen Street West.
  H. H. WRIGHT, M.D., L. C. P. & S. U. C., Physician to Toronto General Hospital, Lecturer on Principles and Prac-tice of Medicine. --197 Queen Street East.
  J. H. RICHARDSON, M.D., M.B. C.S., Eng., Consulting Sur-geon to the Toronto General Hospital and Surgeon to the Toronto Juli, Lecturer on Descriptive and Surgical Anatomy.
- MES THORBURN, M.D., Edinburch and Toronto Uni-versities, Consulting Physician to the Toronto General Hospi-tal and Physician to the Boys' Home, Consulting Surgeon to the JAMES
- tal and Physician to the Boys' Home, Consulting Surgeon to the Children's Hospital, Lecturer on Materia Medica and Thera-peutics.—Wellington and York Streets.
  M. BARBETT, M.A., M.D., Medical Officer to Upper Canada College, and Lecturer on Physiology Ontario College of Veterin-ary Medicine, Lecturer on Physiology.
  W. OGDEN, M.B., Physician to the Toronto Dispensary, Lecturer on Medical Jurisprudence and Toxicology.—242 Queen Street West.
- Jueen Street West.
- A. AIKINS B.A., M.B., M.R.C.S., Eug., Lecturer on Primary Anatomy.—Burnamthorpe. OLDBIGHT, M.A., M.B., Physician to the Newsboys' Home, Curstor of Museum, and Lecturer on Sanitary Science. 50 Duke Street
- DURE Street.
   L. M. MCFABLANE, M.D., Physician to the Toronto Dispensively, Demonstrator of Anatomy. --7 Cruickshank Street.
   GEORGE WRIGHT, M.A., M.B., Physician to the Toronto Dispensively, Demonstrator of Anatomy. --154 Bay Street.
   ALEX. GBEENLEES, M.B., Lecturer on Practical Chemistry. 123 Church Street.

- 123 Chilfen Street.
   B. ZIMMERMAN, M.B., L.R.C.P., Lond., Physician to the Toronto Dispensary, Physician to the Children's Hospital, De-monstrator of Microscopical Anatomy.—107 Church Street.
   F. H. WRIGHT, M.B., L.R.C.P., Lond., Physician to the Toronto Dispensiry, Physician to the Children's Hospital, De-monstrator of Microscopical Anatomy.—197 Queen Street Fort East
- LEAST. J. E. GRAHAM, M.D., L.R.C.P., Lond., Surgeon to the To-ronto General Hospital, Physician to the House of Providence, Lecturer on Chemistry.- 66 Gerrard Street East.
- B. A. REFUE, B. A., MD., Surgeon to the Eye and Ear In-firmary, Oplithulmic Surgeon to the Toronto lieneral Hospital, and Children's Hospital, Lecturer on Botany and on Diseases of the Eye and Ear. Corner of Shuter and Victoria Streets.

Clinical Instruction will be given at the Toronto Dispensary by Dr. McFarlane, Dr. George Wright, Dr. F. H. Wright, and Dr. Zimmerman.

J. JONES, Janitor of School, Residence on the premises.

oniversity

TOBONTO

#### SUMMER SESSION.

Arrangements have been made for the establishment of a summer course, commencing May 1st, and extending into July.

Primary and final subjects will be taken up; particular attention being devoted to those branches which cannot be fully treated during the winter course.

- W. OLDRIGHT, M.A., M.B., Lecturer on Surgical Anatomy, Orthopædic Surgery, with Practical Instruction in the application of Splints, Bandages, and Surgical Apparatus gen-
- erally; Operations on the Cadaver. L. M. MCFARLANE, M.B., Lecturer on Midwifery and Dis-

GEORGE WRIGHT, M.A., M.B., Lecturer on Diseases of

- ALEX. GREENLEES, M.B., Lecturer on Therapeutics and
- R. ZIMMERMAN, M.B. L.R.C.P., London, Lecturer on Diseases of the Skin.
- H. WRIGHT, M.B., L.R.C.P., London, Lecturer on Dis-eases of the Heart and Lungs, Stomach and Kidneys, with Practical Instruction in Auscultation and Percussion.
- J. E. GRAHAM, M.D., L.R.C.P., London, Clinical Lecturer at the H
- R. A. REEVE, M.A., M.D., Lecturer on Diseases of the Eye and Ear.

Examinations in Anatomy will be given by each of the Lecturers. Clinical Instruction at the Toronto General Hospital by Dr. H. H. Wright, Dr. Aikins, Dr. Richardson, Dr. Thorburn, Dr. Graham, and Dr. Reeve.

Clinical Instruction at the Toronto Dispensary by Dr. McFar-lane, Dr. George Wright, Dr. F. H. Wright, and Dr. Zimmerman. Communications may be addressed to

WM. T. AIKINS, M.D., President,

78 Queen St. West.

- H. H WRIGHT, M D., Secretary
  - 197 Queen St. East.

# The New York Medical Journal

#### JAMES B. HUNTER, M.D., EDITOR.

Published Monthly. Volumes begin in January and July.

"Among the numerous records of medicine and the collateral sciences published in America, the above Journal occupies a high position, and deservedly so."—The Lancet (London).

"One of the best journals, by the by, published on the American continent." - London Medical Times and Gazette.

"A very high-class journal."-London Medical Mirror.

"The editor and the contributors rank among our most distinguished medical men, and each number contains matter that does honour to American medical literature."-Boston Journal of Chemistry, "Full of valuable original papers abounding in scientific ability."-Chicago Medical Times.

"Taking it all through, its beauty of paper and print, its large-sized type, the high character of its eontributors, its general usefulness, we know no other periodical that we would rather present as a specimen of American skill and intelligence than the New York Medical Journal."—*Franklin Repository.* "The New York Medical Journal, edited by Dr. James B. Hunter, is one of the sterling periodicals of this contributory.

this country. The present editor has greatly improved the work, and evinces a marked aptitude for the responsible duties so well discharged. The contents of this journal are always interesting and instructive; its original matter is often classic in value, and the selected articles are excellent exponents of the progress and truth of medical science."-Richmond and Louisville Medical Journul.

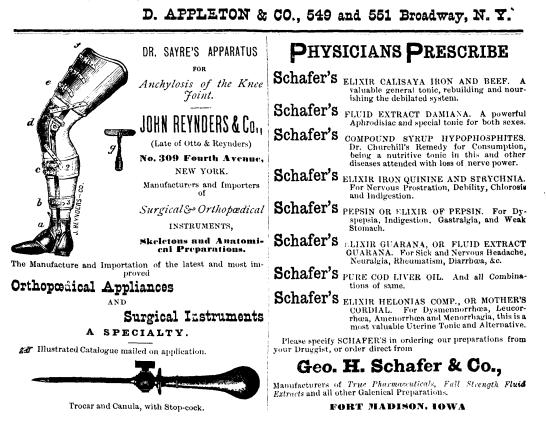
#### TERMS-FOUR DOLLARS PER ANNUM.

Postage Prepaid by the Publishers. Subscriptions received for any period.

A specimen copy will be sent on receipt of thirty-five cents.

Very favourable Club Rates made with any other journals.

Remittances, invariably in advance, should be made to the Publishers.



# BELLEVUE HOSPITAL MEDICAL COLLEGE, CITY OF NEW YORK.

SESSIONS OF 1877-78.

THE COLLEGIATE YEAR in this Institution embraces a preliminary Autumnal Term, the Regular Winter Session, and a Spring Session.

THE PRELIMINARY AUTUMNAL TERM for 1877-1878 will open on Wednesday, September 19, 1877, and continue until the opening of the Regular Session. During this term, instruction, consisting of didac ic lectures on special subjects and daily clinical lectures, will be given, as heretofore, by the entire Faculty. Students expecting to attend the Regular Session are strongly recommended to a tend the Pre-liminary Term, but attendance during the latter is not required. During the Preliminary Term, clinical and diductic lectures will be given in precisely the same number and order as in the Regular Session.

THE REGULAR SESSION will commence on Wednesday, October 3rd, 1877, and end about the 1st of March, 1878.

# FACULTY.

ISAAC E. TAYLOR, M.D.,

Emeritus Professor of Obstetrics and Diseases of Women, and President of the Faculty. JAMES R. WOOD, M.D., LL.D., FORDYCE BARKER, M.D., Emeritus Prof. of Surgery. Prof. of Clinical Midwifery and Diseases of Women.

AUSTIN FLINT, M.D., Professor of the Principles and Practice of Medicine and Clinical Medicine.

W. H. VAN BUREN, M.D.,

Professor of Principles and Practice of Surgery, with Diseases of Genito-Urinary System and Clinical Surgery.

LEWIS A. SAYRE, M.D., Professor of Orthopedic Surgery, Fractures and Dis-locations, 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.

HENRY D. NOYES, M.D.,

Professor of Ophthalmology and Otology.

JOHN P. GRAY, M.D., LL.D., Professor of Psychological Medicine and Medical Jurisprudence.

EDWARD L. KEYES, M.D.,

Professor of Dermatology, and Adjunct to the Chair of Principles of Surgery.

EDMUND R. PEASLEE, M.D., LL.D. Professor of Gynæcology. WILLIAM M. POLK, 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.

ALPHEUS B. CROSBY, M.D.,

Prof. 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 Clinical Medicine.

#### PROFESSORS OF SPECIAL DEPARTMENTS, etc.

EDWARD G. JANEWAY, M.D., Professor of Practical Anatomy. (Demonstrator of Anatomy.)

LEROY MILTON YALE, M.D., Lecturer Adjunct upon Orthopedic Surgery.

A. A. SMITH, M.D.,

Lecturer Adjunct upon Clinical Medicine.

A distinctive feature of the method of instruction in this College is the union of clinical and didactic teaching. All the lectures are given within the Hospital grounds. During the Regular Winter Session, in addition to four didactic lectures on every week-day except Saturday, two or three hours are daily allotted to clinical instruction.

The Spring Session consists chiefly of Recitations from Text books. This term continues from the first of March to the first of June. During this Session daily recitations in all the departments are held by a corps of examiners appointed by the regular Faculty. Regular clinics are also given in the Hospital and College building.

### FEES FOR THE REGULAR SESSION.

Fees for Tickets to all the Lectures during the Preliminary and Regular Term, including	Clinical	
Lectures	\$140	00
atriculation Fee	5	00
emonstrator's Ticket (including material for dissection)	10	00
Graduation Fee.	30	00

#### FEES FOR THE SPRING SESSION.

Matriculation (Ticket good for the following Winter)	\$5 00
Recitations, Clinics, and Lectures	35 00
Dissection (Ticket good for the following Winter)	10 00
Students who have attended two full Winter courses of lectures may be examined at the end of their	second
course upon Materia Medica, Physiology, Anatomy, and Chemistry, and, if successful, they will be exami	ned at

the end of their third course upon Practice of Medicine, Surgery, and Obstetrics only. For the Annual Circular and Catalogue, giving regulations for graudation, and other information, address Prof. Austin FLINT, Jr., Secretary Bellevue Hospital Medical College.

6

# Canadian Journal

A MONTHLY JOURNAL OF BRITISH AND FOREIGN MEDICAL SCIENCE, CRITICISM, AND NEWS.

ТНЕ

ot

U. OGDEN, M.D., EDITOR. R. ZIMMERMAN, M.B., L.R.C.P., London, 107 Church Street, Toronto, Corresponding Editor.

Medical Science.

#### SUBSCRIPTION, \$3 PER ANNUM.

AF All Communications, Letters and Exchanges must be addressed to the Corresponding Editor.

# TORONTO. MAY, 1877.

# Selections : Medicine.

# HEMIPLEGIA COMING ON WITHOUT LOSS OF CONSCIOUSNESS; DEATH; AUTOPSY; ATHEROMATOUS AND SYPHILITIC DISEASE OF CEREBRAL ARTERIES.

#### (Under the care of Dr. Hughlings Jackson.)

Syphilitic disease of cerebral arteries is recognised as a cause of thrombosis, and, therefore, as a cause of local cerebral softening. In this country attention was drawn to thrombosis of cerebral arteries from syphilis by Dr. Bristowe (Path. Soc. Trans., 1859), by Dr. Wilks (Guy's Hosp. Reports, 1863), by Dr. Moxon (ibid., 1867), by Dr. Hughlings Jackson (in our "Mirror," Oct. 27th, 1866, and London Hosp. Reports, vol. iv., 1868). The valuable remarks on syphilis of arteries, by Dr. Greenfield, at the Pathological Society, will be fresh in the memory of our readers.

The following case was the text of clinical remarks which are given with the report, and the case shows that we should not hastily conclude that because a patient is syphilitic, his hemiplegia is due to syphilis.

A man, sixty years of age, was admitted for perfect left hemiplegia, without any defect of speech, on Jan. 24th. The paralysis began fourteen days before; when out walking, the patient suddenly became giddy, and would have fallen had he not clutched a fence. He felt confused, but did not lose consciousness; he talked indistinctly. He was able to walk into his house. Next morning he was paralysed on the left side, but was quite conscious.

The mode of onset of the hemiplegia is most important. A deliberate onset without loss of consciousness points to local softening from blocking of some branch or of the trunk of the middle cerebral artery. At the very first the patient felt confused; that is to say, he had some slight, probably most trifling, defect of consciousness. There are all degrees of affections of consciousness, from that with the slightest confusion of thought to deepest coma. Moreover, the fact that the patient in this instance was giddy shows that there must have been some defect of consciousness. Vertigo. however produced, is always attended by some impairment of consciousness, trifling though that impairment may be; no one could add up a column of figures when giddy from any cause. When giddy, a man is not, as the popular phrase has it, quite himself, however slightly less himself he may be. Such a slight affection of consciousness is, however, for practical purposes, in a case like this, equivalent to no affection of consciousness, although scientifically we The absence of loss of conmust recognise it. sciousness in a case of such perfect hemiplegia as this patient had is very strong evidence towards the diagnosis of local cerebral softening. Indeed, cerebral softening is always local, and hemiplegia, with or without aphasia, is the great symptom of it; but hemiplegia, with or without aphasia, is a symptom of cerebral hæmorrhage, too; but then the onset is mostly by loss of consciousness or coma. Hemiplegia coming on without loss of consciousness points to local softening; hemiplegia, with loss of consciousness, to clot. Such is the rule of thumb; but, speaking carefully, the first mode of cuset points to a lesion of comparatively little

gravity; the second, to one of much gravity. Within the term "gravity" are included two factors-(1) extent of lesion, (2) rapidity of lesion. Using terms metaphorically, we have to speak of the momentum of lesions, the factors being mass and velocity. If the lesion be very extensive, although not very rapid, there may be loss of consciousness, and if of little extent and very rapid, there may be loss of consciousness. Yet the rule of thumb is very valuable. So in this case, from the mode of onset, it was concluded that there was local softening, although, from the atheromatous state of the radial arteries, clot was a possible lesion; indeed, had the patient had chronic Bright's disease, clot would have been diagnosed, as the condition of which chronic Bright's disease is a part overrides the rule that hemiplegia coming on without loss of consciousness points to local softening.

But now comes the question, How was the softening produced ? In a case of hemiplegia the question is, so to speak, Why did an artery get blocked ? Arteries may get blocked by embolism or by thrombosis. Blocking by embolism is said to be sudden ; but it is not always so; or at any rate hemiplegia will come on deliberately in young patients who have not atheromatous vessels and who have disease of the heart's valves. This man had no heart disease to point to embolism; his age pointed more to blocking from thrombosis; this and the atheromatous state of his radials pointed to thrombosis of an atheromatous cerebral artery as the cause of the softening. But we found decisive evidence of syphilitic taint; there was a node of the left tibia, and thus we suspected syphilitic disease of his cerebral vessels. Had he been young, and had his cerebral arteries, as inferred from the state of his radials and temporals, not been atheromatous, we should have concluded that the thrombosis was due to syphilitic disease. But plainly, in a man sixty years of age, with atheromatous arteries, this could only be suspicion.

He had much pain in the head, especially on the right side; he became gradually imbecile, and died comatose on February 22nd. At the autopsy we did find softening of the outer part of the right corpus striatum, of some convo-

lutions of the temporo-sphenoidal lobe, and of some others in the district of the right middle cerebral artery. There was thrombosis of the main trunk of this artery. Now this vessel was, as were all the other cerebral arteries, very atheromatous. But the left middle cerebral artery was the subject of syphilitic disease; its sheath was thickened; the artery was slightly nodose, and of a grey-green, greasy tint. But, curiously, this vessel was not occluded ; in the opposite vessel we discovered no syphilitic change. And even if we had, the atheroma would have been a sufficient cause for the thrombosis. This is a case then in which, even post mortem, we could not be sure that the hemiplegia was owing to syphilis.

The pain in the head was probably owing to a recent syphilitic osteitis of the right side of the skull, which was seen after death.

It is to be observed that the patient had no optic neuritis, a condition often found in cases of gummatous masses in the brain ; there were no such masses in this case.—London Lancet.

#### THE MONOBROMIDE OF CAMPHOR IN MASTURBATION.

4.60.2

My attention has been recently called to the use of the "monobromide of camphor" in nervous and kindred diseases. I have since used it with happy results in a number of cases, and in many instances substitute it for the potassium bromide. I have found it, particularly in masturbation, a reliable and efficient remedy. One case I will record. W. F. P., male, aged twenty years, teacher. Consulted me in December last. Complained of weak memory, confusion of thoughts, nocturnal emissions, constant desire for sexual indulgence, and the many other characteristic symptoms of confirmed masturbation. Becoming alarmed, and realizing his condition, he confessed to having practised masturbation for a year or more. Had rather plethoric appearance, but nervous symptoms seemed prominent. I prescribed the usual remedies, with little or no benefit. I finally put him on four-grain doses of the camphor monobromide three times a day, with immediate and seemingly permanent results.

He now informs me that he feels well, and believes he is cured. A remedy containing such virtues, and so happily applicable to such a disease as masturbation, should merit prominence. These unfortunate young men are, as a rule, ignorant of the benefit they may receive from an intelligent physician, and easily fall victims to the nostrums of quack "institutes."— WALTER N. SHERMAN, M.D.—Med. and Surg. Reporter.

# CLONIC SPASM CURED BY LARGE DOSES OF ARSENIC.

G. D. Van Vranken, M.D., Saratoga, N.Y., writes to the *Medical and Surgical Reporter* as follows :---

"The article in the *Reporter* of November 18th, by Professor Mitchell, on 'The Effects of Large Doses of Arsenic in Chorea,' reminds me of a case of spasm which came under my care some time since, in which small doses of arsenic failed, and large ones were followed by a speedy cure.

"In June of 1872 I was called to a distant village to see Alice B—, nine years old, of nervous temperament and feeble constitution. Some ten weeks previous she had had a light attack of scarlatina. A few days after her recovery she was taken with severe pain in her right hand, which was soon contracted, and rigidly held for two or three days. Then the pain again became severe, during which the right hand was relaxed and the left closed. A few days, and the left leg was affected, first thigh, then ankle, and so on, the spasm shifting from place to place, after remaining stationary from three to ten days.

"Nor was the disease confined in its effects to the extremities, but for several days she was perfectly blind in her right eye, and for a time she stammered as badly as the most inveterate stammerer I ever heard. In sound sleep, the muscles were sometimes relaxed, but contracted again when she awakened. For three months I tried the remedies which I thought best to remove after effects of scarlet fever, and to cure spasm, viz., iron, quinine, strychnia, iod. pot., brom. pot., etc., with arsenic, in drop doses, three times per day, all of which proved comparatively valueless.

"I then resolved to push arsenic, and commenced with five drops of Fowler's solution, three times per day, to be continued until puffiness of the face was produced, or one-half ounce taken.

