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THE

# CANADA LANCET.

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

Vol. VII.  
No. 6.

TORONTO, FEBRUARY 1, 1875.

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## CINCHO-QUININE.

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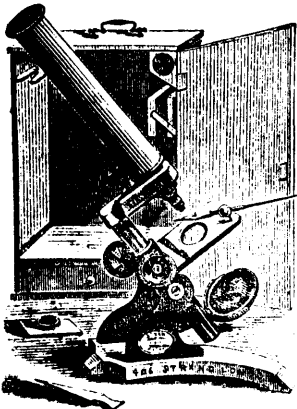
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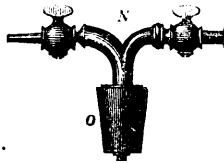
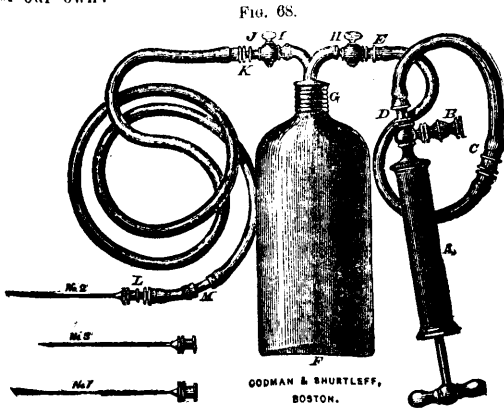


Fig. 69. The Stopper and Cocks supplied with Apparatus No. 2.

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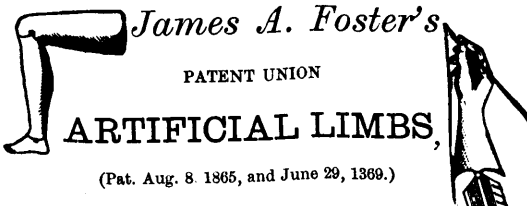
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*Ninety-First Annual Announcement, 1874-75.*

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THE plan of Study was radically changed in 1871. Instruction is now given by lectures, recitations, clinical teaching and practical exercises, distributed throughout the academic year. This year begins October 1st, 1874, and ends of the last Wednesday in June, 1875; it is divided into two equal terms, with a recess of one week between them. Either of these two terms is more than equivalent to the former "Winter Session," as regards the amount and character of the instruction. The course of instruction has been greatly enlarged, so as to extend over three years, and has been so arranged as to carry the student progressively and systematically from one subject to another in a just and natural order. In the subjects of anatomy, histology, chemistry, and pathological anatomy, laboratory work is largely substituted for, of added to, the usual methods of instruction.

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Students are divided into three classes, according to their time of study and proficiency. Students who began their professional studies elsewhere, may be admitted to advanced standing; but all persons who apply for admission to the second or third year's class, must pass an examination in the branches already pursued by the class to which they seek admission. Examinations are held in the following order:—

At the end of the first year—Anatomy, Physiology and general Chemistry.

" " second year—Medical Chemistry, Materia Medica, and Pathological Anatomy.

" " third year—Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, and Surgery.

Examinations are also held before the opening of the School, beginning September 28th. Students who do not intend to offer themselves for a degree will also be received at any part of the course, for one term or more. Any student may obtain, without an examination, a certificate of his period of connection with the school.

**REQUIREMENTS FOR A DEGREE.**—Every candidate must be twenty-one years of age; must have studied medicine three full years, have spent at least one continuous year at this School, have passed the required examinations, and have presented a thesis.

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Single branches may be pursued, and on payment of the full fee also the privilege of attending any of the other exercises of the Medical School, the use of its laboratories and library, and all other rights accorded by the University will be granted. Graduates of other Medical Schools who may desire to obtain the degree of M.D. at this University, will be admitted to examination for this degree after a year's study in the Graduates' Course.

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## Phosphorus as a Remedy for Neuralgia.

The following table is taken from a valuable paper, contributed to the "London Practitioner" by Prof. J. Ashburton Thompson, on the use of Phosphorus for the above-named complaint, large doses being employed by him, (the 1-25 gr. or more) and with marvelous success. He records 18 cases, as will be seen by table below, and arranges them in three classes—Acute Primary Attacks, Acute Recurrent Attacks and Chronic cases. Six cases occur in each class. In the first class the ages ranged between 25 and 46; in the second between 30 and 40; in the third between 24 and 40.

Some of the patients suffered from Trigeminal, some from Cervico Occipital, some from Cervico Brachial Neuralgia, and one in the second class from Sciatica. All the cases in the first two classes were cured; of the third class three were cured, one of the patients having been afflicted 18 years, without a week's freedom from pain.