"In about two weeks her father wrote me, saying, 'Daughter's medicine gone. Has had no spasm since fourth day of taking it.' She has had no return of spasm, with health rather better than in previous years.

"Since this experience I have had no hesitancy in prescribing large doses of arsenic when clearly indicated."

# Surgery.

## CONTRIBUTIONSTOAURALSURGERY.

# BY W. B. DALBY, F.R.C.S., M.B. CANTAB., Aural Surgeon to St. George's Hospital.

FATAL CASES OF DISEASE OF THE MIDDLE EAR.

Although the occasionally fatal results which attend cases of perforation of the membrana tympani are well known to the profession, it is to the fact of this affection being so common that we must attribute the indifference with which a discharge from the ear is generally regarded by so many, and for the same reason the deaths which are due indirectly to perforation of the membrana tympani might be not inappropriately spoken of as accidents in the course of disease. From whatever cause arising, where once the tympanum has become the seat of inflammation, and pus has made for itself an exit through the tympanic membrane, if the perforation does not heal within a few weeks, the prospect of closure ever taking place is very remote. The condition then arrived at in the ordinary course of events is that the cavity of the tympanum becomes a surface subject to suppuration, and discharging more or less, or ceasing to discharge, according to surrounding circumstances. Given a large number of persons with perforation of the tympanic membrane, it admits of no question that a certain proportion of them will die from inflammation of the brain or its membranes, and that others will die of pyæmia. It may be true enough that every physician and surgeon to a large hospital has these facts sufficiently often brought before his notice to be familiar enough with these cases as soon as he meets with them; still, it cannot be too often repeated that a tympanic membrane whose perforate condition may date from infancy, and be the source of an occasional purulent discharge till advanced life, can at any time during this period of life be the indirect cause of a rapidly fatal affection, until the surprise which death from this cause creates is replaced by greater attention to the condition of the ear. Even then, with every precaution, a few cases, though far less than heretofore, will, I believe, terminate fatally.

Considerably more notice to this subject has this year been directed by papers in some of the journals, and especially in reference to its bearing on life assurance by Dr. Cassells, of Glasgow, and others, confirming the opinion which I expressed on the matter in *The Lancet* for 1872, as follows: "I believe that a discharge from the ear is regarded by insurance companies as an element against granting a policy, or, at any rate, demanding an increased premium. I can only say that, if it is not so regarded, it would be if the companies consulted their own interests."

There would appear to be two almost distinct divisions in these cases —viz.: the first, in which the fatal symptoms make their appearance soon after the attack of inflammation in the tympanum and rupture of the tympanic membrane; the second, in which the symptoms do not appear until the discharge from the tympanum (and sometimes the mastoid cells) has become chronic. In the first, I believe, must generally be placed the unavoidable deaths; in the second, those in which care and appropriate treatment will oftentimes place the patient in a position of safety.

During the past year three most noticeable instances of those in the first division came under my notice : one, where an elderly gentleman died of meningitis within a few weeks from the time when the tympanum became the seat of inflammation ; another, where the same course of events occurred to a middle-aged man; and a third, in which a young boy died from pyæmia, the first rigor happening before I saw him, and a few days only after the tympanum became inflamed. However grave these cases may be, nothing of especial value would be gained by relating them in detail. But the other division cannot fail to be of great surgical In this the local condition of the ear interest. generally met with will include complete or nearly complete loss of the tympanic membrane, the tympanum being in each instance a suppurating cavity, the surface of whose lining membrane is either studded with exuberant granulations, or is the origin of a polypoid growth, which completely fills it, and in some instances protrudes into and beyond the external meatus. Occasionally added to this will be found a bony growth, a so-termed exostosis, in the meatus.

A more perilous condition than some of these complications entail can hardly be conceived how perilous is sufficiently well attested by the number of deaths which take place from meningitis and pyæmia induced by this state of things. At the present moment, however, I desire especially to direct attention to how the fatal termination may often be prevented, and shall probably best illustrate this matter by relating briefly the following :

CASE 1.—In Oct., 1874, I saw a middle-aged lady who had for many months at times been subject to a discharge from the left ear, attended with considerable deafness, but to which she had paid little attention. She began to suffer during the earlier part of the year from occasional severe pains in the head, which were considered to be neuralgic, and for which she had visited German baths and tried a variety of remedies. In the summer of the year she had frequent attacks of giddiness. Amongst others she had consulted Dr. Buzzard, who referred her to me for an examination of the car as probably being the source of her discomfort.

There was a profuse discharge from the ear, and a polypus which blocked up the furthermost portion of the meatus, and obviously was interfering with the escape of discharge from the tympanic cavity. She objected to my at once removing the growth. Within a fortnight the symptoms became more urgent in their character. She was so giddy that she could not walk upstairs or for any distance without support; the pains in the head were so severe as to interfere with her rest, and her general health was becoming seriously affected.

On a consultation with Sir W. Fergusson and Dr. Buzzard it was decided that the polypus should be removed. I accordingly took it away the next day (under ether). After the removal it was found that the tympanic membrane was completely ulcerated away, and a small portion of the bone at the lower part of the tympanic cavity was exposed. The usual local applications were subsequently used to the growth, all the pains in the head and giddiness gradually passed off, and by the early part of December there was so little discharge that it could not be detected except by very close examination with the speculum, and she had returned to her accustomed health.

From time to time I see this patient. She has had no repetition whatever of the head symptoms, and the growth has shown no signs of returning. Can there be any reasonable doubt that, in the absence of any decided treatment, the case would have followed the usual course, so often terminating in cerebral abscess or meningitis ? ж

¥

×

\* \* \* These cases are most striking examples, but others with symptoms of a less definite and marked character are most common. In fact, it is a matter of almost daily observation for patients who present themselves with extensive perforation of the tympanic membranes to complain of frequent pains in the neighbourhood of the affected ear, pains which sometimes extend over the half of the cranium, such symptoms being often accompanied by attacks of giddiness.

Can there be a question as to these patients being in a position of more or less peril? Can it be a matter of surprise that some of them eventually become the subjects of meningitis ? It would be natural to expect that this occurred more frequently than it does, when the position of the suppurating surface is remembered. The routine of desirable treatment has been indicated in the foregoing cases, and may be shortly said to consist in the removal and complete eradication of polypus where it is present, an improvement of the general condition of the tympanum by astringent applications, and the use of an artificial support in the form of the flattened pad of cotton-wool, learned to be adjusted by the patient. Under the use of this latter application the tympanic cavity is always protected from the external air, and a profusely suppurating granular surface is soon replaced by a more healthy condition of mucous membrane, in which the discharge scarcely suffices to coat the pad when it is daily exchanged for a fresh one. By scrupulous cleanliness and such attention to details the fatality in these cases may, I believe, be immensely diminished, and I am the further encouraged in this view by remembering that many of the deaths

from meningitis which have come under my notice have been in those where the condition of the ear has not obtained attention until premonitory symptoms of pyzmia or meningitis have set in. In these, as in all others, death has invariably followed when there has been a distant rigor.

In conclusion, I cannot help repeating that when a polypus by its presence acts as an obstruction to the egress of discharge from the tympanic cavity, the propriety of removing it is so obvious as scarcely to merit discussion. How obvious this is may be frequently seen in the examination of these cases, when by pressing the growth on one side with a small probe. a quantity of fetid pent-up pus will escape from the tympanum. The most ready method of operating in these cases has previously been considered in The Lancet and elsewhere, but the method by which the polypus is removed is (provided that it is entirely taken away), comparatively speaking, a trivial matter, the chief difficulties being in the after-management, which shall ensure its complete eradication, so much so that the truly important part of treatment may be said to commence after the operation. The after-treatment demands the greatest care and patience. It is not enough that the root of the growth should be destroyed, but the small portion of mucous membrane from which it springs must be treated in a like manner. In doing this the utmost caution should be used not to touch any part of the surrounding tissue, as this is in the highest degree sensitive, and if the caustic comes in contact with this part, it not only causes extreme pain, but is liable to excite great irritation and inflammation, which it is hardly necessary to observe is most undesirable and dangerous in the position To avoid any chance of this under treatment. it is necessary that the surface under manipulation should be thoroughly dried before the application of any caustic, and that the reflected light used for illumination should be the brightest obtainable. The subject of exostosis in the external meatus, as a complication in cases of perforation and polypus, was discussed in The Lancet of Jan. 22nd, 1876, so I make no further allusion to this at present.-London Lancet.

A NEW SAW .--- Messrs. George Tiemann & Co., Surgical Instrument Makers, of New York, have produced an entirely novel saw, the invention of Mr. F. A. Stohlmann, whose ingenuity has already done so much to improve the armamentarium chirurgicum. It is intended to replace the chain-saw in common use, and is entirely free from the tendency to bind, kink, and break which characterizes the latter instrument. It consists of two handles counected by a wire of cast-steel, on to which are strung a series of steel beads with sharp cutting edges. The instrument might, indeed, be called a file quite as appropriately as a saw, and its action on a bone is said to be more like that of the first-mentioned tool, in the absence of such rough edges as are made by the saw in common use. No needle is required to carry it through or around a bone, and its beads can be readily strung on to a new wire in case of a break. Another advantage lies in the fact that the beads, by their free rotation, present fresh cutting edges : and still another is the considerable difference in price between this instrument and the ordinary chain-saw .- New Remedies.

RESULTS OF OVARIOTOMY IN LONDON HOS-PITALS.—From the Hospital for Women no report has been as yet received; but the following table Mr. Wells said, he believed, would represent the result of ovariotomy for the last nine years in four large hospitals and in the Samaritan.

C	Cases.		Recoveries.			hs. Mo	Mort. per cent.	
Guy's								
St. Bartholomew's	21	• •	8		13		61.90	
St. Thomas's	29	••	13		16		55.17	
St George's	11		3		8		72.72	
Samaritan	296	••	230		66		22.29	

Mr. Wells added that, when these results were known, he believed, not only that the larger hospitals would be encouraged to do all that could be done by efficient sanitary precautions, separate rooms, specially trained nurses, and careful attention to every detail likely to assist in ensuring greater success in the future in their cases of ovariotomy, but that similar care bestowed upon every patient in the surgical wards would lead to far better results in all surgical operations. There was no such useful stimulus as a little wholesome rivalry.—*The Brit. Med. Journal.* 

GASTROTOMY.-To the Editor of the Lancet.--Sir-With reference to the statement made in your issue of the 13th inst., that until M. Verneuil's case there had been no recovery after gastrotomy, I beg to state that in the Lancet of May 15th, 1875, there is recorded a case in which gastrotomy was performed by Mr. Sydney Jones, where the patient quite recovered so far as the operation is concerned, The patient was up and about, smoking and enjoying his food, when unfortunately he contracted a sharp attack of bronchitis, and died on the forty-first day after the operation. Yours Samuel Osborn, F.R.C.S., St. obediently. Thomas's Hospital, Jan., 1877.

THE TREATMENT OF ATHEROMATOUS CYSTS OF THE NECK.-Esmarch recommends in those forms of atheromatous cysts of the neck which can only be removed with difficulty, or with the formation of a large cicatrix, puncture of the sac, the injection of a one per cent. solution of carbolic acid, until the solution returns clear. and then the injection of a solution of a Lugol's solution, containing about three per cent. of iodine, and iodide of potassium in water, which he allows to flow out again after the lapse of a few minutes. If the tumour has not considerably diminished in size in the course of six or eight weeks the operation is repeated. In the course of half a year the cyst is usually reduced to the size of a small node.

ROYAL COLLEGE OF PHYSICIANS .- The president said that a very interesting and important discovery had been made by Dr. Sieveking in the British Museum of the manuscript of the notes of the lectures delivered by Harvey before the college, and he sent round an autotype copy and a transcript of the last page of the particular section relating to the circulation containing words of great interest, for that particular page contained the sum and substance of Harvey's discovery of the circulation, and what appeared to Harvey to be the import of that revelation as regards the use of the circulation in relation to the nutrition and heating of the body. The thanks of the college were accorded to Dr. Sieveking.-London Lancet.

------

# Midwifery.

## LACERATIONS OF THE PERINEUM FROM CHILDBIRTH.

#### BY WILLIAM GOODELL, A.M., M.D.,

#### Clinical Professor of the Diseases of Women and Children in the University of Pennsylvania.

Here is a fine-looking young woman, twentyeight years old, who comes to us in sad plight. Ten years ago, in her first labour, she met with the mishap of having her perineum very badly The rent extends through the sphincter torn. ani, and three-quarters of an inch up the bowel. The waters drained off early, and the labour, consequently, became a tedious one. Her physician, a man of large experience, very properly put on the forceps. In delivering the head, this rent happened, as it will sometimes happen in spite of the best care. I shall not, therefore, blame the physician, nor can I afford to be uncharitable, for I once met with the same disaster. As I separate the labia you see that the perineum has disappeared, and that the vagina and rectum end in one common opening. It is an ugly looking rent, but bad as it is, she did not discover it until after getting up. Then her troubles began in earnest, and they have grown more and more exacting, until she has been driven to us for relief.

Rents of the perineum are called complete or incomplete, according as the sphincter ani is or Most commonly the rent is is not involved. incomplete, and does not include this muscle. Yet even then the sustaining power of the vaginal column is impaired by such an injury to its perineal abutment, and the bladder and womb tend to sag down. Again, the vulva gapes ; it acts no longer as an elastic, air-tight valve, and the womb and vagina, irritated by the air which gains access to them, become congested and hypertrophied. By the enlarged vulva and relaxed vagina erectility is impaired, and the sexual act is blunted. These evils are bad enough, and yet, should the rent involve the sphincter ani, as in our patient, there will be added to them an involuntary escape of flatus and of the fæces, if at all liquid.

For ten years this woman's clothing has been oiled without warning. She is often waked

up at night by an involuntary movement of the bowels. She is liable, no matter when or where, to break wind, and she, therefore, stays She told me, with tears, that her at home. person has become repulsive to her husband, and that her friends shun her company. To a young woman, to a young wife, few calamities can be more grievous, and she bitterly denounces her physician. It is, indeed, a sad infirmity; yet. gentlemen, in a busy life very few of you will escape from seeing it happen, in some form or other, in your practice. It behooves you, therefore, to know how to treat it, and better still, how to avoid it.

My time is too limited to speak of all the causes of lacerated perineum ; but there are two special and salient ones on which, while our patient is getting her ether, I wish merely to break ground. One cause is the common and, as I hold, faulty mode of supporting the perineum. The problem seeking solution is this :---Given a fetal head, and a vulva through which it must pass; how can the perineum be kept from tearing? Well, this problem looks simple enough, and yet, let me tell you, it is the riddle of the sphinx. Every physician has literally tried his hand at it, and every one has come to Never yet has it been solved. grief.

One advocates pressure on the perineum with a folded napkin; another with an unfolded napa third scouts all napkins, whether kin ; folded or unfolded. One plugs up the rectum ; another empties it. The perineum is pushed forward by some, and backward by others. Some place their hand transversely across the perineum; some longitudinally, with the fingers looking upward; some longitudinally, with the fingers looking downward. As runs our nursery rhyme, "Simon says, 'Thumbs up !' Simon says, 'Thumbs down !' " and yet the perineum would tear, and tear it will, until woman becomeslike the cherubs of the old painters-all wings and no body.

Now, to my thinking, all this diversity of opinion—and, mind you, I have not given you a tithe of the different modes of "supporting the perineum," as it is technically called—means that Nature herself intends to take care of the perineum, precisely as she does the preceding stages of labour, and that she can very generally do it better than the physician. But supposing that the case is a morbid one, and really needs help; or else, that you cannot, for the life of you, keep your hands off—what is to be done? Why, imitate Nature. She retards the too rapidly advancing head, and that by making the woman cry out. You will retard the head by making direct pressure, *direct pressure*, I say, on it.

The word "support," as applied to the perineum, is a misnomer. It is not the perineum that needs support, but the head that needs sup-By supporting the head we support the port. perineum. If the ordinary mode of "support" ever does any good, it is by retarding, through the interposed perineum, the advance of the But the good thus gained is more than head. counterbalanced by the evil. Continuous, firm pressure with the hand makes the perineum hot, dry, and unyielding. It also hinders it from undergoing equable dilatation; for the compressed portion cannot take its share of the general tension, and the strain is thrown on the fourchette. Bruised, congested and benumbed by such support, the perineum is no longer a living tissue, capable of responding intelligently, so to speak, to the requirements of the occasion-when to solicit, when to repel the advance of the head. Again, in the last throes, when such support is, if ever, most needed, the woman is very likely to jerk herself away, and the abruptly released perineum suffers.

Make, then, your support, or retarding pressure, directly to the head itself, and not on the perineum ; not through a fleshy medium which needs perfect freedom from all restraint, in order to undergo the requisite and inevitable amount of dilatation. For many years I have not touched a perineum for the purpose of saving it. Sometimes I do nothing; at other times I make simply a retarding and guiding pressure with my fingers and thumb spread over the head of the child as it crowns. When the perineum is very rigid, I relax it, by hooking up and pulling forward the sphincter ani, with two fingers passed into the rectum, while with the thumb of the same hand I make the needful restraining pressure upon the head.

A faulty method, then, of supporting the perineum plays an important part in the production of these lacerations. But they very

generally stop at the sphincter ani, and are rarely complete When, however, the rent is a complete one, involving the bowel, you will commonly find that, as in our patient, the third stage of labour has been ended by the forceps. Not a winter passes by without the appearance before you of several such cases. This ought not to be so ; but it is so ; and why is it so ? For many reasons, but at which I have time only to hint. Thus, through false delicacy, many physicians apply the forceps and deliver the woman under a sheet. They work in the dark, and cannot see what they are about. Again, in difficult forceps-cases, the worn-out physician is tempted to brace his feet against the edge of the bedstead. But braced traction means uncontrollable traction, and when the head jerks past the brim, it is very likely, before the physician can recover himself, to tear its way out through the perineum. Or the' forceps may slip off, and the physician suddenly finds himself on his back, or brought up all standing by the opposite wall. At best, by the use of the forceps the head is liable to be brought down too quickly upon undilated soft parts, and to be prematurely delivered. Skilled physicians are constantly doing this, and so will you, unless you follow the advice I am about to give. To tell you the truth, such grave lesions to the mother, and for the matter of that, to the child also, from the use of the forceps are so constantly brought to my attention that I am disposed to accept Baudelocque's dictum, that, take it for all, "The forceps has been more injurious than useful to society." My advice, therefore, to you-and you will find it a very safe one to go by-is that, in general, and always with primiparæ, you take off your forceps as soon as the perineum begins to bulge, and that you leave the final delivery of the head to the expulsive efforts of your patient.

But, supposing that, in spite of the greatest care, a rent has happened. What is now to be done? First, discover the rent. You smile but not so fast! Through over-delicacy on the part of the medical attendant, lacerations are over and over again escaping his notice, until it is too late to do anything. So was it with our patient's physician. So will it be with you,

unless you make it an inflexible rule after every delivery, either to look at the perineum, or to gauge its thickness between the thumb in the vagina and the index finger in the rectum. Don't forget this.

Next, make a clean breast of the mishap to your patient, and as soon as the placenta is delivered, put in metallic sutures. And bear in mind, I beg you, that the lowest one, which goes in first, must be introduced at cutaneous points fully half-an-inch below the lower angle of the rent; but I shall have something more to tell you about these sutures when our patient is being operated on. Do this with a good light, and at once, while the wound is fresh, and the perineum lax and comparatively numb and insensible from the pressure and the passage of the head.