Sex.	Age.	Nerves Affected.	Duration of Attack.	Extreme Duration of Treatment.	Complication.	Result.
<b>PRIMARY ACUTE CASES.</b>						
M	40	R. Trigeminal.	4 days.	4 days.	Catarrh.	Recovery.
F	26	L. Trigeminal.	14 days.	10 days.	Anaemia.	"
F	25	" "	21 days.	24 hours.	None.	"
M	46	Cervico Occipital.	12 hours.	12 hours.	General Derangement.	"
F	28	L. Trigeminal.	14 days.	48 hours.	Lactation.	"
F	26	" "	6 days.	12 days.	Catarrh.	"
<b>RECURRENT ACUTE CASES.</b>						
F	60	R. Sciatic.	15 days.	36 hours.	Decay of Nature.	Recovery.
F	33	L. Trigeminal.	5 days.	6 days.	None.	"
F	32	" "	21 days.	24 hours.	"	"
F	35	R. Trigeminal.	10 days.	4 days.	Lactation.	"
F	30	" "	14 days.	5 days.	Phtisis.	"
F	30	" "	7 days.	48 hours.	Debility.	"
<b>CHRONIC CASES.</b>						
F	28	{ R. & L. Trigeminal. }	18 months.	5 weeks.	Phtisis.	Relief.
F	24	{ Cervico Brachial. }	4 weeks.	9 days.	"	"
F		{ R. & L. Trigeminal. }				
F		{ Occipital, R. & L. }				
M	35	{ Trigeminal, R. & L. }	12 months.	12 days.	Nervous Debility.	Cure.
F	36	Cervico Brachial.	2 months.	14 days.	Pregnancy.	"
F	26	R. & L. Trigeminal.	16 years.	18 days.	None.	"
F	40	R. Trigeminal.	4 months.	15 days.	" (Decayed Teeth.)	None.

### PHOSPHORUS AS A NERVE TONIC.

Its use is supported by no less authority than Prof. Delpech, Prof. Fisher, of Berlin, Dr. Eames, (in the *Dublin Journal*), Dr. Burgess, and Dr. Hammond, of New York. The special treatment indicated in these cases is: 1st. Complete rest of mind, especially abstention from all occupations resembling that upon which the mind has been overworked; 2d. The encouragement of any new hobby or study not in itself painful, which the patient might select; 3d. Tranquillity to the senses, which expressly give in these cases incorrect impressions, putting only those objects before them calculated to soothe the mind; 4th. A very nourishing diet, especially of shell fish; 5th. The internal administration of phosphorus in pillular form, prepared by W.M. R. WARNER & Co.

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	" <i>Res. Guaiaci,</i>	gr. C.		
	" <i>Moes Soc.,</i>	gr. LXXV.	.60	2.75
	" <i>Myrrhae,</i>	gr. L.		
	<i>M=fiat pilulae, No. C.</i>	<i>Dose 1=4 Pills.</i>		

**PIL ANODYNE.**

(Warner & Co.)

R	<i>Po. Camphorae,</i>	gr. C.		
	<i>Morphia Acetat,</i>	gr. V.		
	<i>Ext. Hyoscyami,</i>	gr. C.	.75	3.50
	<i>Ol. Res. Capsici,</i>	gtt. V.		
	<i>M=fiat pilulae, No. C.</i>	<i>Dose 1=2.</i>		

**PIL ANTICHLOROTIC.**

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R	<i>Potass. Chlor.,</i>	gr. C.		
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	<i>Po. Podophylli,</i>	gr. C.	.75	3.50
	<i>Po. Myrrhae,</i>	gr. L.		
	<i>M=fiat pilulae, No. C.</i>	<i>Dose 1=2.</i>		

**PIL ANTICHOROMANIA.**

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R	<i>Zinci Valer.</i>	gr. CC.		
	<i>Ferri "</i>	gr. XXV.		
	<i>Ext. Sumbul,</i>	gr. L.	.75	3.50
	<i>M=fiat pilulae, No. C.</i>	<i>Dose 1=2.</i>		

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	<i>Brom. Camphor,</i>	gr. L.	.75	3.50
	<i>Po. Capsici,</i>	gr. L.		
	<i>M=fiat pilulae, No. C.</i>	<i>Dose 1=2.</i>		

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	<i>Strychnia Sul.</i> ,	gr. III.		
	<i>gelsemin</i> ,	gr. V.	.50	3.75
	<i>Ferri Sulph. Crs.</i> ,	gr. L.		
	<i>Ol. Res. Capsici</i> ,	gtt. X.		
	<i>M=fiat pilulæ, No. C.</i>	<i>Dose 1-5.</i>		

## PIL ANTISPLENETIC.

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Rx	<i>Fr. Aloes Sac.</i> ,	gr. C.		
	" <i>Ammoniaci</i> ,			
	" <i>Myrrhae, aa</i>	gr. L.	.60	2.75
	<i>Ext. Bryony</i> ,	gr. C.		
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	<i>Ol. Menth. Pip.</i> ,		.60	2.75
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	<i>Res. Guaiaci,</i>	gr. L.		
	<i>Lyr. Chamni,</i>	Q.S.		
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## PIL SEDATIVE.

(Warner & Co.)

R̄	<i>Ext. Sumbul,</i>			
	" <i>Valerianaæ,</i>			
	" <i>Hyoscyami, aa</i>	gr. I.	.75	3.50
	" <i>Cannab. Ind.,</i>	gr. X.		
	<i>M=fiat pilulæ, No. C.</i>	<i>Dose 1=2.</i>		

## PIL TONIC.

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R̄	<i>Ext. Gentianaæ,</i>	gr. C.		
	" <i>Humuli,</i>	gr. L.		
	<i>Ferri Carb. Sacch.,</i>	gr. XXV.		
	<i>Ext. Nuc. Vomica,</i>	gr. V.	.60	2.75
	<i>Res. Podophylli,</i>	gr. IV.		
	<i>Ol. Res. Zingiber,</i>	gtt. X.		
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# THE CANADA LANCET :

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

VOL. VII. TORONTO, FEBRUARY, 1875. No. 6.

## Original Communications.

### MAILED SPLINTS FOR THE TREATMENT OF FRACTURES.

BY WILLIAM KERR, M.D., GALT, ONT.

I was first led to attempt an improvement in the structure of splints by a case of ununited fracture of the leg of five months' duration. A rude tin splint, but containing the germ of subsequent changes, effected a cure, the patient being permitted to walk with crutches during the whole period. Upwards of 30 years have since elapsed, and I now lay before your readers the improvements which time and experience have gradually suggested.\*

In nature, we find that animals to whom bones are denied are provided with shells, and though this fact did not suggest the inventions I am about to describe, yet these may not inaptly be compared to the shell of the crustaceæ provided as a substitute for a bone, when that bone is fractured. I have called them mailed splints, from their general resemblance to mailed armour.† They are of tin-plate, hammered to adapt themselves very closely to the shape of the human frame, and are all hollow, so as to embrace from a-half to two-thirds of the circumference of the part to which they are applied. Owing to these advantages, and the attachment whenever necessary to adjoining parts, giving a more secure hold, and greater lever power at angles best suited for the purpose, the fractured bone may be steadily maintained in its position

during the cure. Great or nearly perfect comfort<sup>t</sup> is attainable, because the splints preserve their position on the injured limb almost independently of a roller; therefore bandaging to the extent of squeezing so as to give uneasiness, is not required. Comparative trials will speedily produce the conviction, that in cases of simple fracture, pain and suffering—when the first few days are past—arise from the splints in common use squeezing the bruised limb, and at the same time forcing the patient with a fractured leg or thigh to lie for weeks on one spot. In these fractures, my contrivances allow a considerable degree of locomotion; a patient having a broken leg, may in a few days turn from side to side, the limb being supported by the hands of another, and often at the end of a week is able to move about his apartment on crutches; a patient having a broken thigh, is soon able to shift from place to place in bed, or to sit upon its edge, his feet resting on the floor, and, if a young person, may be carried out of doors without the slightest injury.

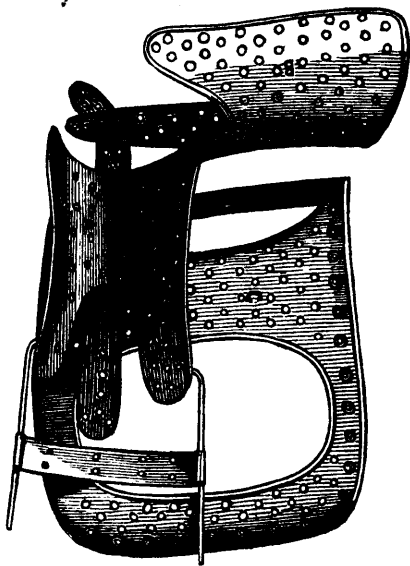
Commencing with the forearm, A is the splint, which is applied to its palmar side. It is scolloped in the distal portion, to permit better adaptation to the shape of different sized forearms; besides, compound fractures often occur here, and the splint being wanting at this point, they are more open to inspection. Rotation, by which fractures are so often displaced, is prevented by the hand grasping the strong ribbon of tin-plate which slides on the two lateral wires; these are soldered at a short distance from the end of the splint, to avoid squeezing the wrist. A piece of cloth folded a few plies, in this, as in all other splints, forms the only padding. A short roller secures the arm to the splint; a second passes over the uppermost wire and underneath the hand, supporting it in its proper line with the forearm, and next surrounds both wires and the hand, making rotation impossible.

A certain degree of rigidity is necessary for a good splint; too much flexibility permits injurious compression, and too much firmness prevents the proper moulding of the splint to the thickness of the limb. Mere thickness of metal, however, is insufficient to give the rigidity required. For this purpose, the edges of the splints must be either hemmed, bound or wired. Hemming is turning over the edge on itself, making two plies; binding is embracing the edge in a little trough of tin-plate,

\* I published an account of these inventions in the Edinburgh *Northern Journal of Medicine* for 1845. They were then more clumsy, but they contained the principles of the present.

† The word splint was formerly used for armour. In the ballad of Kinmont Willie, which relates his rescue from Carlisle Castle in the reign of Elizabeth, by Buccleugh and his men, we are told they had "splint on spauld," that is, armour on the shoulder.

making three plies ; and wiring is folding the edge over a wire. The splints are pierced with small holes all of the same size, and having the same gauge as to distance, to permit easy attachment to each other by small screw-bolts provided with nuts. These holes also allow the escape of perspiration, and, in compound fractures, permit pus to get away, more especially when tepid water is freely poured over the part, or the limb with its splint is immersed. Bathing and immersion are very agreeable to the patient's feelings, and a great amount of quietude may be obtained, a most desirable object ; but to make certain that no abscess is forming, or festering going on from pus being retained by the padding, the limb ought from time to time to be carefully lifted, washed, and replaced. Simple fractures do not require this attention, in most instances the limb may be let alone in its splint till the cure is completed.



In fractures of the forearm, the splint is used in the simple form I have described ; but in fractures at the elbow, and of the humerus, a similar one, with three stout copper ribbons rivetted at the elbow, is required for attachment to a splint B on the arm. One of these resembles the letter T, the other two the letter L ; these last are rivetted, one at each corner, and the third is rivetted between them ; this last is screwed to the part of the arm splint B, which projects downwards over the inner condyle ; the upper L ribbon is then bent to about a right angle, and its loose end, which is curved to

suit the convexity of the arm splint, is now to be fastened to it by one or two screw bolts, and the lower L ribbon bent upwards so as to support the elbow ; these ribbons protect the bend of the arm from undue pressure, and by the flat side of one being opposed to the edge of another sufficient rigidity is obtained. A cotton roller and a sling complete the apparatus. When the opposite arm is fractured the upper L ribbon will become the lower, and if in a compound fracture the wound, owing to its position, would be covered, the splint may be fitted on the outside of the arm.