Under such conditions ether is not ordinarily needed ; you are merely giving a dressing to the wound, and that the very best dressing it can have. Should the lochia obscure the parts, dam them back by a sponge pushed high up. And don't forget to remove the sponge before you begin to twist the ends of the wires together. Then draw your patient's water, put a pad between her knees, and bind them together. If the rent be an incomplete one, you need do nothing more than keep the bowels bound by opium; remove the stitches on the sixth or the seventh day, and give oil or a saline cathartic on the day following. But, should the sphincter ani be torn through, you will pass into the bladder a self-retaining catheter, and will on the eighth day, remove all the sutures but the first one put in, viz., the one which you will soon see me put around the anal rent. On the ninth day give an enema of four ounces of warm olive oil, followed in two hours by one or more of soapwater, and after the bowels are cleared out, cut the remaining stitch. Ten to one your patient will now be as good as new.

But here lies before us a woman who missed the golden opportunity for immediate repair. The broken ends of the anal muscle have retracted. The parts are rigid, and otherwise deformed by cicatricial contraction. The chance for the simple suture-dressing has gone She now needs a tedious and bloody by.

prepared by a dose of oil taken yesterday morn-We put her in the lithotomy position, ing. with her knees well supported by two assistants, who also, with their free hands, keep the vulva on the stretch. I first shave off the hair around the rent, and then pass two fingers into the bowel, in order to smooth out the overlying rugous vagina. Next, with a curved pair of scissors, I trim the rectal edges of the rent, and snip off from its vaginal surface a thin paring of mucous membrane. This dissection is continued for an inch and a half up the posterior wall of the vagina, and then the sides of the perineal rent are denuded for a space a little broader and longer than the cicatrix of the original perineum. Venous blood flows freely, and three small arteries are springing. We do not tie them, lest the ligatures should act as foreign bodies, but each one is nipped with a serre-fine. It is on account of the vascularity of these parts, and the valveless veins, that I prefer the half-crushing action of the scissors to the clean cut of the knife. It does not interfere with union, and yet lessens the bleeding.

See what a symmetrical raw surface we have ; it looks very like a red butterfly with its tail But, before folding its wings, and cut off. closing the wound, I hunt for some little islets of mucous membrane which may have escaped the scissors. It is not always easy to distinguish them from the raw surface; so, to be on the safe side, I snip off every suspicious looking ridge. The sutures must now be passed, and since success, in either the primary or the secondary operation, depends mainly on the manner in which this is done, I bespeak your closest attention. A sharply curved needle, held in the jaws of a needle-holder, and armed with silver wire, is entered in the left buttock, on a level with the lower margin of the anus, and about half an inch away from it. By my finger in the rectum, I pilot this needle through the recto-vaginal septum so that by one sweep it completely girds the rectal rent, and emerges at a corresponding point of the skin on the right buttock. The face ends of this suture are alone visible; its loop lies wholly embedded in the This suture was first devised by my septum. friend, Dr. Emmet, and a very important one it secondary operation, for which she has been is whenever the sphincter and is torn through,

or a limited portion of the recto-vaginal septum is involved. It purses up the margins of the slit in the bowel, and brings together the ends of the broken muscle. When, however, the slit in the septum is over three-quarters of an inch in length, its closure cannot be safely entrusted to this single stitch.

Last week I received a letter from a physician out West, who sought my advice. In a very difficult forceps case, he had had the misfortune to see his patient's perineum give way, and her recto-vaginal septum torn up for two and ahalf inches—very nearly up to the cervix uteri. I wrote back to him to sew up, first, this slit in the septum, with a sufficient number of interrupted gut-sutures, knotting each one in the rectum, and then to close the perineum by the operation that I am now showing you. These gut-sutures, by the way, need no further attention, for they disappear by absorption.

The perineum proper I shall now close by five other metallic sutures, which will be carried by this long-handled perineum needle. The first one of these five sutures is so passed that its ends emerge at cutaneous points on a level with those of the preceding suture, but half an inch outside of them, while the very small visible portion of its loop lies on the mucous membrane of the posterior vaginal wall, just above the uterine edge of the raw surface. The cutaneous points of the remaining four sutures are about an inch from the margin of the rent, and each suture is also made to pass through the vaginal mucous membrane, very close to the edge of the raw surface.

I now remove the serres-fines, and, as you see, the arteries do not bleed, but the general oozing is free. This is the usual case, but fortunately the pressure made by the adjustment of the sutures will always stop it. And it is for the purpose of controlling every bleeding vessel, that I make the perineal sutures include a portion of the sound vaginal mucous membrane. Yon may, if you choose, secure the wires by merely twisting them; but from habit I prefer to clamp each one by a perforated shot. As perfect coaptation has been gained by these deep sutures, no superficial ones will be needed. The ends of the wires are now cut off close to the shot; a self-retaining catheter is next

passed into the bladder; the knees are then bound together, and our patient will now be wheeled off to her bed.

For one week her water will be drawn off, and her bowels kept bound. For the latter purpose, opium enough to ease the painful tension of the stitches will suffice. No local dressing, beside cleanliness, will be needed; but after the first forty-eight hours the vagina should be washed out twice daily, with a weak solution of carbolic acid, or of the potassium permanganate. There is one distressing complication of which you need to be forewarneda very painful collection of wind in the bowels, which few escape. How and why this happens, I cannot say; but the only sure remedy is the introduction into the rectum of a flexible male catheter. And that reminds me of another point : charge your patient not to stand on ceremony whenever she feels the inclination to Efforts to withhold it may cause break wind. a damaging contraction of the sphincter muscle. Our patient's diet will be restricted to milk, toast, eggs, and broths. On the seventh or the eighth day I shall cut and remove every suture but the one first put in, viz., the rectal one. On the morning of the ninth day four ounces of warm olive oil will be slowly injected into her rectum, followed two hours later by soap-water enemata. When her bowels have been thoroughly moved, but not till then, the ectal stitch will be taken out. After this, if the union be good, her bowels will be kept open daily, by an evening dose of the compound liquorice powder. If otherwise, they will be again bound for five days more. For two weeks, at least, she will keep her bed and have her knees bound together. After that she may be allowed to sit up, but not, for a week more, to walk about. Such precautions are needful, in order that the newly-united tissue may not become absorbed, or become relaxed by overstretching.

Other operations have been devised for lacerations of the perineum, but the one just performed before you is simple, and yet very successful. Its good results many of you have repeatedly witnessed. And after an experience with it, in some twenty-five cases of the immediate operation, and in about thirty of the secondary operation, I feel myself entitied to recommend it very warmly.—*Philadelphia Medical and Sur*gical Reporter.

# CLINIC OF PROF. T. G. THOMAS, AT THE COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CASE OF OVARITIS AND LACERATION OF CER-VIX UTERI, CONSEQUENT UPON LABOR .--- From her appearance you would probably suppose, gentlemen, that the patient before us was a young girl of sixteen or seventeen; but, on inquiry, we find that she is twenty years of age, has been married four years, and has already had two children. Her name is Mrs. E-----. Her first child was born three years ago, and the second one, one year ago; and, in reply to our questioning, she tells us that she has never been well since the birth of the former. She complains of a violent headache at times, and a constant pain in the left side, which is especially aggravated when her bowels are constipated, and at the time of her monthly sickness. Just after she has had a movement of the bowels it is most severe ; but it is so troublesome always that she has to spend the greater part of her time lying down, in consequence of it. You will notice that there is something peculiar about these headaches she has mentioned. In a little while after one has commenced, she says she feels something coming up in her throat and choking her, and then she immediately becomes unconscious, and so remains, as a rule, for two or three hours. As far as she is able to judge, she lies perfectly still at these times, and so profoundly insensible that she would not feel a pin stick her. She says that she bites her tongue; but, as there is never any blood on her lips, face, or clothing, we must receive this statement with considerable allowance. These attacks vary in their duration from half an hour to an entire day. When they are over, she feels as if she had been beaten and bruised all over, and particularly in the left side. Her menses are regular, and are both preceded and followed by special pain. Finally, she has constant leucorrhœa. Now, gentlemen, I have gone over these symptoms carefully, as I considered it important to do so. Of course, there was enough in the history of the case to cause us to make a physical examination, and I will tell you, in the first place, that all the troubles of which she complains have resulted from her first labour. On a vaginal examination we found that the cervix was badly lacerated, there being a single deep rent going right through toward the sacrum. This was undoubtedly made by the child's head. The uterus is about normal in size and position.

On employing conjoined manipulation the left ovary was found under the broad ligament, soft and enlarged, and so tender on palpation that she almost jumped off the table when it was touched. There must have been imminent danger of septicæmia during the period of her confinement, from the laceration of the cervix ; but she seems to have escaped this. At this time she also had inflammation of the left ovary, and this still continues.

Her excessively nervous condition results partly from that and partly also from the laceration of the cervix; cicatricial tissue in this situation being exceedingly liable to occasion nervous derangements.

The patient herself believes that she has epilopsy; but I think this is not the case. Epileptic fits do not last several hours, like the swoons in this case. Notwithstanding the patient's statements to the contrary, I am of the opinion that she does not bite the tongue; but, even if she did, it would not be proof of epilepsy, as this sometimes occurs in violent hysterical convulsions. These attacks I believe to be of the latter nature, but it seems to me that there is great danger in this instance of the case running into hystero-epilepsy, as it is called. The prognosis is not very encouraging, but much can be done to give relief here. First of all, the lacerated cervix should be operated on, and this will remove the leucorrhoa and a certain amount of nervousness. We cannot cure the ovaritis, but we may be able to control the symptoms caused by it to a great extent by a free use of the bromides. Their action here would be somewhat analogous to that of quinine in the case of a person suffering from malaria, but who was unable to leave the malarious district in which he was living. It would be impossible to remove the cause of the trouble, but its pernicious effects could be counteracted to a certain extent, at all events, by the remedy employed. There is really only about one cure for ovaritis, and that has already signally failed in this case. I refer to pregnancy. The rest from their ordinary functions for nine months and longer, if lactation ensues, not unfrequently restores inflamed ovaries to their normal condition. A little later I shall advise electricity, which is sometimes beneficial; but I can never succeed in really curing these cases.

CANADIAN JOURNAL

PREGNANCY OCCURRING DURING LACTATION.-Mrs. Sarah F----; a native of Germany ; aged 23; married four and a half-years, and has had two children and one abortion. It is now sixteen months since her last confinement. She continued to nurse her child-until\_three months ago, when she had an attack of pneumonia, which put an end to lactation, and forced her to wean the infant. She comes to us because she has had no return of her menses since that time. Not very long ago we had a case here, which many of you no doubt remember, in which there was amenorrhœa continuing after pregnancy and lactation were over, and which we found to be due to super-involution of the uterus. This atrophy is not uncommon, and in these cases the menopause (which is its natural result) sometimes takes place very early. When in any case there has been no menstruation for a year (without pregnancy or lactation) always be very careful about commencing treatment. If atrophy of the organ has already taken place, you can do no possible good, and any treatment you may institute will only cause your patient useless trouble and expense. Only yesterday two ladies, who were affected in this way, neither of whom was more than thirty years of age, were in my office.

But the present case is not of this character, and I merely allude to this matter to put you on your guard when you meet with patients who are suffering from amenorrhœa. Mrs. F—— has noticed that her courses did not return when they should have done so, and she has come to us to know what is the matter. When I made an examination *per vaginam*, I found there was something in the uterus, which probably interfered with the functuation of menstruation, and I am of the opinion that she is again pregnant.

Pregnancy has nothing to do with menstruation. It is the common opinion, both among physicians and the public in general, that during lactation there is no danger of pregnancy; but this is a fallacy. Whenever ovulation (which, however, commonly ceases during lactation) commences again, pregnancy is liable to occur. Some women never menstruate at all, and yet have large families of children.

Now, gentlemen, I warn you to be very careful in cases like the present. It is said that "a blunder is worse than a crime"; but it is, at all events, only second to one. It is a blunder to bring on the menses in a case of amenorrhœa like this (which, of course, involves the sacrifice of the product of conception) that is only second to the crime of inducing abortion intentionally. Never commence any treatment whatever in a case of amenorrhœa until you are sure that it is not caused either by pregnancy or the menopause. It is a very easy matter to introduce a uterine sound, but the consequences may be disastrous. Or a current of electricity (especially by the faradic) may bring on uterine contractions, and you may find to your consternation that an abortion has been produced. I do not envy the feelings of a practitioner of medicine in such a predicament as this. I am sorry to say, gentlemen, that Dr. Ward, my clinical assistant, makes the awful announcement that all our other cases have lost their courage and run away. We had five to present to-day, but only the two which you have seen could be prevailed upon to come before you .---Clinic.

ON THE NATURE AND TREATMENT OF CRACK-ED NIPPLES .- According to Dr. Le Diberder, fissures of the nipples are not really the entire ailment, but a manifestation of derangements of the puerperal state. If, as Dr. Donne asserts, the fissures are due to the constitution of the milk, the alteration of the latter would imply a pathological condition of the blood. Indeed, as soon as the fissures appear, the pulse accelerates, the skin becomes hot, there are much thirst, general lassitude, and, lastly, perspiration. Sleep and appetite participate in the general disorder. Under the influence of the fever, the fissures become more tender, and augment in surface and depth; nursing becomes impossible. The author considers the febrile exacerbations as the cause, not the consequence, of the fissures; he has been led to place a secondary value on local treatment, for which he substitutes general treatment with sulphate of quinine. The latter is given in doses of fifty to eighty centigrammes a day ; the local treatment consists in protecting the parts with Samaritan balm or fresh, unsalted butter. In all cases the improvement is rapid, and a cure is accomplished at the end of five or six days. In support of his theory, the author refers to numerous observations and a practice of thirty years, and invites a trial of his method.-Annal. de Gynecol. and Lyon Med.-N. Y. Med. Jour.

### CASES ILLUSTRATING THE ADVAN-TAGE OF THE GENU-PECTORAL POSITION.

#### BY ARTHUR W. EDIS, M.D.,

#### Assistant Obstetric Physician to the Middlesex Hospital, etc.

CASE 1.—Retroversion of the gravid uterus; retention of urine; redressed in the genupectoral position .- R. C----, aged twenty-nine; married ten years; mother of three children. Between the third and fourth month of uterogestation retention of urine occurred, necessitating the employment of the catheter; but no efforts were made to detect or obviate the cause of the retention. Two days afterwards she presented herself as an out-patient at Middlesex Hospital, complaining of severe bearingdown pàin and inability to pass her urine. A No. 8 flexible gum-elastic catheter was introduced and two quarts of urine drawn off. The uterus was found to be enlarged to about the fourth month of utero-gestation, and retroverted, being wedged down beneath the promontory of the sacrum.

Attempts at replacement in the left lateral position failing, the patient was placed in the genu-pectoral position. Two fingers of the right hand were then inserted per vaginam and the fundus passed to one side. On separating the fingers so as to allow pneumatic pressure to come into play, the uterus receded from the pelvis with a distinct noise as of air being sucked in. A Hodge's pessary was then inserted, and the patient directed to avoid sitting down in the ordinary posture for micturition; the genu-pectoral position to be resorted to at regular intervals. No recurrence of retention took place, and the patient progressed satisfactorily.

CASE 2.—Retroversion of the uterus; prolapse of the left ovary; sterility; cured by genupectoral position.—A. L\_\_\_\_, aged twenty; married four years; sterile. Suffers much from severe pain in lower back, and down the left leg on standing or walking. Has severe pain in coitus and defecation, always worse just before the catamenial period.

On examination, the uterus was found to be retroverted, and the left ovary prolapsed and exquisitely sensitive to the touch. On placing the patient in the genu-pectoral position, and allowing the air to enter per vaginam, the uterus was readily replaced, and the ovary could no longer be felt.

Impregnation having occurred after coitus in the genu-pectoral position, the patient missed her next period for the first time in her life. Considerable relief to the other symptoms was also experienced. A Hodge's pessary was passed, but could not be retained, owing to the sensitive condition of the ovary. In consequence of some domestic trouble, the patient miscarried about the sixth week.

Impregnation again took place by resorting to the same posture, a month subsequent to this, and utero-gestation is now progressing accompanied by the usual symptoms. A Hodge's pessary, together with a frequent resort to the genu-pectoral position, prevents the uterus remaining retroverted, and there is every prospect of the case proceeding to a favourable termination, and this after four years' sterility.

CASE 3.—Retroversion of the uterus ; adjustment of a Hodge's pessary; impregnation in genu-pectoral position .- S. F----, aged twentynine; married two years; sterile. Uterus found to be retroverted; cervical canal slightly granular. A Hodge's pessary was inserted, and nitric acid applied to the cervix. Relief to the symptoms ensued, but the sterility remained unimproved. Impregnation ensued the very first time coitus was effected in the genupectoral position. The patient miscarried during the second month of utero-gestation from overfatigue and jolting in an omnibus. The pessary remained in, but the patient never assumed the knee position, as she had no discomfort.

Eight months subsequently to this the local symptoms being very slight, the patient again consulted me respecting her infecundity. Adoption of the posture above-mentioned was advised, and later on I learnt that again she had become pregnant within a few days of my seeing her. Pregnancy advanced satisfactorily, the knee position being frequently resorted to until after the fifth month, with manifest relief to the morning sickness and the feeling of bearing-down.—London Lancet

# A CASE OF COMPLETE ABLATION OF THE UTERUS.

An apparently successful case of complete excision of the uterus, for cancer, was reported to the last meeting of the German Society of Physicians and Naturalists, by Dr. Hennig, of Leipzic.

In the performance of the operation the uterus was first separated from its connections with the anterior wall of the vagina by a knife and scissors; next it was separated by the fingers from the anterior fold of the peritoneum ; and then, since the vessels in the broad ligament bled but little, the fundus of the uterus was drawn forward, first with two fingers and afterward with a hook, so that its connections with the posterior wall of the vagina were divided without difficulty. The growth had invaded the posterior vaginal wall, and one tubercle involved the wall of the rectum, and in its removal a small opening was made in the rectum. The total length of the uterus was five and a-half inches, and the carcinoma had invaded the whole cervix. It was found that the left ovary and Fallopian tube, adherent to the uterus, had been removed with it, and about one-half of the right Fallopian tube. Thus the uterus had not been separated from the peritoneum, as intended, but the tissue which was attached to the base of the uterus showed that old peritoneal exudations had filled up and enclosed the pelvic portion of the peritoneal cavity, in consequence, no doubt, of perimetritis. The opening in the rectum was closed with the needle, and a piece of ice put into the wound; there was little subsequent hæmrorrhage, and the wound was cleansed afterward by injections of salicylic acid twice a day. Considerable peritonitis followed, the temperature of 105° being reached on the fifth day after the operation, but it gradually subsided. The recto-vaginal fistula was closed by an operation four weeks after the excision of the uterus, and with the exception /sf a small superficial abscess from some enloy/ed glands, the patient's progress was most sr isfactory. Four months later a small soft rowth appeared in the neighbourhood of the fistula, and was removed without difficulty, ine fistula having become almost closed; and up to the date of the communication, eight months after the operation, no further symptoms of recurrence had manifested themselves, and the patient's health continued good .- Medical and Surgical Reporter.