I have succeeded perfectly in several severe injuries of the elbow with the apparatus described, but should the fracture be so high on the humerus that almost the whole of the splint is beneath it thereby not allowing an efficient hold above the injury, then the arm must be attached to the breast-plate C through the intervention of the extremity of the middle T ribbon, prolonged to the wrist, and the elbow supported at a proper height by a piece of band iron screwed to the breastplate, making a skeleton platform presenting the edge of the iron to the fore-arm splint. The breastplate having its edges stiffened by wiring, is curved to the shape of the chest, and requires to possess a considerable degree of stiffness to prevent the breathing being compressed when it is bound to the body. As the edges of holes made by a punch would in a short time cut even strong thread, a row of eyelets is formed around the top and sides, and to these a strong roller of cloth is sewed, which is laced or buckled at one side ; two leathern belts above the breastplate will give additional security, and braces over the shoulders will prevent displacement downwards. The two large apertures in the breastplate enable pressure on the female breast to be avoided, and give greater facility for the insertion of screw bolts.

In fractures of the clavicle, or cervix scapulæ, the only change on the preceding apparatus is the addition of a woollen wedge, which is pushed between the breastplate and arm-splint till the clavicle is properly elongated. I have tried several plans, but this is the simplest and best. To avoid a sensation of cutting, a thick brass wire is soldered along the whole upper edge of the arm splint, which, not pressing into the axilla, does not cause numbness of the arm. In all fractures requiring the breastplate, I place it not exactly over the

middle of the chest, but somewhat to the side giving it a somewhat hooked shape; in fractures of the clavicle it therefore necessarily intervenes between the woollen wedge and the patient's body,

It was an apparatus of this description, but without the wedge, which was used by Dr. McCargow in the case of ununited fracture of the humerus of nearly nine months standing, and successfully treated by him, as described in the *Canada Lancet*, Aug., 1874. Upwards of twenty years ago in a case of ununited fracture of the humerus, likewise of nine month's duration, I scratched the ends of the bones subcutaneously, applied the splint, and obtained a cure.

A very interesting case occurred where the back of the hand was terribly mangled by a planing machine, the arteries were not divided, but four cuts crossed the fingers and hand, dividing the bones, and opening eight joints. The forearm in its splint was slung from the ceiling, and water dressing applied. In the treatment there were two objects, to save the hand, and procure union of the tendons, so that the hand might be useful; for this last purpose it was necessary to keep the wounds as nearly as possible in apposition during the whole period of the cure, practically reducing the wounds to subcutaneous incisions. Slight pressure with the fingers could at any time maintain the edges of the wound in contact; trusting, therefore, to the steadiness of the hand in the splint, a ribbon of tin plate was attached to the wires at each side of the hand, with five little projections resembling fingers, each being moulded by itself, and giving the desired pressure on the skin beneath; that the pressure might resemble that of fingers a bit of caoutchouc was fastened to the projecting points. The hand and fingers were supported by a few broader ribbons of tin plate attached to the lateral wires, and moulded to the configuration of the hand and fingers above; to permit the escape of pus there was no padding beneath the hand, the slight elasticity of the tin plate giving the sensation of a spring mattress. The fingers were supported laterally by upright plates having projecting points of wire stuck into corresponding holes in a strong cross band beneath. The chief attention was directed to the thumb and forefinger, and with such success that, when the hand regained its strength, he was able to write as well, though not so quickly, as formerly. During the

whole period of the treatment he never lost a night's sleep from pain, a few at first, however, from mental anxiety.

Many years ago a workman in a machine shop had the olecranon cut through, and the posterior part of the right elbow-joint opened by a circular saw. In a consultation which followed three medical men advocated immediate amputation, and only reluctantly yielded to my opinion that the arm might possibly be saved. A splint was applied; in eleven weeks he was able to ring the bell of the machine shop, and in a few months to assist in carrying stoves, and other weighty articles, a considerable degree of motion of the joint being retained. Water dressing and free bathing were employed; no burrowing of matter or formation of abscesses took place; the cure, no doubt, being much facilitated by the depending position of the wound; a most important object, which ought if possible to be attained, if not by position in bed, by slinging the limb in its splint, in all wounds penetrating joints.

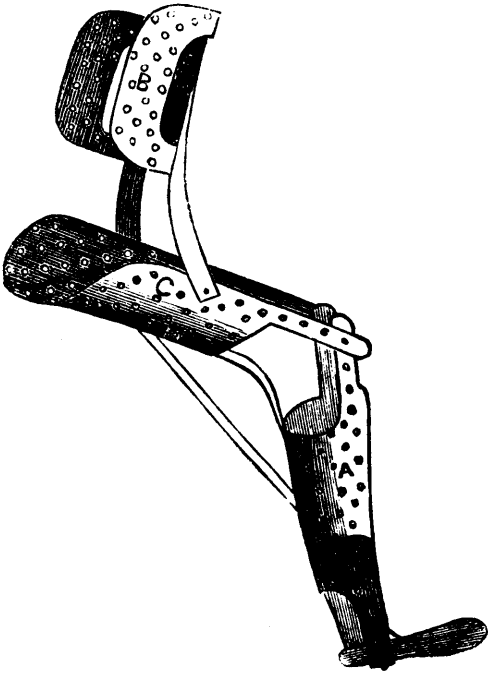
For partial dislocations of the wrist, the small tubes by which the strong tin ribbon slides on the lateral wires have their further ends closed; sliding thus being impossible,\* the necessary extension is maintained by tapes from a glove or cloth bandage around the wrist; these are drawn tightly over the tin ribbon which holds its position at the extremity of the wires. Counter extension is given by the arm splint.

For simple fracture of the leg the splint with its retaining bands is so closely applied to the limb, and fits it so accurately that displacement is scarcely possible. I have without injury conveyed a man on the third day after the accident 60 miles by railway, and 7 in a waggon, with four changes of the vehicle during the journey.

The splint consists of three pieces, two for the leg, and the third a thick copper sole. The pieces for the leg slide on each other for adaptation to different sizes of adults; the upper piece embraces about two thirds of the circumference of the limb, the lower, about three fourths; the upper is hammered out at the sides to give some degree of elasticity, and consequently a better hold; the lower is somewhat stirrup shaped to embrace the

\*This is represented in the outline sketch; it is useful in all cases to prevent the points of the wires being caught by the bed-clothes.





instep, and hammered out opposite the ankle not to give pain by compression, and for a similar reason the anterior edge of its arch has a slightly trumpet form; indeed, in all the splints every corner is rounded, and every part which would hurt is so hammered as not to cause uneasiness. The lower end of the leg splint opposed to the heel consists of two strong flat tails, which slide on each other to allow adaptation to different sizes of ankles. Through holes in these the sole is attached by screw-bolts. The splint is placed over the front of the leg, and secured in its place by a cloth extending from its upper end to the instep, having a closely set row of buckles on the one edge, and tapes on the other; the heel and the leg corresponding with the stirrup part of the splint are supported by a cloth which is pinned around the wires on each side of the stirrup. A short roller binds the foot to the sole, which, still better to keep the foot from inclining to either side, has soldered to its edges two small pieces of tin plate, the loose ends of which are supported by the upright sides of the stirrup. To allow inspection of the fracture without disturbing the splint, there are two large apertures (about three inches in width measured on the curve) on the front of the leg splints, each divided by a narrow rod of tripled

tin plate to keep off the pressure of the tapes; where the two splints overlap they can be brought into closer contact by the lower rod being loose, so that instead of intervening between the two, it may be placed over them. As already mentioned all the small holes being pierced to a gauge, there is no difficulty in inserting the screw-bolts of which two, so placed as not to form a hinge, will connect the two leg splints, and the other two the sole. The whole length of the leg being pressed evenly into the splint, which forms an accurate mould completed in its whole circumference by the retaining cloths, sinking of the heel backwards, cannot occur whatever be the state of the pillow on which the leg is placed, whether the patient lies on his back or either of his sides, or sits resting his leg on a chair, or by and bye walks with crutches, the weight of the splint being supported by a band around the neck.

In the case which suggested the first idea of these contrivances, the lower part of the leg had sunk backwards in bed, but at the end of five months it was readily drawn forwards by the broad band behind the heel. Firm union took place though I am unable to say in what time, because I was afraid for a number of months even to take off the splint. In another case, not of such long standing, the fracture was oblique, and the fractured extremities to some extent rode on each other. I divided the contracted Tendo Achillis, reduced the fracture, applied the splint, and obtained a good reunion.

I do not recommend this invention for Compound Fractures, except while the patient is being carried from the site of the accident to his home, the anterior position of the splint giving to it a firm grasp of the bones. In all compound fractures, whether slight or severe, there ought to be no obstacle to the free inspection of the limb, as the earlier the formation of an abscess is detected, and the earlier it is opened the more quickly will the cure go on. I employ a pretty deep trough extending beneath two-thirds of the leg, its prolongation for the remaining third being formed by a strong ribbon of tin plate of two or three inches in width, rivetted to both sides of the splint, and passing under the heel where a copper sole, the same as in simple fractures, is fastened to it. Instead of allowing the posterior part of the leg to lie on padding, I suspend the leg within the

splint on numerous bands of cloth attached to its edge, or having their ends tied together beneath its under surface; in this way accurate adaptation to the shape of the leg is obtained. Though this splint placed posteriorly grasps the muscles rather than the bones, displacement is resisted by the hold on the knee, the ankle, and the foot, and further security is given by swinging the leg from the ceiling, a plan to which the splint is well adapted. In a recent case of compound fracture of both legs both were thus swung, and the patient could also be lifted a few inches from the bed, for necessary purposes, by a sheet of canvas spread beneath him, to which cords connected with a small windlass were attached. The cure was very satisfactory.

When the fracture is near the knee it may be necessary to screw the top of the splint to another on the thigh, the connection being easily made through the medium of the projecting copper ribbons. In a case of compound dislocation of the knee, where one of the condyles projected through the wound without, however, injuring the popliteal artery, a good cure was obtained, the leg being held in the straight position. Here, as in the case of injury of the elbow, the depending position of the wound was of great importance. When cured the patient was able to walk about, undistinguishable from other people but by a perfectly stiff knee. Perhaps the reader will remember that Sir Astley Cooper says, compound dislocation of the knee in every instance demands immediate amputation. He himself had shown by successful cases that compound dislocation of the ankle does not necessarily require amputation, but Mr. Hey, and still further back Mr. Gooch had arrived at the same conclusion.