Two Births within Ten Months; The SHORTEST TIME ON RECORD.-On Sunday, December 5, 1875, Mrs. M., living four miles west of this place, was delivered of a male child at full term. On Thursday, September 14, 1876, she was again delivered of a large, well-developed male child, weighing seven and one-fourth pounds, which she claims, and which has every appearance of having gone to full term, and I may add that the child was born within three days of the time that she had claimed it ought to be, counting from the time and, as she claims, the only time she had sexual intercourse with her husband after the birth of the child until she was over two months advanced in her second pregnancy, she fixing the date from the fact that her husband left home for a two months' absence the morning of the tenth day after her confinement, he soliciting, and she consenting, to a "congress" the evening before. Her first child never nursed at the breast, the extreme smallness of her nipples preventing, nor did she, at any time, seem to have much milk-indeed, not enough to give her any trouble. This second child was born in just two hundred and eighty-four days from the date of the birth of the first. In this case how are we to account for the absence of "degeneration " of the womb substance, as is described by Drs. Hamilton, Heschl, Retzius and others ? --C. H. Tidd, M.D., Detroit Review of Medicine

ACTION OF CHLORAL ON THE RECTUM .- It would appear that chloral is one of those agents which act with nearly as much energy when introduced in the rectum as when taken into the stomach. In a case of puerperal-convulsions, to which we had been called in consultation, a solution of bromide of potassium with hydrateof chloral, which could not be swallowed by the patient, was injected into the rectum, with the effect of allaying spasm promptly and decidedly. It was repeated in the same case with excellent results. Since that time, other trials of chloral as an enema have confirmed its value in this mode of administration. The quantity of thirty grains in two or three ounces of water will generally be sufficient for a single injection .--Pacific Medical Journal.

# Materia Medica.

#### A NEW METHOD OF ADMINISTERING QUINIA.

Dr. W. E. Forrest, Resident Physician at the Presbyterian Hospital, New York, states (*Medical Record*, Dec. 23, 1876) that he had a patient in the hospital with chronic malaria, who could not take quinia for any length of time without being "almost crazy from it," as she expressed herself, and at the suggestion of Dr. Burrall, the visiting physician, he determined to use, in this case, bromohydric acid as recommended by Dr. Milner Fothergill (*Am. Journal Med. Sciences*, October, 1876, p. 556).

It was given in 5ss doses, with quinia in capsules, and with the happiest result. The roaring in the ears and the dizziness disappeared, and the patient no longer objected to being cured by quinia.

Since then Dr. Forrest has tested the medicine in many cases, and it has never failed. Dr. H., of Washington, D.C., entered the hospital suffering from malarial poisoning and from large doses of quinia, and was much pleased at being relieved from the cinchonism by the acid. The tinnitus aurium following the exhibition of quinia seems to be due to an active congestion of at least some parts, if not the whole of the brain, as Dr. D. B. St. J. Roosa has observed that after taking ten or fifteen grains of quinia the membrana tympani and malleus are markedly injected. It had before been noticed that the administration of quinia aggravated the symptoms of otitis media and other aural affections.

It may be that hydrobromic acid, being analogous to bromide of potassium, may, like bromide of potassium, cause contraction of the bloodvessels, and thus prevent the bad effects of quinia. However this may be, it acts in the happiest manner.

There is a growing mistrust among the laity towards quinia. All sorts of stories are reported concerning its harmful effects, such as causing permanent deafness, impairing the eyesight, affecting the brain, etc., etc. Nor are these opinions wholly without reason, for the roaring in the ears, the dizziness, the trembling limbs, the sensation of being in a storm at sea generally, is anything but pleasant and reassuring to a person distrustful of "allopathy." It is, then, the duty of the profession to keep our faithful ally quinia from falling into disrepute when it can be done by so simple a means as the use of this acid.

In giving quinia in solution, Dr. Forrest uses the following formula :---

R.—Quinia sulph. 3j; hydrobromic acid, aquæ, āā žiss.—M. Sig.—Two teaspoonfuls contain five grains of quinia.

The formula for preparing the acid is as follows: Dissolve  $\exists x, \exists v j$ , grs. xxviij of potassæ bromidi in water Oiv, add  $\exists x i i j, \exists j$ , grs. xxvij of tartaric acid. The acid remains in solution, and potassa bitartrate is precipitated.— Monthly Abstract.

HUNYADI JANOS MINERAL WATER. - The Hunyadi Janos, or John Hunyadi, mineral water, was so called after a distinguished Hungarian leader, by its proprietor, It comes from the neighbourhood of Buda, or Ofen, where the spring was discovered in 1863. Since that time more extensive examinations have led to the discovery of other springs in the neighbourhood, and from these the water is obtained. It is richer in purgative salts than any water now imported. Of the characters and properties of this water we are enabled to speak from a somewhat extended experience. The water is bright and clear, with no deposit even after long keeping. Its taste is bitter, but not disagreeably so, and possesses nothing of that nauseous character which sometimes renders the use of purgatives disagreeable. Its chief characteristic is that it renders singularly sweet and pleasant the subsequent draught of ordinary water. Only a small quantity is required-not more than a wineglassful-and this should be taken the first thing in the morning, and shortly followed by a hot draught of tea or coffee, or itself may be warmed and taken hot, with or without the addition of ordinary drinking water. It is of great use in habitual constipation, in catarrhal condition of the bile ducts and bowels, and for congestion of the liver and other organs. One thing worthy of note we would remark-that its use does not give rise to subsequent constipation; on the contrary, the bowels remain slightly relaxed for a time.-The Medical Times and Gazette.-New Remedies.

NITRITE OF AMVL.—From experimen, I (W. Lemon Lane, M.B.) beg to submit the following deductions :---

1. Amyl-nitrite, when inhaled in small quantities, produces reddening of the face in man, and of the nose and mouth in kittens; this action is due, according to Brunton, to the dilatation and overfilling of the arterioles.

2. When inhaled by kittens in large quantities, it produces cyanosis of the nose and mouth along with insensibility. The cyanosis arises from overdistension of the venous system this being due to the engorged arterioles propelling the blood into the veins, while the insensibility is probably caused by overdistension of the venous system and the heart.

3. When inhaled in small quantities, it produces recovery from chloroformic insensibility by dilating the arterioles of the brain, and thus removing the cerebral anæmia due to the chloroform.

4. When inhaled in large quantities, instead of producing recovery from chloroformic insensibility, it not only retards it, but it may cause death by paralysis and overdistension of the heart, and engorgement of the venous system.

5. It causes a rise of temperature when inhaled in small quantities by the increased amount of blood in the arterioles causing an increased tissue change in the body.

6. In large doses (inhaled) it produces a fall of temperature.

7. It also helps to produce recovery from the chloroformic insensibility by raising the temperature which is always lowered by chloroform, and by removing the paralysis of the heart due to chloroform; this action is well seen by the nitrite of amyl making the heart's beat fewer and its sounds louder.

8. Death is caused chiefly by paralysis of the heart, which is shown by all its cavities being distended, and by engorgement of the venous system.—*British Medical Journal.* 

ANÆSTHETIC-MIXTURE .----

Powdered-camphor.....4 drachms. Sulphuric-ether .....1 ounce.

Dissolve. On applying the mixture for a minute to the part where a superficial operation is to be practised, local anæsthesia is temporarily produced.—*Medical Brief.* 

ANTIHYDROPIN. -Dr. Bogamolow some time ago discovered in cockroaches (Blatta orientalis, Orthoptera) a crystalline substance, which he named antihydropin, from the favourable effects obtained by him with it in the treatment of dropsy. Roaches are highly esteemed as a popular diuretic by the common people in Russia; this fact induced Dr. B. to employ them in various forms, such as decoction, tincture and powder, and in the form of the supposed alkaloid. Under its use the amount of urine increases, albumen and casts diminish in quantity; œdema of hands, feet, and face subsides, the weight of the body increases, and the pores of the skin begin to act more freely. The remedy is said not to interfere with digestion, nor to irritate the kidneys - Petersb. Med. Woch. in Ph. Z. f. Russl.-New Remedies.

FORMULE.—FISSURE OF THE ANUS.—GLYCER-INE OF THE OXIDE OF ZINC.—(ROLLET.)

**R**: glycerine, 16 grammes; starch, 8 grammes; oxide of zinc, 4 grammes. Mix the glycerine and starch, heat gently in a porcelain capsule, stirring until the mass forms a jelly, and add the oxide of zinc. This glycerine is recommended by M. Rollett for dressing the sores, in the shape of fissures or rhagades, which sometimes exist in the radiating folds of the anus in persons who have had chancres. These fissures cicatrize very slowly, on account of frequently repeated contact with feculent matter. It is for this reason that they are cauterized from time to time with nitrate of silver, and are subsequently dressed with the glycerine of the oxide of zinc.

ANTIGASTRALGIC PILLS.-(H. GREEN.)

R: extract of belladonna, 50 centigrammes (7 to 8 grains); sulphate of quinine, 4 grammes (about 60 grains). Mix and divide into 30 pills. Three a day in the treatment of gastralgia.

LOTION FOR VAGINAL DISCHARGES. (TRELAT.) Pure Carbolic Acid, 1 Grammes. Alcohol, or Cologne Water, 30 Grammes. Water, 70 Grammes.—Mix.

With the aid of a speculum tampons of cotton wool saturated in this solution are introduced into the vagina once or twice a day, and after they have been withdrawn, slightly astringent injections are employed. As soon as the diseased surfaces are cleansed, the phenicated alcohol is replaced by a less active solution, which contains, for example, 5 grammes of tannin to 30 grammes of glycerine. The tampons are plunged into this solution, and are introduced like the first.—Courrier Médical.

# Medical Jurisprudence.

# THE BORDER-LAND OF INSANITY. BY EUGENE GRISSOM, M.D.

#### (Continued from our last.)

The temptation to dwell upon the characteristics of those whom we may well term the illustrious insane may carry us too far, but in certain cases it is indispensable to the faithfulness of the picture, to portray the details thereof.

The case of the renowned Dean Swift I need not dwell upon. He was afflicted through life with vertigo-the result, he says, of cerebral congestion caused by eating a hundred golden pippins at one time. Irritable, strange, gloomy, at last he went months without speaking. His great cruelty, too, and extraordinary perfidy to the women who loved him, foreshadowed his St. Patrick's Hospital for lunatics was future. built and endowed by him for the people of Dublin, at a cost of eleven thousand pounds. This institution still exists, yearly working out its share of blessing, while its great founder moulders in the grave. For the last four or five years of his life he fell into a state of idiocy, locking his lips in the silence of the tomb.

The names of Johnson and Swift suggest that of Pope, whose fame will last as long as the Universal Prayer remains as it is, one of the most superb expressions of thought in our language. Is it possible that there was anything abnormal in the constitution of Alexander Pope, the friend of wits and statesmen, the keen satirist, and the model of English poetry for two generations ? Dr. Johnson says Pope had disease of the stomach and liver, from which came absolute hypochondriasis.

"Feeble at the best, he finally required perpetual female attendance. So great was his sensibility to cold that he wore a fur doublet under a shirt of coarse woven linen. He was placed in a bodice of stiff canvas when he arose, and could hardly hold himself erect until it was laced. Then came a fiannel waistcoat. His slender legs required three pairs of stockings, and he could not dress or undress without the help of the maid. Often he was a picture of miserycomplete—quarrelled with his friends; symptoms of pressure on the brain appeared, and he sighed for death to end his physical and mental agony. By the active medical aid of Sir Samuel Garth alone was his mind restored to a healthy tone after these attacks.

"I cannot forbear to note a discovery of very recent date, that bears all the marks of an insane act. Prompted by the inordinate vanity that often appears in cerebral disease, he ardently desired to publish his correspondence during his own life-time, and determined to use the petty artifice of concealing the truth by making it appear that the publication was forced upon him through the unprincipled conduct of others, who, he pretended, gave to the public garbled fragments of it. He robbed himself of his own letters, conveyed them piecemeal and by feigned hands to the publishers, and accused others of the theft-among them Dean Swift, who was then imbecile and shut up from the world. Having prepared the literary circle for what he called his genuine correspondence, as published in his own name, he now wrote and gave forth a fictitious one; letters, which his correspondents returned at his own request, were re-written, re-dated, and re-addressed to personages that seemed more likely to bring him credit."

Pope was a sickly boy, without brother or sister to correct his morbid tendencies; he grew up without healthy control, intensely selfconscious, petted, spoiled, vain, indelicate, even malignant, and perhaps the key-note of his life was that this puny skeleton was a parody of the men of the world and of pleasure about him.

But in the survey of the vast field before us, probably no fact will more astonish the casual reader than the constant and recurring proof of brain disease and abnormal organization in a long line of British poets for more than a century and a-half just past.

To begin with Gray, the sweet singer, whose music echoes in our hearts. "The curfew tolls the knell of parting day." How rude the shock to know that this child of a father of violent passions and brutal manners, was a prey to feebleness, indolence, trivial derangements of mind and body, with numberless little affectations, absurdly sensitive, disputations. He changed his home of twenty years (Peter House, at Cambridge) on account of a silly joke of the college boys upon his peculiarities. His life passed in visions of immortal labours that never saw the light.

Darker and sadder was the fate of Collins, his contemporary-a lyric poet of the first rank, whose ode on the Passions is to-day in every choice selection wherever English is read. When first published, his works were unread Receiving a legacy from a and unappreciated. rich uncle, he paid voluntarily all the losses of the publisher, and burned the unsold edition. Insanity came on ; he travelled, to shake it off, in foreign lands, but only to return to the lunatic asylum. Such as it was in that day, how terrible a home for such a spirit ! Pathetic is the account of the scene at Islington. When Dr. Johnson visited him in its dreary wards, he was holding a book in his hand, having given up earthly hopes and fame ; said he, with trembling speech : "I have but one book now, but it is the best." It was the New Testament. He died at thirty-six; and after he had gone, his odes steadily rose in esteem until, a hundred years after, they were pronounced the best in our literature. They have been said to partake of the enthusiasm of Tasso, the magic wildness of Shakespeare, the sublimity of Milton, and the pathos of Ossian. Too late, that judgment, for the fevered brain and the broken heart !

Next in time, but greater in importance, is William Cowper, the first of the modern school of poets-the bold genius who threw off the thraldoms of Pope and all the classical school; and in a single poem, and almost in a day, revolutionized English thought, and prepared the era of Byron, Scott and Words-The delicate child of a Hertfordshire worth. parson, he was articled as an attorney, but abandoned it. Twelve years he spent in the Temple. Appointed to a clerkship which required a public appearance in the House of Lords for one occasion only, he fancies the clerks against him, and was overcome in the struggle to fit himself for its duties. He hopes he will go mad or die, and in going mad, attempts to commit suicide. One time he will

drown himself, but some one in the way prevents; he has the poison at his lips, but is interrupted; he tries to stab himself, and finally does hang himself, but the garter breaks. For the time, the shock restores him. The office abandoned, the excuse of his insanity is religion. He is not one of the elect, and the angry eyes of the Almighty are forever watching him. For two years he is placed under restraint at St. Albans, under care of Dr. Cotton. For a time he loves his cousin, Theodora Cowper, but her father objects. "If you marry William Cowper, what will you do !" "Do, sir," the intrepid girl replied, "wash all day and go out to ride upon the great dog." She spent a lifetime faithful to Cowper, in loneliness and solitude, but he, alas ! forgot her in the selfishness-the intense self-consciousness of his life. In the words of a great writer,---

"Beautiful and amiable as his character was, the capacity of stremuous loving might have been its salvation. A man who is able to throw himself into the existence of another, to seek with vehemence the welfare of another, has the strongest safeguard ever given by God against all the evils that result from brooding over and becoming absorbed in the sufferings of self. In all the combinations of human circumstance, true love is well-nigh the only combatant strong enough to overthrow that last and subtlest enemy of man."

He goes to Huntingdon, and boards in the family of Mr. Unwin, after whose death, he still remains for many years the close friend and inmate of the widow's house, Mary Unwin, whose patient devotion and unselfish kindness will live as long as Cowper's fame. It is a life of monastic seclusion; hymns and prayers and sermons, with an occasional evening walk, occupy their days and nights, the Rev. John Newton being their neighbour and friend. Cowper renounces all his former friends; the gloom thickens, and the storm bursts suddenly again, while he was one day at the vicarage; although so near his home, with their gardens adjoining, he was there eighteen months before he could be moved to Mrs. Unwin's. He recovers like a child after long illness; builds chairs and bird-cages, and tames his haves. He tries a little drawing and returns, at last, to books.

It was then that Mrs. Unwin suggested that he write a poem.

Accepting this thought eagerly, he writes and published *The Progress of Error*, but as his old friends take no notice of it, he quivers with wrath and indignation. Lady Austen tells him the story of John Gilpin's Ride, at which he laughs all night, and writes his famous verses, so irresistibly comic. When he begs her for another subject, she suggests *The Sofa*, with a smile, and straightway he composes *The Task*, hardly dreaming that he would accomplish a revolution in a day. Says a writer,—

"England had fancied herself to have outlived the lofty melody of blank verse. She discovered now that the old strain was her favourite-that it could charm her ear, as well as rouse her soul. She found out that nature was as sweet as it had been in the days of Milton-the English fields as fair, the rural sights and sounds as fresh and tender. This worn and sick man, growing old, fanatic, half madman, half recluse, drew the veil from her eyes, and threw open to her a new, sweet, dewy, fragrant world. It is difficult for us to imagine the surprised delight with which the nation felt the sweetness of this voice, which was so familiar, so homelike, so unpretending. Poetry had been for a century a thing of the coffee-houses and the wits. Cowper sprang at a bound into a place more deeply set in the popular heart than Pope ever attained."

His work well-nigh done, the shadows crept up from the autumnal fields. In the last glimmerings of evening light, when Mary Unwin had already felt the warning touch of paralysis, he writes his most perfect productions—strange anomaly of genius. These were the Verses to My Mother's Picture and To Mary.

In 1794, Mary Unwin falls into dotage, and Cowper, in turn, becomes the nurse. What a solemn picture! One imbecile babbling and laughing in her weakness; the other sitting still and silent as death, speaking to no one, asking nothing, dwelling in a visionary world of diseased fancy! She dies, but in his gathering stupor he knows it not. They take him to a quiet parsonage in Norfolk, where he sits with wild, sad eyes, listening to the moan of the sea. Three years of darkness he survives, writing the *Castaway*, the last and saddest of his poems, in the last year of his life. In the closing year of the century he dies in despair, but, we may trust, to wake in hope.

The lover of his literature is irresistibly attracted by the group of the Lake Poets, as they are called, by their friends, whose history is forever associated with peaceful Westmoreland. Wordsworth and Southey, Coleridge, Lloyd and Lamb—dear Charles Lamb.

If one pronounces that the mark of brain disease was upon all of them, the reader is startled and declares that enthusiasm is carrying judgment beyond its bounds. But what are the facts? Three of these married three sisters. and all were engaged in a scheme to found a new Society on the Susquehanna, which should show mankind how to live. In later days, Lloyd became a raving maniac, and escaping from control in England, is arrested in France, and dies in a Parisian Asylum. Coleridge, with perhaps the grandest metaphysical intellect ever bestowed upon man, and the author of a fragment which no man that ever lived could finish, the wonderful Ancient Mariner, after showing signs of the evil to come, finally accelerated his ruin and went to utter wreck with opium. DeQuincy, who has written for us the horrors of opium eating, says :---

"It was a fine saying of Addison that Babylon in ruins is not so affecting a spectacle, or so solemn, as a human mind overthrown by lunacy. How much more awful then, and more magnificent a wreck when a mind so regal as that of Coleridge is overthrown, not so much by a visitation of Providence as by the treachery of his own will, and the conspiracy, as it were, of himself against himself."

Southey, the poet and historian, died of lingering cerebral disease. Wordsworth, the cool, calm, reflective poet, the last man to have such a thought associated with him, we are told by his sister in mysterious language, was overwhelmed by a nervous attack, at the sights of the French Revolution in Paris, whither he had gone, and his later days were passed in mental oblivion, for he died of softening of the brain.