In fractures of the thigh the leg splint last described, and the breastplate used in fractures of the humerus and clavicle are required. Besides these there is a third splint in which the thigh lies as in a trough; it must extend beneath the tuberosity of the ischium, where it is flattened or slightly turned down not to hurt, on the outer side it is long enough to cover the trochanter, but on the inner it must be be scolloped out so as not to press upon the pubes; necessarily, therefore, there must be a splint for the right, and another for the left thigh. My experience is that the latter is more frequently fractured than the right, and that when children meet with injury the

femur breaks far more frequently than the bones of the leg. The lower end of the thigh splint has on each side a strong copper ribbon which meets similar ribbons on the leg splint.

We shall now suppose a fracture of the thigh; the breastplate is to be securely bound to the body, I say securely, because without this the accurate retention of the broken bone in its place is endangered. It is to be placed as in fractures of the clavicle somewhat to the side of the injury. As the breastplate extends from near the crest of the ilium almost to the axilla the flexibility of the spine is taken away, and the trunk rendered rigid. The splints when screwed together form a triple inclined plane embracing the trunk of the body, the thigh and the leg. To obtain the greatest amount of mechanical power the different parts ought to be fastened at right angles to each other; but more obtuse angles will generally hold the limb steady. The breastplate being applied, the thigh splint is to be placed so that its upper and inner flattened portion catches on the tuber ischii. Two strong copper ribbons with a connecting arc at top having the same curve as the breastplate, unite it to the thigh splint, of which last they form a part; to gain mechanical power these do not arise from opposite points of the thigh splint, the outer about the middle, and the inner near the lower end; they are hinged by what is called a loose rivet, which, as soon as the angle at which the thigh is to be kept is decided, is to be converted into a fixture by the insertion of a screw bolt through one of the holes in the small arc made for this purpose in the thigh splint; the upper ends of these ribbons, or their connecting arc are fastened to the breastplate by at least three screw bolts placed where their power is greatest. Having applied the breastplate and thigh splint, it only remains to adjust the leg splint: placing the leg in it at or about a right angle, the necessary extension is to be made, and the copper ribbons of the thigh and leg splints, where they cross at the knee, fastened by a single screw bolt at each side, constituting in the first place a hinge. If the thigh is now found not to be exactly of its proper length, it can still, without unscrewing the bolts at the knee, be somewhat extended by bending the leg further; the body being held immovable, by the breastplate now screwed to the thigh splint, the knee will be pulled forwards, while the limb is being

bent. The resistance tells pretty correctly when the thigh is of the proper length, but this ought to be ascertained by measurement before fastening the last screw bolts. For this purpose I have found nothing which admits of such accuracy as a ribbon of lead about half an inch broad, and sufficiently thick to give the necessary rigidity; it is a caliper compass of the simplest form, it sets aside all error from swelling of the limb, its upper end applied to the top of the trochanter, a scratch from the surgeon's nail opposite the sharp edge of the outer condyle will tell with precision whether both thighs are of the same length. A thin copper ribbon rivetted to the under and lower end of the thigh splint, to give support to the bone where the splint is wanting, is now to be moulded so as to accomplish this purpose, and attached to the upper end of the leg splint by a screw bolt. As the position of this bolt is never changed, it may be a fixture. Lastly, a strong copper brace rivetted to near the lower end of the thigh splint is to be brought across the angle formed by the thigh and leg, and bolted to the middle of the leg splint.\* A roller is to be firmly bound around the leg in its splint, and another, though less important one, around the thigh. The binding of a roller judiciously applied is little felt on account of the rigidity and great extent of surface of the splints, and it will be observed in regard to all that, whenever necessary, a firm hold can be got on uninjured adjoining parts, leaving the bruised limb comparatively unbound, certainly not squeezed, thereby avoiding the chief cause of suffering, if not of danger.

The principle of the apparatus for a fractured thigh is very simple, it is that as the breast-plate cannot approximate the leg splint, neither can the thigh which lies between in its hollow splint get shortened, provided attention is paid to the rollers and screw bolts. Extension and counter extension kept up during the cure are not productive of uneasiness, on account of the large surface of the body and the leg which bear the pressure. A perineal band is not required, supposing; however, that from any circumstance a necessity arose of making the angles rather too obtuse, such a band

\* Copper, as is well known to tinsmiths, is rendered more tough but less flexible by hammering; this will be kept in view in forming the various ribbons or braces. Ten screw-bolts are required for the inferior extremity, six for the upper, and four for the leg. The splints are japanned.

bearing part of the pressure could be attached. The patient's bed will require to be so pillowed as to suit the angles of the splint. I have only to add that upward pressure on the foot, and displacement therefrom, is prevented by the intervention of the sole. Judging from my experience, and the structure of the apparatus, I am disposed to say that an ill united and shortened femur ought not to occur, the union ought to be so perfect as to make the site of the fracture nearly undistinguishable, and the patient, if a young person, ought to be able to be carried about, or to enjoy drives in a carriage without displacement. I have seen several instances, in consultation with other medical gentlemen, where, owing to the obliquity of the fracture, the thigh could not be kept in its proper position by the ordinary apparatus, yet from the day the above contrivances were applied till they were removed, the thigh bone did not shorten in the slightest, and did not require any readjustment.