Charles Lamb, the remaining one of the

friends-who does not love the picture of his shambling, ungainly form, but the kindly eye and the generous hand, and the courteous gentleman, and the most delightful essayist that ever handled pen ? His was a consecrated life, ever shadowed by the disease that wrought such havoc in his family. Born of a paralytic mother, he was himself confined, in 1796, in an asylum at Hoxton. Mary Lamb, his devoted sister, killed her own mother by stabbing, in a sudden access of insanity, and from that moment Charles devoted himself to her life-long care. Renouncing his love and all thought of marriage, he determined to live for her. Whenever the seasons of insanity approached they took their solitary way to the Asylum-she packing her clothes, with the garments of restraint and all. Joyfully receiving the signal of her improvement, he was wont to go back to lead her home again-beautiful lesson of devotion and brotherly love !

George Gordon Byron was the son of a wild roue, known as Mad Jack Byron, who lived a life of libertinism. His great-uncle, William Lord Byron, killed his relative, Mr. Chaworth, with the sword in a fit of passion. Byron's mother was a high-tempered Highland woman, driven half mad by a spendthrift husband. Once an heiress, but ruined in purse and temper and nerves, by turns she fondled and scolded her solitary, weak, club-footed, and epileptic boy. At eleven he becomes Lord Byron, and from the deepest poverty they pass to the elegance of Newstead Abbey. For fear of the termagant mother, his guardian stands aloof, and the unhappy boy enters life without discipline, with no one to respect, and no one that he loves. A trifling book of juvenile poems is harshly criticized, and he springs to the arena, the Minerva of his genius full born, with a quiver of poisoned arrows. The whole earth shook with the onset, and fame was made. He has no friends; he takes his seat in the House of Lords a stranger. With disappointment in his soul he flies to the East. When he returns. Childe Harold has made him the lion of London, and he finds himself, says Moore, "among its illustrious crowds, the most distinguished object."

In the meantime, he lost his mother. She,

poor thing, although she could not agree with him, really loved him, and believed in his genius. And he—the moment the funeral procession leaves the door, when all but they two of that household had gone to the grave for the last solemn rites over the ashes of his mother—goes to work with his boxing-gloves and has a violent sparring-match with his servant. It was a wild, physical outburst of dumb misery and defiance—that defiance of pain and of better emotions that distinguished his whole life.

We need not recount the miserable story of his marriage and separation, nor the recital of his dark vices; nor have we time to comment upon the kindly acts his better soul would command, as related by Countess Guiccioli. His long line of brilliant poems the world knows by heart. Unhappily the memoirs were destroyed, which would have revealed to the world more fully the nature of the vulture that preyed upon his life. From time to time recurrent attacks of his epilepsy appearedthe last happening in the Spring of 1822, when in Greece, upon his expedition to aid the patriots in recovering their freedom. Riding out in bad weather, before he recovered from the prolonged prostration of his last dreadful seizure, he succumbed and died after a brief illness. The epitaph has been pronounced upon him : "Never was life less happy nor more forlorn, nor an end more pitiful. Thus all was ended upon earth of a man who had received every gift which Heaven could bestow, except the control of the glorious faculties that God had placed in his hands."

What a contrast is he to Walter Scott, who, when he is involved deeply in debt by his kindness to others, rallies his brain to labour, and in less than three years, alone by the work of his pen, pays a hundred and forty thousand dollars of the sum. He cries out, "Oh, invention, rouse thyself—may man be kind, may God be propitious." "The worst is," he sadly adds, "I never quite know when I am right or wrong." He bears up under two strokes of paralysis. Still, like galley-slave, he labours confusion of thoughts by day, unalterable weariness and pain by night. When friends tell him his last book (*Count Robert*) is a failure, he only says, pitifully : "God knows I am at sea and in the dark, and the vessel leaking, too, I think. I have suffered terribly, and I often wish I could lie down and sleep without waking. But I will fight it out if I can. Did I know how to begin, I would begin again this very day, though I knew I should sink at the end." He struggled until the light went out. His wife died by his side when he most needed help. With one faithful child by him, he toiled on. He makes a journey of despair to Italy and returns to meet his doom. The greatest works of his genius, it well has been pronounced, pale before the work of his life. Scotland holds him the type of her race, the flower of her genius, the noblest, truest, and most gifted of all the Scots who glory in the name.

#### (To be continued.)

SPIRITUALISM AND INSANITY.—Dr. W. B. Carpenter, in his lectures on Spiritualism, delivered at the London Institution, insisted that, in the inquiry into the socalled phenomena and facts of spiritualism, nobody was to be trusted; that almost everything in it must be the result either of deception or self-deception, and that there was an immense difference between the fact itself and the observer's idea of the fact. In conclusion, he said that these investigations were calculated to produce insanity, because insanity was nothing more than the possession of a fixed idea which tinctured everything with which we have to deal.

SEWER GASES .- Professor Frankland has made another contribution to sanitary science science by stating his conclusion, after repeated experiment, that sewage, in flowing through a sewer, however unpleasant the odour may be in the locality, cannot be sufficiently agitated to impregnate the circumambient air with suspended particles. But if sewage becomes stagnant, fermentation ensues, and the bursting of myriads of minute bubbles throws into the air particles of zymotic matter. If, therefore, sewage is constantly passing at a fair rate through the sewers, the air therefrom will be comparatively harmless; but if it be allowed to remain long enough to putrefy, danger to health may arise.-London Lancet.

#### Translations.

On the Treatment of Fractures of the Elbow in Children.

#### From L'Union Médicale Du Canada. \*

The work of Dr. Berthomier, inspired by M. Laroyenne, Surgeon-in-Chief to La Charité de Lyon, raises a point of surgical practice of the utmost importance. In the case of fracture of the elbow in a child, ought one to fix the limb in extension or in flexion? According to these writers, what is most to be feared in the child is not traumatic arthritis, which is almost nil and rarely produces anchylosis, but the vicious position of the fragments, which in almost all cases is the cause of the difficulty in movement. They have been able to verify this fact in a large number of children. Now, setting out with this view, that the only position capable of securing an exact coaptation of the fragments is extension, they have treated, for several years, all fractures of the elbow in children by this method. In all the cases (of which the notes are related in this thesis) they have been able to observe that the consolidation once obtained in this good position, the juintstiffness does not resist an appropriate treatment of fifteen or twenty days' duration, sometimes less, so that the articulation enjoys the whole extent of its movements, or very nearly so. They take care to add that in some cases the opposite indication presents itself when there is reason to fear complications arising from the constitutional condition of the patient, such as white swelling in scrofulous subjects, &c. Finally, according to these gentlemen, the epiphysary luxation backward of the epicondyle (a rare accident) requires the immobilization in the flexed position. (Thèse de Paris, 1875.)-Bulletin Gen. de Thèrap.

#### SUBCUTANEOUS INJECTIONS OF THE BROMIDE OF POTASSIUM.

#### From the Revista Medico Chirurgica, Buenos Ayres.

Dr. Luis Frigerio states that he has obtained advantageous results in the treatment of epilepsy from the employment of bromide of potassium by hypodermic injection. At first he uses a solution which contains two centigrammes of the bromide in one gramme of the vehicle (one in fifty), afterwards increasing the dose of the bromide as far as sixty centigrammes in each injection. But he has observed that in exceeding twenty centigrammes local accidents of some gravity, such as abscesses and sloughs, may occur.

The place preferentially selected by Dr. Frigerio for the injections is the forearm; care is moreover taken to make free frictions over the injected part, which, according to his observations, facilitate the absorption of the liquid and obviate the supervention of abscesses. He also prescribes rest of the limb, and, if it be possible, requires the patient to kcep his bed. These injections are very painful, but by means of them one rapidly obtains dimunition of the attacks, and seldom sees those gastrointestinal phenomena, coryza, and bromide acne, which occur when bromide of potassium is given in the ordinary way.—From O Progresso Medico.)

#### From Le Progrès Médical.

At the Anatomical Society the following case was related : Pl.----, aged 81, attacked with cerebral apoplexy, was brought into M. Bouchard's wards at the Bicêtre. Two days after-At the autopsy, besides the wards she died. existence of the cerebral hæmorrhagic effusion, the following peculiarities were found: The left kidney was completely wanting. In the region which it ought to occupy a sort of adipose atmosphere (sic) was found containing no kidney. The ureter was also absent.. No artery arose from the aorta which might represent the renal artery. The suprarenal capsule was in its place. . . . The right kidney was in its place. . . On opening the bladder, it was observed that the right ureter entered at the corresponding angle of the trigone. But no opening was observed on the left side. Lastly, on dissecting the specimen it was found that the seminal vesicle and the deferent canal of the left side were also absolutely wanting. . . . A case precisely similar to the above was presented in 1870 to the Société Anatomique by Dr. Reverdin.

#### From Le Progres Medical.

At the session of the Biological Society, on the 17th of February, M. Onimus pointed out the effect of electric currents on the cicatrization and suppuration of wounds. In ordinary wounds, weak currents (of two or three elements) are employed and long continued. In bad (or unhealthy) wounds strong currents (of forty to sixty currents) are required. Good results are obtained, but it must be remarked that the effects differ according to the direction of the curent. When the negative pole is placed near the wound, suppuration is increased, but there is also a greater activity in the formation of fresh granulations; the contrary happens if it be the positive pole which is near the wound. There are probably two causes concerned, at first the electrolytic action, then the influence upon the circulation and nutrition.

CURE OF ENURESIS IN A LITTLE GIRL BY ELECTRIZATION OF THE ANAL SPHINCTER.

#### From the Gazetta Medica Italiana.

This was employed by Dr. Ultzman with surprising success, and by means of the induced current. One pole, a fine brass rod, was introluced into the rectum, or into the vagina; the other was placed upon the symphysis, or on the upper part of the thigh. The duration of treatment, one sitting a day, was from four to six weeks. Herschmann has confirmed the good success of this mode of treatment. He has likewise seen good results from belladonna in increasing doses.—From Lo Sperimentale.

#### THE HERRING IN HEPATIC COLIC.

#### From the Gazzetta Medica Italiana.

Dr. Rapin relates several cases of hepatic colic, part cured, and part relieved by the daily use of herring. He has presented to the Medical Society of Switzerland, a number of calculi passed by his patients, together with a rich collection of biliary calculi. The author asks if this curative action of herring be not due to the propylamine it contains.—Bull. Méd. de la Suisse romande.

#### From Le Progrès Médical.

At a late meeting of the "Société Médicale Des Hospitaux" M. Bucquoy presented a patient who was the subject of *tuberculosis of the tongue*. A large ulceration treated by a solution of carbolic acid in glycerine (one in one hundred) had healed up before. A short time afterwards a fissure formed at the margin of the cicatrix, and was also cured. At present another fissure has formed.

#### From Le Progrès Médical.

At the session of the Academy of Medicine, on 28th Nov., 1876, M. Pasteur related the observation of a young man who had been cured of a severe quartan ague, which had lasted for a year, by two hypodermic injections of 100 drops of a  $2\frac{1}{2}$  per cent. solution of carbolic acid. This young man had cured by means of the same treatment two inhabitants of the Sologne affected with a most rebellious form of intermittent fever.

#### CURE OF AMENORRHEA.

Dr. Graham has obtained many favourable results from the use of massage in amenorrhœa. He practises flagellation of the whole body, blows upon the back, passive movements of the feet, legs, and thighs, specially adduction and abduction. The case succeeds better if it have a chlorotic foundation rather than a chronic affection of the womb.—Lo Salute.

#### INOCULATION OF CANCER IN DOGS.

Dr. Nowinsky, of St. Petersburg, announces two successful cases in which a small piece of medullary cancer, taken from the nose of one dog and implanted on a healthy wound (which was afterwards cured) on the back of another dog, produced nodules at the seat of inoculation, whose structure resembled that of a primary cancer. The examination was made in one case five months, in the other six weeks, after the inoculation. A number of inoculations on inflamed skin all failed; out of fifteen on healthy skin, two succeeded. These results must be accepted with all reserve .- Medical Times and Gazette.



A monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretarics of County or Territorial medical associations will oblige by sending their addresses to the corresponding editor.

#### TORONTO, MAY, 1877.

## ANNUAL EXAMINATIONS OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.

The above examinations were, with exception of the orals, held simultaneously at Toronto and Kingston. The orals were held in Kingston, on Tuesday, 17th April; and in Toronto, on Thursday, 19th. The total number of candidates passed was 188, of whom 45 were first year's men, 63 primaries, and 80 finals. Over three-fourths of the whole were examined at Toronto.

The Examiners were: Dr. H. H. Wright, Dr. Robertson, Dr. Workman, Dr. Morrison, Dr. Morden, Dr. Fowler, Dr. McLaughlin, Dr. Grant, and Dr. Logan.

In order to meet the wishes of the eastern examiners, and suit the convenience of the candidates, the examiners were divided by the Council into two sections, the first five in the above list being assigned to Toronto, and the remaining four to Kingston, for the written examinations. The members of each section, besides conducting their own respective examinations, acted as representatives of those elsewhere engaged, and besides discharging this double duty, every examiner acted as associate with one of his *confreres*.

The number of candidates for homœpathic examination, we are informed, came so near nullity, as hardly to warrant the additional examining fee. Perhaps, however, it is just as well to tolerate the tottering vanity a little longer, and allow it to die out by spontaneous inanition. The oral examinations, which were unusually limited in number, were conducted in the presence of the whole Board. At the close of the proceedings, a resolution was unanimously passed, expressing the high satisfaction of the Board with the superior character of the general answering of the candidates, and their uniform gentlemanly demeanour throughout their protracted and onerous work.

We learn that it is the general opinion of the examiners that the system of obliging the candidates to write down the questions, at the commencement of each examination, from the dictation of the examiners, instead of each being supplied with printed copies of the questions, is a very serious evil. In the first place, it causes the loss of much time which should with fairness be allowed to the candidates for their proper work. In the second place, it leads to numerous misunderstandings and injurious mistakes, and imposes on the examiners much unpleasant labour in rectifying misapprehensions; especially manifest was the latter evil in the course of the Toronto examinations, the University Convocation Hall being about the worst chamber for acoustic purposes that fancy architecture ever inflicted on suffering humanity.

SEABURY AND JOHNSON.—On our last page will be found the advertisement of this large and successful firm. From the award of the Jurors at the Centennial Exhibition, they must be unequalled for the *originality*, *reliability*, and *general excellence* of their manufactures. The members of the firm are practical pharmacists and chemists, and manufacture in the most approved and practical form the most extensive line of plasters ever produced.

The Anatomist is a picture by Max which was exhibited in the Art Gallery of the International Exhibition. By referring to our advertising columns it will be seen that copies of this picture can be obtained from R. Berendsohn, of New York.

Dr. Peacock, of St. Thomas's Hospital, who has been suffering from a slight attack of hemiplegia, is much better, and it is hoped that he will soon be restored to health.

# Medical Council.

#### EXAMINATION PAPERS.

#### SURGERY.

# Examiner-DR. ROBERTSON.

- 1. What is an aneurism? Distinguish between the following varieties: True, false, dissecting varicose, aneurismal varix. Give pathology of aneurisms.
- 2. How is an aneurism of the axillary artery distinguished from other tumours and swellings in the axilla? What different lines of treatment are open to the surgeon in a case of axillary aneurism?
- 3. What is intracapsular fracture of the neck of the femur? Give the history, causes, diagnosis, prognosis, and treatment.
- 4. How does dislocation of the lower jaw occur? Give signs, and state how reduced.
- 5. Give the pathology of tetanus—causes, symptoms, diagnosis, prognosis, and treatment.
- 6. Give the pathology, causes, symptoms, and treatment of organic stricture of the urethra.

#### OPERATIVE SURGERY.

#### Examiner-DR. ROBERTSON.

- 1. In what cases would resection of the elbow ? joint be advisable ? Describe the operation. What structures must be avoided, and how ? Give the after treatment.
- 2. In what cases is it advisable to remove the superior maxilla? How is it done? Give the after treatment.
- 3. Describe the lateral operation in lithotomy. State what accidents may unavoidably occur. What precautions must the surgeon take?
- 4. Describe ligation of the external iliac artery.

#### MIDWIFERY.

#### Examiner-DR. WORKMAN.

- 1. Give, in the order of their sequence, the signs and symptoms of pregnancy, and note those most reliable.
- 2. State the diagnosis of true and false labour pains, and the course you would adopt in order to ascertain the existence of each.
- 3. At what period of gestation is abortion most likely to occur. State the indication of its impending and of its actual progression. Mention the chief danger, and give the treatment to prevent it.
- 4. Consequences of hour glass contraction of the uterus. How would you discover its existence, and what must you do to save the life of the mother?

- 5. Why is vaginal plugging worse than useless in post partum hæmorrhage, but if thoroughly done most valuable in the so-called unavoidable hæmorrhage, which before birth is associated with placenta prævia?
- 6. In cases of podalic version, or when the head comes last, when does the life of the child begin to be in danger, and what might be the consequences of a forcible traction ?
- 7. How would you avoid the error of mistaking ovarian tumour or dropsy for pregnancy ?
- 8. Describe retroversion of the uterus. Mention the most distressing symptoms, and give the treatment.

#### OPERATIVE MIDWIFERY.

- 1. Describe the process of natural labour, giving the position of the child's head with the relation of its several parts to the pelvis at its entrance at the brim, flexions and natural descent until its complete emergence. Describe the fontanelles and sutures, and tell which you would expect first to discover.
- 2. At what time is the placenta usually detached from the uterus, and where, by vaginal examination, is it generally found? Why do you avoid strong traction on the cord when delivering the placenta? What is the best method of promoting the expulsion of the placenta? Under what circumstances would you deem a second ligature on the cord necessary, and why, in the absence of these circumstances, may a second ligature be dispensed with?
- 3. What is the cause of secondary or post partum hæmorrhage? Name the only reliable process of its suppression, and what are the means adopted to secure your object.
- 4. What do you understand by unavoidable hæmorrhage, and state its causes and the source of the escaping blood, and state respective dangers to mother and child ?
- 5. State the course you would pursue in treating such cases, and give the treatment and reasons therefor.
- 6. Why, before clearly having ascertained the presentation, should you be careful to keep the bag of membranes unbroken?

#### MEDICINE.

#### Examiner-DR. FOWLER.

- 1. Under what circumstances is irritation most rapidly propagated, and how does irritation influence the function of secretion ?
- 2. A man, forty years of age, is seized with a pain in the head, vomiting, and faintness, ending in syncope in half an hour. He recovers; walks a short distance; becomes drowsy, and dies the next day. Name the disease, ex-

plain the symptoms, give the treatment, and state the morbid anatomy.

- 3. In an ordinary case of typhoid fever, give the morning and evening temperature during the first and fourth week, the case ending in recovery the twenty-sixth day.
- 4. Mention three diseases in which bronchial breathing is heard, and the morbid anatomy giving rise to each.
- 5. What morbid conditions give rise to colic? How would you recognise and treat the disease?

#### SURGICAL ANATOMY.

#### Examiner-DR. McLAUGHLIN.

- 1. Name and explain the causes producing deformity in (a) talipes varus, (b) talipes equino-varus, (c) fracture of the clavicle at its centre.
- 2. A leg is amputated about its centre. What arteries require ligation or torsion, and where are they to be found ?
- 3. Name the parts met with in cutting down to ligature the brachial artery about its centre.

#### SANITARY SCIENCE.

#### Examiner-DR. H. H. WRIGHT.

- 1. Definition, scope, and intention of sanitary science.
- 2. Give the composition of the atmosphere as found in healthy localities at the surface of the earth. Enumerate the ordinary sources of the impurities, the percentage which may vitiate the air, and the particular forms of disease which might arise from each of these impurities.
- 3. What considerations ought to determine the site for a human dwelling? and are cellars desirable in houses ? and if not, why not?
- 4. What do you mean by natural and artificial ventilation? Mention the means of accomplishing both, and what are the advantages or disadvantages of each.
- 5. Enumerate or mention the disinfectants in general use. Which is the most effectual of these, and give the manner or mode of using them ?