In that terribly torturing malady, disease of the hip-joint, in many instances great and immediate relief to pain is given from putting on a light splint made on the same principles as that for fracture; slight extension too can be obtained by a hinge at the knee. Wearing this splint the patient is able to be much in the open air, and to walk about with crutches; when seated the weight of the splint is wholly borne by the chair. Experience leads me to recommend that the tinsmith fit the splint in the first instance to a young person of the same size, who, free from pain, will sit quietly while the different parts are being shaped and rivetted together. I have farther to say that if a patient has lain long in one position while suffering severe pain, a change of position to obtain better angles for the splint must not be attempted, as still more severe pain would be excited.

I have received the following letter from Dr. Campbell, Toronto, at the time of the accident, practising in Niagara: "At your request I have looked over my old case book, and find the following particulars with reference to the use of your splints in a case of fracture of the neck of the femur. Mr. James McFarlane, aged 65, by a fall from his carriage near Niagara, on the 21st Jan., 1854, fractured his left femur within the capsule. Your apparatus was applied on the 7th February, two weeks after the injury. From the very day of its application he became quite easy and comfort-

able, was able to be taken out daily in his carriage, and upon the final removal of the apparatus on the 19th May there was undoubtedly bony union of the fracture, a very unusual occurrence in fractures within the capsule, which this certainly was. Unfortunately it was difficult to judge of the completeness of the recovery as to lameness, as Mr. McFarlane was lame of the same leg from a previous accident, but he was able to walk quite as well, and as far, as before the fracture of the femur occurred. As to the diagnosis of the seat of the fracture I had my opinion corroborated by yourself, Dr. Wilson of Niagara, and Dr. Kingdom, Assistant Surgeon Royal Canadian Rifles\* In this case the fracture being within the capsule, measurement by a ribbon of lead was inapplicable, and the bent position of the thigh made ordinary measuring appliances useless; nevertheless it was essential, when adjusting the splints, to know whether the fractured surfaces were in exact apposition. The difficulty had often occurred to me in cases of diseased hip-joint, where it was desirable to know whether the distortion was caused by dislocation or muscular contraction, and I was accustomed to solve it by an apparatus constructed on the following principles. Adopting the shoemaker's rule as a pattern one upright was applied to the middle of the sacrum, the other to the middle of the pubes, and the rule continued out between the knees; a straight line crossing this at a right angle touched both knees when the fractured thigh was sufficiently elongated.

Mr. Amesbury, in his very valuable writings on fractures (London, 1828,) strongly inculcates the necessity, in fractures of the neck of the thigh-bone of a triple inclined plane, for obtaining and preserving the proper apposition of the broken bone. His apparatus consists of a bedstead and mattress; the head and back rest upon the upper part; the thighs bent to a right angle, or thereabout to the body are supported by a corresponding part, which is capable of being elongated to the proper length, and the legs rest on the third plane. It is impossible to read his book without being convinced that he was successful in curing fractures of the neck of the thigh bone. Objections drawn from cases which have been treated with inferior splints,

and have failed, are valueless when opposed to successful cases treated with greatly superior apparatus. It may be owing to its bulk and expense that Mr. Amesbury's fracture bed has scarcely got into use, and is seldom noticed by surgical writers. My own splints are free from objections on these grounds, but the greater merit of retaining the fractured thigh bone at all times of its proper length is owing to the adoption of the triple inclined plane instead of the double, the necessity for which was first pointed out by Mr. Amesbury.

#### NÉLATON'S METHOD OF RESUSCITATION FROM CHLOROFORM NARCOSIS.—SUCCESSFUL CASE.

BY W. WADE, M.D., M.R.C.S. ENG.; L.R.C.P. EDIN.; COBOURG, ONT.

As this subject, resuscitation from chloroform narcosis, is now attracting the special attention of the profession, I believe it to be the duty of every medical man to report any case of success or failure of Nélaton's method which may fall under his observation. I have therefore thought it proper to communicate the following case to your journal, and, through its widely-read pages, hope it may be of service to some one who may happen to be placed in like unpleasant circumstances.

A few weeks ago, I was summoned to meet Drs. Rose and McBrien, in the case of a rather delicate looking youth, about 15 years of age, suffering from necrosis of the central portion of the right tibia. After inspecting the case, we decided to operate. The chloroform (Duncan & Flockhart's) was administered with every care, by Dr. Rose, who was careful to see that there was no external impediment to respiration. It was taken without difficulty, with scarcely any struggling or excitement; in fact, I never saw a patient take chloroform more quietly. When Dr. Rose found him ready, the operation was commenced by Dr. McBrien. At this time the patient was breathing comfortably, regularly, and without stertor; lips of a good color; in fact, everything connected with him seemed as it should be. In a few minutes, as the anæsthesia seemed perfect for the time, Dr. Rose stepped down to witness the operation, and assist if necessary.