#### MEDICAL JURISPRUDENCE.

#### Examiner-DR. LOGAN.

- 1. Give a medico-legal definition of a wound and difference between ante and post mortem wounds.
- 2. State the characteristic appearances of accidental, suicidal, and homicidal drowning.
- 3. In cases of infanticide, how would you proceed to determine that crime had been committed ?

- 4. Describe the varieties of insanity, and state what you would consider sufficient evidence to warrant commitment.
- 5. Describe the post mortem appearances in death by lightning.

#### PRACTICAL CHEMISTRY.

#### Examiner-DR. MORRISON.

- 1. Name the impurities found in potassium hydrate, and sodium carbonate. Give the tests for them.
- 2. Give the tests to distinguish mercurous from mercuric salts. Give the reactions in each case.
- 3. How is antimony detected in the presence of arsenic, and how may arsenites be distinguished from arsenates?
- 4. Give four tests for lead, three for copper, and two for cyanogen, with reactions in each case.
- 5. Give the tests for urea and for sugar in the urine. Draw out a plan for the chemical examination of urinary calculi.

#### MATERIA MEDICA.

#### Examiner-DR. H. H. WRIGHT.

- 1. Give the officinal names of the preparations in the envelope, their therapeutic properties, strength, and doses.
- 2. Give the definition of an anæsthetic. Enumerate those in general use. Give directions as to their administration and cautions in their use.
- 3. What is opium. Name its officinal varieties. Give its therapeutic properties, officinal preparations, with their strength and doses. How are they administered? When is opium or its preparations contra-indicated ? Name its accive principles and their doses.
- 4. Give the rule for apportioning doses to ages. Give, as an example, a quickly acting, mild emetic for a child of six years, and an anodyne for a youth of fifteen years.
- 5. Give the definition of homatinic and the supposed mode of their action.

#### ANATOMY.

#### Examiner-DR. MCLAUGHLIN.

- 1. Give the origin, insertion, relations, and actions of the brachialis anticus, gluteus maximus, and tibialis posticus muscles.
- 2. Give the origin and course of the musculospiral and external popliteal nerves.
- 3. Describe the course and relations of the axillary artery, and name the branches in the order in which they are given off.
- 4. Give the boundaries of the popliteal space and the relative position of its contents.

- 5. Give a description of the lungs omitting the minute structure.
- 6. Describe the male urethra.

#### PHYSIOLOGY.

#### Examiner-DR. GRANT.

- 1. State the chief differences between organic and inorganic bodies.
- 2. What are the effects produced on the air in its passage through the lungs?
- 3. Give the inorganic constituents of the blood,
- 4. Give the chief peculiarity of the pulmonary circulation.
- 5. Describe the chemical and microscopical characters of chyle.
- 6. Describe the microscopical features of the sediment which occurs in oxaluria.
- 7. Give the minute anatomy of the kidney.
- 8. Enumerate the principal secreting membranes.
- 9. State the different uses of the bile in the animal economy.
- 10. Define what is meant by the terms secretion and excretion.

#### BOTANY.

#### Examiner-DR. FOWLER.

- 1. State how the reproductive function goes on. 1st. In the simplest form of vegetable life. 2nd. In ferns. 3rd. In mosses.
- 2. How is woody fibre formed in plants?
- 3. What are the functions of the leaves of plants?
- 4. Mention from without inwards the parts of which a complete flower consists.
- 5. Into what two great divisions are flowering plants separated? Give an example of each.
- 6. Give a short description of the following medicinal plants, and state the natural order to which each belongs : mustard, henbane, poppy, hemlock, peppermint, thornapple.

#### CHEMISTRY.

#### Examiner-DR. MORRISON.

- 1. Divide the non-metallic elements into groups according to their characters and relations. Describe the mode of preparation and properties of iodine, phosphorus, sulphuretted hydrogen, ammonia, sulphuric acid. Give formulæ showing the reaction.
- 2. Explain by formulæ the reactions which occur in the preparation of sodium carbonate, potassium chlorate, mercuric chloride, potassium iodide.
- 3. Give the preparation, composition, and properties of arsenic acid, perchloric acid, ferric hydrate, light carburetted hydrogen.

- 4. Enumerate the characters of methyllic and common alcohols. Show how the latter can be prepared from its inorganic materials, and state the relation the former bears to formic acid. What is ethyl ? What evidence have we of its existence ?
- 5. Give the mode of preparation, composition, and properties of chloroform, iodiform, common ether. Is the first an ethyllic compound? Give the reasons.
- 6. What is urea? Describe an artificial process for preparing it.

#### TOXICOLOGY.

#### Examiner-DR. LOGAN.

- 1. Give your definition of a poison, and state the various channels through which it may be introduced into the blood.
- 2. Give the symptoms, treatment, ordinary tests, and fatal dose in poisoning by opium, extract, or tincture.
- 3. How would you distinguish poisoning by opium from apoplexy, concussion, and intoxication ?
- 4. How would you distinguish gastro-enteritis from poisoning by arsenic, before and after death.
- 5. In a case of death from supposed poisoning how would you proceed to determine that poison had been taken or administered ?

BOOKS AND PAMPHLETS RECEIVED.

On the Anatomical Causes and the Nature of Sympathetic Ophthalmia. By Dr. Adolph Alt, of New York.

On Sympathetic Nuro Retinitis. By Dr. Adolph Alt, of New York.

These are reprints from the Report of the Fifth International Ophthalmological Congress, September, 1876.

First Annual Report of the State Board of Health of the State of Wisconsin for the year ending Dec. 31st, 1876.

This is a carefully prepared report of the work done by the Board since its organization, and in addition contains valuable papers on Small-pox, Sewerage and Drainage, Construction and Drainage of Public Buildings, Mental Hygiene, Food and Domestic Beverages, and Registration and Vital Statistics. Phthisis: Its Causes, Diagnosis and Treat ment. By WM. PORTER, M.D.

The Mortality of Operations in the Upper Lake States compared with that of other Regions. By EDMUND ANDREWS, A.M., M.D., assisted by THOMAS B. LACEY, M.D., reprinted from the Chicago Medical Journal and Examiner.

This is a pamphlet of 123 pages, containing a valuable statistical resumé of the mortality of surgical operations throughout the world. The author has also added the opinions of different surgeons in various countries as to the propriety and results of certain operations, and after comparing and analyzing them gives the conclusions which he draws from them. This pamphlet must be the outcome of a vast amount of labour, and reflects great credit on its author and his assistant. No such complete work of a similar nature exists in our language.

A Directory for the Dissection of the Human Body. By JOHN CLELLAND, M.D., F.R.S., Prof. of Anatomy and Physiology in Queen's College, Galway. A. Pidington, 248 and 250 Yonge Street, Toronto; H. C. Lea & Co., Philadelphia. 1878.

Considering the compass of this work, it will prove a valuable adjunct to the larger text-books, and materially aid the student in the acquisition of a thorough knowledge of the important subject treated in it.

The author has a short introductory chapter upon the various instruments and appliances requisite for a successful dissection, and makes some good practical observations upon the manner of using those instruments, as well as the extent of their value.

The work is then systematically arranged by a division of the subject for dissection into five parts, named according to their several localities. He then proceeds to the description of all the structures to be found in each partunder dissection, beginning at the most superficial.

Altogether, this little book may be fairly regarded as complete for its extent, and will doubtless prove a valuable accession to the aids in the dissecting-room. Atlas of Skin' Diseases. By LOUIS A. DUHRING, M.D. Philadelphia : J. B. Lippincott & Co., 1877.

Part II. of this valuable Atlas has been published, and its excellence amply repays for the delay in its appearance. This number contains four nearly life-size, chromo-lithographic plates, painted from life, illustrating *Acne Rosacea, Icthyosis* (simplex), *Tinea Versicolor*, *Sycosis Non-parasitica.* These illustrations are particularly good, especially that of Tinea Versicolor. Explanatory text of the general features of the discase, its diagnosis and treat ment accompanies each plate. The work is to be issued quarterly and completed in eight or ten parts, each consisting of four plates. A success equal to merit will insure a large sale.

#### IODINE AND ITS PREPARATIONS IN THE THERA-PEUTICS OF INFANCY.

In an exhaustive clinical lecture on this subject, delivered at the Paris Hospital for Children (Moniteur Thérapeutique, August 7), M. Jules Simon lays particular stress on the following points :- Tincture of iodine should not be applied pure in tubercular children; it should be diluted either with glycerine or with some unguent. Neither iodide of potassium nor iodide of iron should be given to children under two years of age, except, perhaps, in cases of acute hereditary syphilis, where small doses may be administered. It may be given to the nurse, if the child have not been weaned. Older children bear the drug well. Those who are especially benefitted by it are patients robust in appearance, but with soft inelastic flesh and with manifestations of incipient scrofula. Iodoform is of great service in cases of ozæna and scrofulous wounds. Albuminuria has been observed by M. Simon, in a large number of cases, to follow paintings of the surface with tincture of iodine, especially when applied to eruptions. Iodide of potassium produced the same result, but in a smaller degree. On this head, further investigations are promised. - London Med. Record.

# Communications.

To the Editor of the CANADIAN JOURNAL OF MEDICAL SCIENCE.

#### CASE OF ALDEN.

I have received from Dr. Lavell, Surgeon of the Provincial Penitentiary, Kingston, the following details of the case of F. Alden, who was convicted of the murder of Jefferson, at the November Assizes for the County of Wentworth, and whose sentence was commuted to imprisonment for life in the Penitentiary, to which he was removed shortly after his trial :--

"KINGSTON, March 23rd, 1877.

"DEAR DR. WORKMAN,-In reply to yours of 15th instant, I have to state that Alden died on the 6th of March. When he entered the prison he was miserably weak. Upon examination, I pronounced him unfit for work, and he was allowed to remain most of the time in our invalid room until admitted to hospital. From the time he came to prison he was troubled with a cough, faulty respiration, and slight hæmorrhage from the lungs. Cardiac disease was quite marked. Digestion of the feeblest kind. He gradually, or rather rapidly, ran down, sinking into a low typhoid condition. For some days preceding death he was in a comatose state, there being, to my mind, cerebral effusion present. Nearly a week before his death he was quite unconscious, but partook of what was given, at times greedily, especially stimulants. Before becoming insensible, he had not the slightest feeling of compunction for his crime. He seemed to have no moral sense whatever. He was as bad mentally as physically, and while I am not prepared to say he was insane, in the popular sense of the term, I have no hesitation in stating that in my opinion he was mentally defective. A sadder specimen of mental and physical ruin I have rarely seen. He seemed to be thus defective from birth. His mental weakness, I presume, would have much to do in facilitating his downward moral career. From what I saw of him, I charitably hope he was not responsible. His body being claimed by his friends, I made no post mortem. The anatomical peculiarities

At the final examination at Lennoxville College, for the degree of C.M.M.D., the following gentlemen were successful :---Casey A. Wood, Ottawa, and E. A. Gravely, Cornwall.

mentioned by you, I noticed,—the cranium and chest being quite remarkable.

"Yours truly,

#### "M. LAVELL."

It will be remembered by those who read the testimony given on Alden's trial, that both Dr. Bucke and myself spoke of the unsymmetrical form of his chest and head, and that the erudite Globe exhibited its wonted slang contempt towards this portion of our evidence. Dr. Lavell's statement as to Alden's prison condition, and the symptoms which preceded his death, abundantly corroborate the importance attached by us to his abnormal physical development. I stated to Alden's friends at the time of his trial that, should his sentence be commuted to imprisonment for life, his period of existence would not be very prolonged. Ι felt convinced that he was labouring under a form of heart disease which must end fatally within a very limited time. The clear indications of cerebral effusion, mentioned by Dr. Lavell, show that the brain was not in a healthy condition for perhaps a long time past.

In the paper on "Insanity and Crime," which I had the honour of reading before the Medical Association of Canada at its annual meeting in this city, in August last, I introduced the following passage, which, on the present occasion, appears to me not inappropriate.

"Time is the grand revealer of all secrets, the infallible expounder of all mysteries, the potent settler of all doubts. If, instead of rushing on the trials of some atrocious offenders at lightning speed, and consigning to the gallows and the quick-limed grave, the solution of the momentous question of their moral responsibility, we should, in cases in which medical opinion suggests the probability of mental unsoundness, place the accused under close observance for a sufficient period, justice would neither be cheated nor outraged; law would be divested of much of its indocility and barbarity, and public sentiment would become more rational and authoritative."

Time and natural death have revealed the grand secret in both Ward and Alden's cases. They would, as I believed, have revealed it in

McConnell's case. Time, as I have reliable information in the matter, has, under the keen and vigilant observance of Dr. Clark, settled the doubt as to the real mental condition of Hopkins, who was placed on his trial last April, at Simcoe, for the murder of his wife, and has been in the Toronto Asylum for six months.

The *Globe*, and kindred lovers of Jack Ketch moral suasion, clamoured lustily for the hanging of all the four, and abused the Minister of Justice because he advised the execution of only one. Will time reveal the grand secret of the rabid psychology of the denouncers of the Minister of Justice, because of his deference to educated professional opinion, in preference to unreasoning obedience to their blooddemanding instructions?

JOSEPH WORKMAN, M.D. Toronto, March 24, 1877.

#### APPOINTMENTS.

-

Dr. A. A. McKinnon to be an Associate Coroner in and for the County of Peel.

Dr. J. W. Montgomery, of Queensville, Co. of York, has been appointed Assistant Medical Superintendent to the Rockwood Asylum, which has lately been purchased from the Dominion by the Ontario Government.

At the Annual Meeting of the Kentucky State Medical Society, held in Louisville in the early part of last month, Dr. Baker, of Shelbyville, offered the following resolutions, which were adopted unanimously:

*Resolved*,—That this Society is in full accord with the American Medical College Convention, seeking to elevate the standard of medical education in this country.

Resolved,—That summer schools, which enable students to graduate after from eight to nine months' study, are exerting an evil influence upon the profession.

*Resolved*,—That a winter and summer course by the same school, and graduation at the end of each, tends to deteriorate the standing of the medical profession.

### Miscellaneous.

We regret to have to record the death of Mr. R. G. Whitfield, of St. Thomas' Hospital. He was well and favourably known to many of our Canadian graduates who have walked the London Hospitals.

The Surgical Society of Paris, at a meeting held on 10th ultimo, elected Professor Longmore, of Netley, an associated member, and Mr. Bryant, of London, and Professor Lister, of Edinburgh, corresponding members.

Dr. Dolbeau, the eminent Professor of Surgical Pathology of the Faculty of Paris, expired almost suddenly on Saturday last. His death was brought on by an attack of cerebral congestion, the result of plethora and polysarcia.

The following Canadian gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the Royal College of Surgeons at a meeting of the Court of Examiners, on January 22nd :--H. S. Stone, M.B.Edin., New Brunswick ; and W. T. Ward, M.D.McGill, Stanhope, Canada.

An eminent physician, writing to the London *Times*, says he is so impressed with the benefit of pictures, bronzes, art decorations, sculpture, &c.. in a medical point of view, that he is ready to give £100 toward a fund to cover the naked walls of the London hospitals, as he is confident that the <sup>\*</sup>contemplation of works of art is beneficial to the recovery of all classes of patients.

MORTALITY OF CHILDREN DURING THEIR FIRST YEAR.—According to the researches of M. Kuborn of Belgium, the rate of mortality for children during the first year of life, in the principal countries of Europe, is as follows :— Out of 1,000 children, there die in Sweden 153, in Denmark 156, in Scotland 156, in England 170, in Belgium 186, in Holland 211, in France 216, in Prussia 220, in Spain 226, in Switzerland 252, in Italy 254, in Austria 303, in Russia 311, and in Bavaria 372.—Brit. Medical Journal. FACULTY OF MEDICINE OF RIO DE JANEIRO.— In 1876 there matriculated in the various courses of medicine and pharmacy in the Faculty of Medicine of this capital 459 students, being, in the first year in medicine, 119; in the second, 85; in the third, 63; in the fourth, 40; in the fifth, 38; in the sixth, 25; in the first year in pharmacy, 51; in the second, 18; in the third, 20.—Revista Médico-Quirárgica.

TRAUMATIC TETANUS CURED BY CHLORAL AND JABORANDI.—Dr. Ferrini reports (An. Univ. di. Med.) a case of traumatic tetanus thus cured. The case is remarkable from the association of the two remedies. The anæsthetic action of the chloral was useful in retarding the paroxysms and securing restorative sleep to the patient. The jaborandi caused abundant diaphoresis, and thus lowered the temperature, causing a sudden and great improvement in the condition of the patient. The temperature fell in two days from 39° C. to 37°. The treatment lasted twenty days.—Lo Sperimentale, October, 1876 —N. Y. Med. Jour.

SIMPLE MEANS TO LESSEN THE PAIN OF A BLISTER.-The practice of applying multiple blisters, in acute rheumatism, would everywhere be much more popular with physicians, were it not for the pain, and, in certain cases, the strangury which this mode of treatment produces. To lessen the one and prevent the other M. Ernest Besnier proposes the following plan: Have care to apply the blisters early in the morning; these, properly prepared, covered with a leaf of oiled Joseph paper, will cause very little pain, and never produce the sometimes grave and always painful vesical and renal symptoms which might otherwise occur, provided that the blisters are removed after a few hours, five or six at most, or as soon as the epidermis commences to lift itself lightly and partially, which one can easily tell by the ivorycoloured and wrinkled appearance of the skin. It is then time to remove the plaster, which should be replaced by blotting paper, saturated with cerate or cold cream. The vesication then continues almost painless, and the blister is almost as large as if the application of the cantharides had been continued.-J. L. A., Lyon Médical.

ERGOT IN ATONY OF THE BLADDER .- Prof. von Langenbeck, at a meeting of the Berlin Medical Society, stated that in atony of the bladder, associated with enlarged prostrate, in elderly men, in which the organ is never completely emptied of urine, he has lately tried the hypodermic injection of ergotine with most In three cases the consurprising results. tractile power of the bladder was at once increased so as to enable the patient to discharge additional urine, and in a few days it had so augmented that very little urine was left behind. After one or two injections the improvement was considerable, and even a diminution in the size of the prostrate seemed to have ensued. Dr. Israel said that he had derived the same benefit from the employment of the ergotine, and referred to the case of a patient who was thus enabled to hold his water for three hours, whereas before he voided it every ten minutes .- Berlin Klin. Woch., January 22.-The Clinic.

AMERICAN INVENTIVE PROGRESS.-Under the above heading the Scientific American of May 7th has a long and interesting article, from which we make the following extracts :-- 'To show with what rapidity inventors made improvements on inventions embodying original principles, says the writer, it may be noted that in the early days of the sewing machine 116 patents were granted for improvements thereon <sup>1</sup>n a single year; and out of the 2,910 patents issued in the year 1857, 152 were for improved cotton-gins and presses, 164 for improvements on the steam engine, and 198 for novel devices relating to railroads and improvements in the rolling stock. In the year 1848, three years after the publication of this paper was commenced, but 660 patents were granted; but under the stimulus of publishing those inventions as they were patented, ten years later, in 1858, the number had increased sixfold, reachjing 3,710, while up to January 1, 1850, as already stated, the aggregate of patents issued amounted to 17,467; since that time, and up to the present, the total is 181,015. And curiosity here leads us (adds the editor) to review our own work, extending back, say, twenty years,

or to 1857, a period during which 170,745 patents have been issued. We find, by actual count, that 62,062 applications have been made through the Scientific American Patent Agency for Patents in the United States and abroad. This averages almost ten applications per day, Sundays excluded, over the entire period, and bears the relation of more than one-quarter to the total number of patents issued in this country up to the time of writing.

MEAN PATIENTS .- Some of our contemporaries have announced, and commented on the fact, that the medical profession in Ghent have resolved to keep a list of those patients who make a habit of getting all out of a medical manthey can, and then, without paying him, transfer their patronage to another, whom in turn they treat in the same way. Would that Ghent were the only place where such folk were to be Honest and grateful people would be found. surprised to learn the number of persons who will go to a doctor in distress and perhaps are rescued from agony and even death by him, and then live out the lives that have been saved without a thought of remunerating the doctor. Such people probably think that he is under some kind of moral obligation to heal and help them any hour of the day or night for nothing but the pleasure of doing so. There is every element of meanness in their conduct. For the sake of those who are so mean, a black list might well be kept, that they may know where they are and what it means; and that it is better to be on the sick-list even without a "But," says an doctor than on that list. objector, "people may die under this system." Not easily. Urgent cases are to be regarded without reference to the black-list. The mercy of the profession may be trusted not to abuse it, though this very quality of the professsion is sadly abused every day by people who would not think of being unjust to their butcher or their baker. A casuist would find in this matterthe imperative demands on a doctor's services and the mean evasions of a doctor's claimsone of the saddest and most curious facts in morals, for the alteration of which a black-list is by all means justifiable.-London Lancet.

TORONTO SCHOOL OF MEDICINE PRIZEMEN for the Session 1876-77.—*First Year*: Clapp, R. E., Macklin, W. C., Todd, J. A. Second Year: Burt, Franklin, Dryden, James. *Third* Year: Griffin, H. S., Good, J. W., McKinnon, A. H. Fourth Year: Grant, Andrew, Field, Byron.

TORONTO UNIVERSITY.—The Annual Examinations in the Faculty of Medicine began on April 17th and ended on April 26th. Ninetyeight candidates presented themselves, thirtyseven of whom were for the degree of M.B. This is, we believe, the largest number that has ever come up in the faculty of medicine.

GIANT CELLS .- It is barely five years ago since Schüppel claimed to have discovered the constant element in the tubercular granulation in the presence of the so-called giant cell, a multi-neucleated mass of protoplasm whose offshoots blended with the reticular basis of the But, as is well known, similar bodies tubercle. occur in granulation-tissue, simple as well as specific, in so-called "healthy" granulations of wounds, equally with those of atonic ulcers. About 12 months ago a paper by Professor A. Jacobson appeared in Virchow's Archiv, in which the characters and sources of giant cells were described, the best method of preparation being held to be that by means of Müller's fluid. fragments of granulation-tissue being at once placed in this medium from living subjects. No fewer than eight different structures may, according to the author, be mistaken for giant cells, so that the histologist must proceed very warily in his search after these bodies, which cannot be so characteristic as frequently stated. The structures enumerated are : lymphatics cut obliquely, the endothelium of which is prolifer. ating; thrombi in medium-sized vessels; transverse sections of capillaries full of leucocytes; masses of products of degeneration entangling nuclei or leucocytes; masses of micrococci; transverse sections of hypertrophied muscular fibres with proliferation of nuclei ; transverse sections of certain highly cellular organs, such as glandducts, interpapillary epithelium, &c. ; and lastly, sections of small nerve-bundles, the perineurium representing the contour of the giant cell and

the section of the fibres of the nuclei. Such difficulties do not always arise; indeed, when dealing with ordinary granulation-tissue, but few of these sources of error can be present. Jacobson admits that the giant cell may arise from accumulations of white blood-corpuscles, but is unable to speak with definiteness on this point. He also remarks on the impossibility of deciding between the products of infective tubercular inflammation and those of ordinary non-specific inflammation.—London Lancet.

TRINITY COLLEGE CONVOCATION. -- Medalists. -University gold medal, A. T. Stuart (this is the highest honour awarded by the faculty); University silver medal, D. A Stewart; Medical Faculty gold medal, George T. McKeough; Medical Faculty silver medal, R. A. Ross. Scholarships .- The second year scholarship, Charles Sheard; the first year scholarships, 1st. A. McDearmid ; 2nd. J. M. Black. M. B.-The. degree of M. B. was conferred on the following :-- W. T. Stuart, D. A. Stewart, F. H. Wilson, G. T. McKeough, R. A. Ross, R. M. Stephen, L. Festry, Peter L. Graham, M. Sutton, J. L. Burkart, W. Tisdale, J. A. Sinclair, H. H. Pringle, A. H Miller, K. Henderson, W. G. Stark, H. Minshall, W. E. Winksell, W. L. Davis, -Macklin, W. Honeywell, G. A. Marlatt, T. M. Miller, R. A. Barkwell, Wm. Parker, J. M. Sutherland. Alex. Davidson has passed his examination in all the branches, but not having attended the necessary number of sessions his degree will not be conferred until next convocation. Honour Certificates .-- Certificates of honour were awarded-In the final branches to :---R. M. Stephen, L. Festry, and P. L. Graham. In the primary branches to; C. Sheard, H. Meek, J. D. Bonnar, W. A. Dafoe, W. Cornell, U. M. Stanley, J. M. Groves, D. H. Wilson, Wm. Doupe, J. P. Rankin, J. McKay, Wm. Magrath, J. Henderson, J. Algie, and A. M. Baines. First Year's Examination .- The following have passed their first year's examination :--- Andrew McDearmid, J. M. Black, and P. G. Meldrum. The following candidates have passed their primary examination :--- Charles Sheard, Harry Meek, John D. Bonnar, W. A. Dafoe, W. Cornell, Uriah M. Stanley, J. M.

Groves, D. H. Wilson, Wm. McKay, Wm. Doupe, J. P. Rankin, J. Magrath, James Henderson, James Algie, Allan M. Baines, DeLorn, C. O'Gorman, J. Morrison, J. J. McIlhargey, S. A. Cornell, Archibald Wilson, J. M. Forbes, D. A. Brooke, George Riddell, J. T. Gilmour, R. P. Mills, T. G. McCord, Archibald J. Geikie, Alex. McKelvey, F. A. Howe, M. Stalker. T. F. Parker passed in anatomy, general chemistry, and botany.

ANNUAL EXAMINATION OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF ONTARIO.-Final: Adams, Arthur J., Toronto; Armour, J. P., Toronto; Bentley, R. J., Toronto; Barkwell, R. H., Trinity; Burkart, J. L., Trinity; Bowen, Geo. H.; Bonnar, H., Trinity; Brian, James; Carmichael, D. A.; Carthew, C. E., Toronto; Davidson, Alex., Trinity; Dumble, Thomas; Day, Jonathan; Esmund, J. J., Toronto; Fraser, Alex. C., McGill; Field, Byron, Toronto; Fisher, D. M., Toronto; Franks, W. H., Trinity; Freeman, W. C., Trinity; Gracey, W. J., Trinity; Grant, A., Toronto; Gordon, Geo., Toronto; Grasett, F. W. L.; Griffin, H. S., (B.A.,) Toronto; Graham, P. L., Trinity; Holmes, F. S. L. R.; Honeywell, William, Trinity; Hourigan, A. B.; Hill, A. J.; Higgins, Ed. M.; Kitchen, Edward, Toronto; Langstaff, George, Toronto; Macklin, Marshall, Trinity; Marlatt, G. A., Trinity; Miller, T. M., Trinity; Miller, A. H., Trinity; Minshall, H., Trinity; McKeough, G. T., Trinity; Munro, W. A., Toronto; McKinnon, A. H., Toronto; McFayden, D., Toronto; McDonald, D. F., Toronto; Miller, C. F.; McNicholl, Eugene; Murray, R.; McDermid, Wm.; Newell, Jas.; Orr, R. B., Toronto; Oakley, W. D., McGill; Parke, Wm. T., Toronto; Parker, Wm., Trinity; Pringle, H. H., Trinity; Phelan, Danl.; Richards, Nicholas, Toronto; Reeve, John E., Toronto; Ross, R. A., Trinity; Routledge, G. A.; Stewart, W. T., Trinity; Sinclair, A. J., Trinity; Stark, W. G., Trinity; Stewart, D. A., Trinity; Stephen, R. M., Trinity; Sutton, Marshall, Trinity; Shaver, Alex., Toronto; Smith, J. B., Toronto; Snider, F. S.; Scovill, S. S.; Smellie, Thos. S. T., McGill; Teskey, L., Trinity; Telgemon, -; Tisdale, Walter, Trinity; Wilkinson, F. B., Toronto; Winskell, W. E., Trinity;

Wilson, T. H., Trinity; Wigle, Hiram; Wood, Casey A.; Young, Oliver, Toronto; Youre, John.

First Year : Ames, Fred H., Anderson, Jas., Toronto; Armstrong, -; Black, Fergus, (B. A.,) Bowman, George, Buchner, D. C., Toronto; Bryce, W. W., Trinity; Clapp, R. E., Clemens, George, Cotton, J. M., Cross, W. J., Dickson, J. F., Dickson, C. B., Fisher, Albert, Clendinning, J. J., Toronto; Greer, Thos.; Galbraith, John; Hamilton, C. J.; Head, J. G.; Holt, David, Hunter, J. B., Toronto; Inksetter, D. G.; Machell, A. G., Macklin, W. C., Montgomery, J., McFaydens, J. J., McNamara, G. W., Nicholson, M.A., Toronto; Odlum, John, Rath, F., Radford, J. H., Shaw, F. W., Sheppard, O. B., Shepherd, L. E., Smith, Geo. B., Stevenson, F. C., Sutherland, Toronto; Spence, Thomas, Spencer, Bertram, Steffins, John, Trinity; Todd, J. A., Wallace, Matthew, White, J., Toronto; Welford, A. B., Trinity; Wilson, Thos.

Primary: Adair, James, Toronto; Algee, J., Trinity; Baines, A. M., Trinity; Beeman, T. W.; Bentley, W. H., Toronto; Burt, F., Toronto; Bowman, J. D.; Bremner, W. W.; Brooke, D. B., Trinity; Brent, F.; Craig, H. A.; Cornell, Warner, Trinity; Cornell, Sandford, Trinity; Clinton, George; Cameron, J. D.; Clark, Jno. G., Dafoe, W. A., De Lom, H. A., Doupe, W. H., Trinity; Dryden, J. B., Toronto; Evans, H. A., Forbes, John M., Trinity; Fraser, John R., Geikie, A. J.; Gilmour, John T., Groves, James, Trinity; Greenwood, F., Hooper, Thomas M., Toronto; Howev. W. H., Jones, J. J., Judson, Geo. W., Kennedy, W. B., Kidd, P. E., Lewis, F. W., McKinley, J., Lynch, D. P., Neilson, W. J., Lehman, Wm., Leslie, Joseph Wm., Toronto; Meek, Harry, Merrison, James, Mills, R. P., Trinity; Mills, F. W., McArthur, James; Mc-Carthy, Daniel, Toronto; McCort, Thomas J., Trinity; McCrimmon, John; McGrath, Jas., Trinity; McIlhargey, John, Trinity; McKay, William, Trinity; McKelvey, Alex, Trinity; Pyne, Robert A., Toronto; Riddell, George, Trinity; Riorden, B. L.; Robinson, Alexander, Toronto; Ross, James W., Toronto; Rankin, J. P., Trinity; Robson, W. T., Toronto; Sheard, Charles, Trinity; Smith, D. T., Stalker, Mal-colm, Trinity; Stanley, Uriah, Trinity; Vanderburg, J. F., Toronto; Wilson, D. H., Trinity.

THE DISTAL LIGATURE IN AORTIC ANEURISM. DELIVERED IN UNIVERSITY COLLEGE HOSPITAL. BY CHRISTOPHER HEATH, F.R.C.S., HOLME PROFESSOR OF CLINICAL SURGERY, ETC.-The history of the application of the distal ligature for the treatment of aortic aneurism is briefly this. There were certain cases on record of a ligature having been put on the left carotid for what was assumed to be carotid anuerism low down; and in some of them, notably those recorded by Tilanus and Rigen of Amsterdam, the parents recovered from the operation, living many months afterwards, and then died from some other disease, the aneurism being cured. In both these cases, it was proved after death that the diagnosis had been incorrect, and that the aneurisms had been aortic, and had been In 1829, a surcured by being filled with clot. geon named Montgomery tied the left carotid for an aneurism which proved to be aortic, and it was nearly cured when the patient died some months afterwards. Mr. Samuel Lane tied the left carotid for an aneurism, partly carotid and partly aortic, in 1852; and Pirogoff appears to have had two similar cases. These facts were known, but no special conclusions were drawn from them for the cure of aortic aneerism by surgical interference of this kind till Dr. Cockle wrote a paper in the Lancet, in 1860, where he recommended the application of a ligature to the left carotid as a means of treating aneurism of the aorta. I have for some years taken considerable interest in the treatment of an eurisms of the root of the neck. I had a patient at the Westminister Hospital, in 1865, on whom I performed the operation of simultaneous ligature of the carotid and subclavian arteries for a supposed innominate aneurism; and, although the patient was under very unfavourable circumstances, she lived four years after the operation. and at her death the disease proved to be an aortic aneurism. In 1872, with Dr. Cockle's concurrence, I tied the left carotid in a case of aortic aneurism, and the patient derived very great benefit, the aneurism subsiding immediately, and all urgent symptoms passing off until he renewed hard manual labour, when the sac again enlarged and killed him in September, 1876. The preparations, which is in the College of Surgeons, shows a large sac arising from the

first or ascending portion of the arch of the aorta. In 1874, I again placed a ligature on the left carotid in a case of aorta aneurism which had baffled treatment, but the patient died a few hours after from want of bloodsupply to the brain. In 1875, Mr. Holmes successfully tied the left carotid in a young woman believed to have an aortic aneurism, and she is still alive and well. During this session, a man was under my care on whom I wished to operate, but he declined, and six weeks afterwards returned in great distress and died in a few hours. The specimen shows that this would have been a very favorable case for ligature of the left carotid. The last case was in the woman on whom I had proposed to operate on Wednesday This woman had an aortic aneurism; last. and it was evident that, if something were not done, her life must shortly cease. She was forty-three years of age, and was admitted under Dr. Wilson Fox on January 10th. She was submitted to treatment by rest, by appropriate medicines, rigid diet, and particularly by the administration of iodide of potassium; and it is well to say that some physicians lay great stress upon the effect which iodide of potassium has in producing clot. She was fairly put under the influence of it, but experienced no benefit. The aneurism varied a good deal, but, on the whole, was increasing in size; and she was transferred to me, with the view of having the carotid tied. I had no doubt myself that the left was the proper one to tie, because it is essential that we should be beyond the disease; and, by tying the left, I made pretty certain that we should be beyond the aneurism. The death of the patient was due. to the fact that we were obliged to lay her down; and, the trachea being already very much compressed by the aneurism, it became practically occluded. You will remember that I did laryngotomy; and, as the anterior jugular vein was very large, it was unavoidably divided during the operation; but still blood did not reach the lungs, and, except for the flattening of the trachea, the patient would no doubt have had sufficient air and have lived for the operation to be performed. Had I known that there was so much flattening of the traches, I should not have operated on the patient lying down ; I should have had her sitting up in a chair and without an anæsthetic. But. in these cases of dyspnœa, we find chloroform gives so much relief, that we determined to administer it. If there ever was a favourable case for ligature of the left carotid, this was the one. The aneurism just involves, and no more, the orifice of the innominate, and springs from the upper part of the transverse portion of the arch of the aorta between the innominate and left carctid. If I were asked what case I should by preference choose for the operation, it would have been this very case. I think, in all probability, we should have had a good cure; for, even under very unfavourable circumstances, she had already a small clot in the aneurism; and, much as the untoward result is to be regretted, it must be remembered that she laboured under a disease necessarily and rapidly fatal if untreated.-Brit. Med. Journal.

ELASTIC COMPRESSION BY SPONGES .- Professor C. Heine (Prager Med. Wochenschrift, 1876, No. 32) has for some time used compression by means of sponge in order to produce absorption in cases of chronic, serus, fungous, and deformative inflammations of joints, sheaths of tendons, and bursæ. He usually applies a plaster of Paris bandage, in which an opening is left at the point where pressure is to be applied. A piece of dry sponge, cut to the proper size, is then laid on the part, and compressed by a roller to about one-tenth of its thickness. The plan has, he says, been very successful in the above-mentioned affections; and he has also cured a very large cavernous angioma by elastic pressure applied in the same way.-Brit. Med. Journal.

### Births. Marringes. and Deaths.

#### BIRTHS.

On the 11th inst., at 146 Bay Street, Mrs. T. W. Reade, of a son.

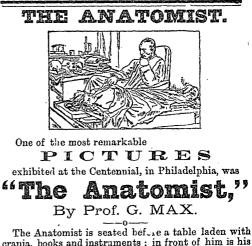
In London, on the 22nd inst., the wife of Dr. F. H. Mitchell, of a daughter.

On Thursday, April 12th, 1877, the wife of Dr. Thomas Armstrong, of York Mills, of a daughter.

At Bradford, on Thursday, the 29th inst., Mrs. J. Widmer Rolph, of a son.

DEATH.

At Belmont, on March 26th, Mary C., daughter of Dr. J. B. Campbell, aged 2 years, 6 months, and 18 days.



crania, books and instruments; in front of him is his subject, stretched on a trestle board, covered with a sheet. He has just drawn this from the face, which he is thoughtfully contemplating. It is that of a woman, young and fair. A wealth of golden hair lies in disorder around the pallid features. It is a masterly delineation, full of noble thought. The desir: to obtain copies was so general that

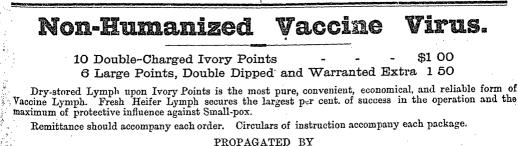
#### MR. K. BERENDSOHN, Of 48 Nassau St., New York,

has had a very accurate and beautiful etching of this remarkable picture executed on copper.

71 by 10 inches. 12 by 151 inches. SIZE OF PLATE -

SIZE OF PAPER -

ar It will be sent by Mail FREE on receipt of \$1.25, on INDIA PAPER.



E. L. GRIFFIN, M.D., President of State Board of Health,

Fond du Lac, Wisconsin.

#### **SANITARY JOHRNAL!**

#### DEVOTED TO PUBLIC HEALTH & PREVENTIVE MEDICINE.

" To prevent disease is the most important aim of the science and art of Medicine," says Sir William JENNER.

The purpose of the SANITARY JOURNAL is to diffuse a knowledge of Sanitary Science, of the Causes of Diseases and the Means of Preventing or Removing these Causes. In short, to discuss all questions pertaining to Public Health and Individual Hygiene. Sanitary Science is fast becoming the most important brauch of Medicine. The more the attention of Physicians is turned to the development of the Science, and the practice of the art of Prevention, the more will they, as well as the public, be benefited; the greater will be the service rendered by the former, and the greater the pay, while the practice of the art of the development of Sanitary Science. All who take an interest in the future well-being of the Profession should aid in the development of Sanitary Science. The aim of the Publisher is to make it specially useful and interesting to Medical men. Biometry—the measure of life., will be made a suecial feature in the Santary relevant.

Biometry—the measure of life. will be made a special feature in the SANITARY JOURNAL, which will render it valuable to all con-nected with Life Insurance business.

Contributors to past Numbers of the Journal:-Dr. Joseph Workman, Dr. Wm. Marsden, (Quebec,) Dr. Canniff, Dr. Berryman, Dr. Oldright, Dr. George Wright, and others. Published Monthly, at \$2 per annum, in advance. Two Copies, one year, \$3 50; or One Copy, two years, \$3 50. Vol. I. neatly bound in cloth, postage paid, \$2 25. Back Numbers supplied.

Editor "SANITARY JOURNAL," Toronto. Address.

# ELECTRO-MEDICAL INSTRUMENTS & BATTERIES.

### FLEMMING & TALBOT,

NO. 814 FILBERT STREET, PHILADELPHIA. -:0:-

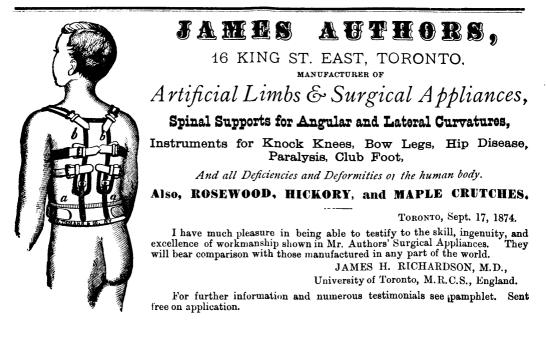
Having largely increased our manufacturing facilities, we are now prepared to furnish the finest work, with the latest improvements, on reasonable terms.

Portable Galvanic, Faradic, and Caustic Batteries, with complete applying apparatus, and Electrodes and Conductors, in all their varieties, constantly on hand.

Contracts made for the erection of permanent batteries in hospitals, colleges, and private offices.

A full supply of Electro-Medical Books always in store. Communications by mail promptly attended to.

SEND FOR CATALOGUE. TO





A Remedy for all NASAL, THROAT and LUNG Diseases, affording relief in some cases in a few minutes.

This instrument is gotten up on an entirely new principle, and is well adapted to the treatment of all those diseases of the air passages requiring efficient inhalation. It is endorsed by many leading practitioners, and commends itself to all desiring an apparatus.

Dr. George Hadley, Professor of Chemistry and Pharmacy in the University of Buffalo, in a carefully considered report upon its merits, concludes in these words :---

"On the whole, this Inhaler seems to me to accomplish its purposes, by novel, yet by the most simple and effectual means; to be philosophical in conception, and well carried out in the execution."

Always ready, no danger of breaking or spilling, besides being as safe and efficient in the hands of the novice as the adept. Made of Hard Rubber, it may be carried about the person as handily as a pencil case, and used regardless of time or place. Patented n the United States, England, and Canada. Over 50,000 now in use in this country.

Price \$2, including Inhalant for two months' use. Neatly put up and sent by mail free, on receipt of price. Extra bottles of Inhalant, 50c. Liberal discount to the trade. Kept by all druggists. Send your address and receive our descriptive circular, post-paid.

> W. H. SMITH & Co., 402 and 406 Michigan St., Buffalo, N. Y.

Samples to Physicians free by mail on receipt of \$1.

# CHEMIST AND DRUGGIST,

J. R. LEE,

339 KING STREET,

East of Parliament Street.

**BRANCH STORE:** 

Corner of Queen and Ontario Streets.

Je Prescriptions carefully dispensed.

IT pays every MANUFACTURER, MERCHANT, MECHANIC, INVENTOR, FARMER, or PROFESSIONAL MAN, to keep informed on all the improvements and discoveries of the age.

IT PAYS THE HEAD OF EVERY FAMILY to introduce into his household a newspaper that is instructive, one that fosters a taste for investigation, and promotes thought and encourages discussion among the members.

# THE SCIENTIFIC AMERICAN,

which has been published weekly for the last thirty-one years, does this, to an extent beyond that of any other publication; in fact it is the only weekly paper published in the United States, devoted to MANUFACTURES, MECHANICS, IN-VENTIONS and NEW DISCOVERIES in the Arts and Sciences.

Every number is profusely illustrated and its contents embrace the latest and most interesting information pertaining to the Industrial, Mechanical, and Scientific Progress of the World; Descriptions, with Beautiful Engravings of New Inventions, New Implements, New Processes, and Improved Industries of all kinds; Useful Notes, Recipes, Suggestions and Advice by Practical Writers, for Workmen and Employers, in all the various arts, forming a complete repertory of New Inventions and Discoveries; containing a weekly record, not only of the progress of the Industrial Arts in our own country, but also of all New Discoveries and Inventions in every Branch of Engineering, Mechanics, and Science abroad.

THE SCIENTIFIC AMERICAN has been the foremost of all industrial publications for the past thirty-one years. It is the OLDEST, LARGEST, CHEAPEST, and the BEST w ekly illustrated paper devoted to Engineering, Mechanics, Chemistry, New Inventions, Science and Industrial Progress, published in the world.

The practical Recipes are well worth ten times the subscription price, and for the shop and house will save many times the cost of subscription.

MERCHANTS, FARMERS, MECHANICS, ENGINEERS, IN-VENTORS, MANUFACTURERS, CHEMISTS, LOVERS OF SGIENCE, AND PEOPLE OF ALL PROFESSIONS, will find the SCIENTIFIC AMERICAN useful to them. It should have a place in every Family Library, Study, Office and Counting Room; in every Reading Room, College and School. A new volume commences January 1st, 1877.

A year's numbers contain 832 pages and SEVERAL HUNDRED ENGRAVINGS. Thousands of volumes are preserved for binding and reference. Terrus, 83 20 a a year by mail, including postage. Discount to Clubs. Special circulars, giving club rates, sent free. Single copies mailed on receipt of 10 cents. May be had of all News Dealers.

**PATERNTS.** In connection with the SCIENTIFIC AMERICAN, Solicitors of American and Foreign Patents, and have the largest establishment in the world. More than fifty thousand applications have been made for patents through their agency.

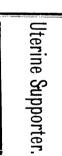
Patents are obtained on the best terms, Models of New Inventions and Sketches examined, and advice free. A special notice is made in the SCIENTIFIC AMERICAN of all Inventions Patented through this Agency, with the name and residence of the Patente. Patents are often sold in part or whole, to persons attracted to the invention by such notice. A Pamphlet, containing full directions for obtaining Patents sent free. THE SCIENTIFIC AMERICAN REFE ENCE BOOK, a volume bound in cloth and gilt, containing the PATENT LAWS, CEN-SUS OF THE U.S., AND 142 ENGRAVINGS of mechanical movements. PRICE 25 CENTS.

Address for the Paper, or concerning Patents, MUNN & CO., 37 PARK ROW, NEW YORK. BRANCH OFFICE, COR. F & 7th STS., WASHINGTON, D. C.



WHERE ADVERTISING CONTRACTS CAN BE MADE.





NEW YORK.

MANAGER.

" "

The attention of the Medical Profession is invited to this instrument as the most perfect ever invented for treating Prolapsus Uteri, or Falling of the Womb. It is an Abdominal and Uterine Supporter combined. The Abdominal Support is a broad Morocco Leather belt with elastic straps to buckle around the hips. with concave front, so shaped as to hold up the abdomen.

The Uterine Support is a cup and stem made of very highly polished hard rubber, very light and durable, shaped to fit the mouth of the womb, with openings for the secretions to pass out, and which can be bent to any curve desired, by heating in very hot water.

The cup and stem is suspended to the belt by two soft elastic Rubber Tubes, which are fastened to the front of the belt by simple loops, pass down through the stem of the cup and up to the back of the belt. These soft rubber tubes being elastic adapt themselves to all the varying positions of the body and perform the service of the ligaments of the womb.

The Instrument is very comfortable to the patient, can be removed or replaced by her at will, can be worn at all times, will not interfere with nature's necessities, will not corrode, and is lighter than metal. It will answer for all cases of Anteversion, Retroversion, or any Flexion of the Womb, and is used by the leading Physicians with never-failing success even in the most difficult cases.

Price-to Physicians, \$8.00; to Patients, \$12.00. Instruments sent by mail, at our risk, on receipt of price, with 20 cents added for postage; or by express, C. O. D.

## DR. McINTOSH'S NATURAL UTERINE SUPPORTER CO.,

296 West Lake Street, Chicago, Ill. Our valuable pamphlet, "Some Practical Facts about Displacements of the Womb," will be sent you free on application.

#### 10

#### A NEW MEDICINE.

# Seven Springs Iron & Alum Mass.

(Neither "Nostrum" nor "Patent Medicine.")

THE COMBINED SUBSTANCE OF

# SEVEN MINERAL SPRINGS.

OBTAINED BY EVAPORATION.

This valuable preparation is the solid substance of SEVEN MINERAL SPRINGS in Washington county, Va., and is reduced to a "Mass" by evaporation. The following analysis, made by Prof. J. W. Mallet, finds it to consist chiefly of IRON, ALUMINA, MAGNESIA, GLAUBER SALTS, and LIME.

Analysis by Prof. J. W. Mallet, of the University of Virginia.

The Mass appears as a stiff dough, or soft solid, of a light gray color, and marked acid reaction to test-paper. The contents of several bottles having been thoroughly mixed, the following composition was found for the mixture in 100 parts : Aluminum Sulphoto

Aluminum Sulphate	15.215
Ferric sulphate (per-sulphate iron)	4.628
Ferrous sulphate (proto-sulphate iron)	.412
Nickel sulphate	.162
Cobalt sulphate	.014
Manganese sulphate	.257
Copper sulphate	.008
Zinc sulphate	.301
Magnesium sulphate	16.006
Strontium sulphate	trace.
Calcium sulphate	17.538

	Potassium sulphate	.060
	Sodium sulphate	.226
	Lithium sulphate	.019
	Ammonium sulphate	.022
	Sodium chloride	.326
	Calcium fluoride	trace.
	Calcium phosphate	trace.
	Silica	1.504
	Organic matter	199
٩.	Water	42.938
		99.759

### A CARD TO THE MEDICAL PROFESSION.

We, the physicians of Abingdon, Washington county, Virginia, having tested the merits of the "IRON AND ALUM MASS," as made from the "SEVEN SPRINGS" in this county, believe it to be a most excellent "medicine," and a valuable contribution to "Materia Medica." It is a remedy which combines Tonic, Alterative, Diuretic, and Antiperiodic properties, to such a degree as to deserve more than a mere mention at our hands. We have used this "Mass" in a number of cases, especially in chronic cases, and it has proved satisfactory in almost every natance. We deem it unnecessary to mention in detail the different classes of diseases in which this medicine is applicable, as the analysis itself will indicate its application. There is, however, more virtue in the combination than is at first glance suggested. We therefore take pleasure in recommending this "Mass," (and water from these springs) to the favorable consideration of the medical profession, feeling assured that it will prove satisfactory. We F. BARR, M.D., R. J. PRESTON, M.D.,

W. F.	BARR, M.D.,	
WM. W	HITE, M.D.	
	HEISKELL, M.D.	

R. J. PRESTON, M.D., H. M. GRANT, M.D., E. M. CAMPBELL, M.D

## HOME TESTIMONY-FROM AN EXPERIENCED PHYSICIAN.

I have been using the "Seven Springs Iron and Alum Mass" in my practice, and find it a most excellent remedy for Chronic Bronchitis and Throat Affections, Torpid Liver and Kidney Affections, Chronic Diarthea and Constipation, Dyspepsia, Nervous and Sick Headache, and in the treatment of some of the diseases peculiar to females I have found it to be very valuable; Leucorrhœa, Amenorrhœa, Dysmenorrhœa, Menorrhægia, Anæmia, Chlorosis, Chorea, diseases following Intermittent Fever, and in all cases in which it is desired to improve the impoverished condition of the blood. I know of no other remedy which combines more happily Tonic, Alterative, and Diuretic properties.

W. F. BARR, M.D., ABINGDON, VA.

This "Mass" is sold by some of the leading Druggists in cities and towns, but in order that Physicians and others may have a steer opportunity for procuring it, we will mail to their address six packages on receipt of \$5, or for a less number \$1 per package. All orders entrusted to us will be attended to promptly. The usual discount to the trade.

Address\_

### LANDRUM & LITCHFIELD, Proprietors,

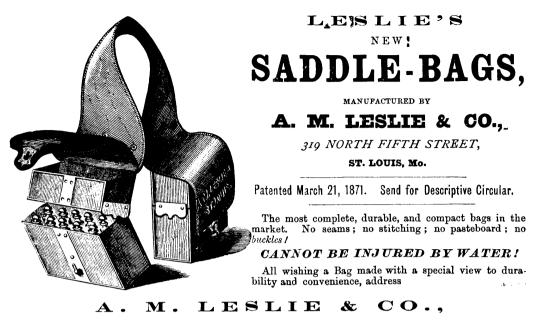
ABINGDON. Va.

#### OR OUR WHOLESALE AGENTS :

DREW & GIBBS, Washington, D.C. , LADD & CO., Richmond, Virginia. PURCELL, M. A. & C. A. SANTOS, Norfolk, Virginia. SANFORD, CHAMBERLAIN & ALBERS, Knoxville, Tennessee. WILKINSON, BARTLETT & OG., Keokuk, Iowa. IRVINE, WALLACE & CO., Montgomery, Alabama.

FAULKNER & CRAIGHILL Lynchburg, Va. CANBY, GILPIN & CO., Baltimore, Md. CASWELL, HAZARD & CO., New York. DEMOVILLE & CO., Nashville, Tennessee. J. J. & W. H. TOBIN. Austin. Texas. REED & LEWIS. Meridian, Mississippi. 11

J



319 NORTH FIFTH STREET,

U.S ST. LOUIS, Mo.,

so Dealers in every variety of SURGICAL & DENTAL GOODS. Publishers of Missouri Dental Journal

# BURRINGTON'S DR. WADSWORTH'S UTERINE ELEVATOR.

The most simple and practical of any Stem Pessary ever invented ; made of India Rubber without lead, unirritating, of easy application, and unfailingly keeps the womb in its natural position. The first-class physicians in Providence, and eminent practitioners in almost every State, highly recommend it. A pamphlet describing it, and testimonials of distinguished physicians, also Price List, sent on application.

### H. H. BURRINGTON, Sole Proprietor,

PROVIDENCE, R. I.

Also for sale by dealers in Surgical Instruments generally. Beware of similar articles sold on th great reputation of above.

Or to the

DR. REEVE

CAN BE CONSULTED IN REGARD TO

# DISEASES OF THE EYE AND EAR,

At the Tecumseh House, London,

ON THE 1st SATURDAY OF EVERY MONTH.

Residence and Office, 22 Shuter St., Toronto.

IMPORTANT **MOTHERS!** ТО Nurses and Invalids,

and persons of impaired digestion. Dr. Ridge's Food 18 very agreeable, and, from the nature of its composition, is exactly adapted to all conditions of the stomach. Sold by Druggists everywhere. Orders for Ridge's Food should be forwarded to

Messrs. WOOLRICH & CO., Palmer, Mass., U. S. A

HOME HOUSE, Bradsbury St., KINGSLAND LONDON.

# THE CANADIAN JOURNAL OFMEDICAL SCIENCE.

U. OGDEN, M.D., TORONTO, EDITOR.

### ISSUED PROMPTLY ON THE FIRST DAY OF EACH MONTH.

CONTAINS A

#### LARGE AMOUNT s READING MATTER.

CAREFULLY SELECTED FROM THE BEST

British, American, French, German, Italian, and Spanish

MEDICAL PERIODICALS.

Its aim is to publish all that is new and good in Medical Literature.

It gives all Home News of General Interest to the Medical Profession.

It is open to the Profession at large for approved Communications.

It is the organ of no School or Branch of the Profession.

It is conducted by a large and efficient Staff of Editors and Translators.

Read the following Extracts from Letters Received from Subscribers:

"This No. (Feb., 1876,) contains much that is good and very little bad, a thing hard to say of most Journals now-a-days. L. D. BULKLEY, M.D., New York. JAMES LANGSTAFF, M.D., Richmond Hill.

"I esteem the Journal highly."

۰

"I like your Journal much, and have tried to induce several of my confreres to take it." W. MARSDEN, M.D., Quebec.

"We like your Journal here very much, and it supplies a long-felt want."

ÄRTHUR A. BROWN, M.D., C.M., Montreal. "I never sent money for a Journal that I had derived more benefit from or was better pleased with." G. H. CHAPMAN, M.D., Morganfield, Kentucky.

"We have received No. 2, Vol. II., of this, in all respects, an excellent Medical Journal. As a purely Canadian Journal, it is well worthy the support of our confreres, who are engaged in the practice of our Profession."- Walkerton Telescope.

"I am much pleased with the manner in which it is conducted."

"The articles that appear are good, short, and to the point."

"Am very much pleased with the Journal."

CHAS. McLELLAN, M.D., Trenton. W. ALLISON, M.D., Bowmanville. N. H. BEEMER, M.B., Wyoming.

#### SUBSCRIPTION-\$3 PER ANNUM IN ADVANCE.

Address all Communications, Letters, and Exchanges to

**R. ZIMMERMAN, M.B.** 

107 Church Street, Toronto, Corresponding Editor.

### RECEIVED THE HIGHEST AWARD

OVER ALL FOREIGN AND AMERICAN MANUFACTURERS

At the Centennial Exhibition. 0

OFFICE & SALESROOM :--

30 Platt Street, New York.

FACTORY:-Brooklyn, New York.

# SEABURY & JOHNSON,

MANUFACTURERS OF

# OFFICINAL, MEDICINAL, AND SURCEONS' ADHESIVE PLASTERS,

#### IN RUBBER COMBINATION, SPREAD AND POROUSED.

Surgeons' Rub ber Adhesive, Aconite and Belladonna, Arnica and Opium, Belladonna and Opium, **Burgundy** Pitch, Pitch and Cantharides,

Asafetida. Blister, Belladonna. Capsicum, Arnica. Aconite. Witch Hazel. Hemlock, Iron. Galbanum. Comp., Carbolated, Ammoniacal.

Mercurial. · Poor Man's, Lead. Strengthening, Opium, Warming,

ALSO, IN THE MOST APPROVED FORM,

KID, SURGEONS', SILK, MUSTARD, ADHESIVE, ISINGLASS, CORN, BUNION AND COURT PLASTERS.

## THE CENTENNIAL JURORS' ESTIMATE

OF OUR MANUFACTURES, TAKEN FROM THEIR REPORT.

"The labours and inventions of this firm entitle them to the highest and ouly award, over all English, French, and American competitors, for originality and improvements in their branch of Pharmaceutical Chemistry." Purified Rubber is a neutral element, specially valuable as a vehicle for plasters, on account of its great elasticity and

Purified Rubber is a neutral element, specially valuation as a value of a product of product of the product of

"ORIGINALITY. The successful application of rubber as a base for all medicinal and mechanical plasters. **RELIABILITY** and general excellence of manufactures."

DR. WM. ROTH, Surgeon-General, Prussian Army. C. B. WHITE, M.D., New Orleans.

J. H. THOMPSON, A.M., M.D., Washington, D.C. ERNST FLEISCHL M.D Austria.

# SALICYLIC ACID.

The safe and positive properties of this newly-discovered Antiseptic is endorsed by the most eminent of European Surgeons and Physicians. It is invaluable in Surgery. The overwhelming evidence of its merits are such as to compel us, as progressive manufacturers, to introduce a sufficient quantity in all of our Rubber and Isinglass Plasters that are used in Surgery. We believe practitioners will appreciate this improvement. We have also incorporated it in our Court, Corn and Bunion Plasters.

#### THE TRADE SUPPLIED BY

NORTHRUP & LYMAN, Toronto. EVANS, MERCER & CO., Montreal. KERRY, WATSON & CO., ... W. & D. YUILL, " RUSSELL BROS.,

1

LYMAN, CLARE & CO., Montreal. LYMAN BROS. & CO., Toronto. W. D. ELLIOT & CO., WINER & CO., Hamilton. And all Jobbing Druggists.

1

Send for our Prices Current and Descriptive Circular.

If you fail to get them of your Wholesale Druggist send to us direct.