Before the bone was thoroughly exposed, a

\*To suit this patient's corpulence a breastplate was made having its lower edge an arc of a greater circle than its upper.

medium sized artery was severed, which bled very freely. I was about to seize it with the forceps, when, to my astonishment, the hæmorrhage ceased, and as it was too large a vessel to cease bleeding so suddenly by natural hæmostatics, I looked for some other cause of arrest. To my dismay, the patient was apparently dead, without struggle or warning. No pulse, no respiration, no heart-sound; lips as pale as death could make them; all muscular irritability gone; in short, not a single sign of life remained. I exclaimed, "Suspend the operation. He's dead!" I immediately drew the tongue well forward, dashed cold water on the face and chest and over the region of the diaphragm, and commenced artificial respiration by Sylvester's method, which was continued for some time with out avail. I then directed my assistant, Mr. Riddell, to mount the table, and elevate the patient by the feet. While he was being held in this position, Dr. Rose and myself kept up the artificial respiration. We continued in this way (it seemed an age), determined not to fail from a lack of perseverance, for some fifteen or twenty minutes it must have been—a period of suspense and anxiety such as I trust I shall never experience again. Long after all hope had vanished, a slight flush was observed upon the face, soon followed by a feeble gasp. With renewed hopes and redoubled energies, we persevered in our efforts, which were finally rewarded by the re-establishment of normal respiration. The patient was then replaced upon the table, and the operation skilfully and successfully completed by Dr. McBrien, without further administration of chloroform, as the anæsthesia remained perfect for a sufficient length of time.

In this case the chloroform was of the best quality, and there was no appreciable contra-indication to its use. It was carefully administered. The breathing and heart's action were natural when Dr. Rose left the patient's head. Whether the heart's action or respiration failed first, I cannot say.

The question naturally arises, whether success was due to the prolonged artificial respiration, or to the inversion of the patient. This, however, is of no practical importance, as both measures may, in every case, be adopted at the same time.

Artificial respiration, on the table, for the time it was persisted in, was of no use; while we were all forcibly struck by the slight flush manifesting

itself, before the first gasp, on a face hitherto exhibiting only the pallor of death. We could not but be favorably impressed with the harmony which exists between Nélaton's theory as to the cause of death—anæmia of the brain—and the method of treatment he advises in the resuscitation of such cases. If his theory is correct, we can easily see the propriety of his treatment. All are aware of the fearful mortality of the dentist's chair, and the exemption of the parturient female. This may be explained partly by Nélaton's theory, and partly, perhaps, by the fact, that in dentistry the anæsthesia is carried to its full extent, to obviate the difficulty occasioned by the clenching of the teeth during the stage of excitement; while in obstetrical practice, full anæsthesia, except in case of operation, is seldom required. The difference is certainly not due to lack of skill in dental operations, for physicians, experienced in the use of chloroform, are generally employed for its administration.

If this difference in position regulates the danger, surely the parturient patient should be generally, instead of only occasionally, benefitted by the greatest boon that our Creator, in all his goodness and mercy, has vouchsafed her.

#### FRACTURE OF THE SKULL AND CONCUSSION OF THE BRAIN.—RECOVERY.

UNDER THE CARE OF DR. CASSIDY, TORONTO,  
PHYSICIAN TO THE HOUSE OF PROVIDENCE.

(Reported by T. Hobley, Esq., Medical Student.)

About 7 A.M. of Dec. 7th, 1874, H. S. while playing at the top of the winding stairs in the new wing of the House of Providence, fell over the baluster and down to the lower floor, a distance of 52 feet. Dr. Cassidy was immediately sent for, and on his arrival he found the patient suffering from symptoms of concussion; the outer table of the left parietal bone fractured and depressed, the depressed portion being circular, and about three quarters of an inch in diameter; the left humerus fractured at its lower third, and the left leg, left side of the body and face bruised and scratched. He straightened the arm and applied the ordinary fracture splints.

10 A.M.—Ordered the head to be shaved and ice to be applied. Patient restless, pulse 85; skin

warm. There was a large amount of effusion beneath the scalp, extending from the superciliary arches to the parietal eminences, and extravasation of blood around both eyes. Prescribed one minim of tinct. aconite every three hours.

4 P.M.—Pulse 117. Very restless, bowels constipated, urine freely voided, no sign of consciousness.

*Dec. 8th*, 10 A.M.—Pulse 84, and strong; patient restless. 4 P.M. Pulse 95: no perceptible change.

*Dec. 9th*, 10 A.M.—Pulse 104. Considerable fever and great restlessness; patient sat up in bed, but apparently not fully aware of what she was doing; bowels constipated. Ordered one minim of ol. crotonis, which caused a couple of evacuations of the bowels. 4 P.M., pulse 117; still feverish and restless.

*Dec. 10th*, 10 A.M.—Pulse 120; feverish, restless and easily disturbed. Patient sat up in bed and opened her right eye. 4 P.M., pulse 117. No change.

*Dec. 11th*, 10 A.M.—Pulse 114; fever abating; very restless, eat some corn starch, milk and beef-tea, with a cracker broken in it. 4 P.M. Pulse 120. Patient sat up in a chair; consciousness seems to be slowly returning. She eat some corn starch, and drank a little milk and beef tea. Still very restless; turns her head when called, and partly opens the right eye.

*Dec. 12th*, 10 A.M.—Pulse 120. Patient very weak; both eyes slightly open, seems to notice objects passing before her. Appetite good. Applied starch bandage to the arm. Ordered ʒj. rye whiskey every two hours, and aconite to be given at long intervals. The right side of the thorax being considerably bulged outwards; ordered a bandage to be applied, and the patient to be kept on the back or opposite side as much as possible. 4 P.M. Pulse 120; patient gaining strength; has slept comfortably; consciousness returning.

*Dec. 13th*, 10 A.M.—Pulse 120 and feeble. Patient knows what is said to her, but makes no attempt to speak. Bowels relaxed. Ordered aconite to be discontinued, and ʒss. rye whiskey every six hours.

*Dec. 14th*, 4 P.M.—Pulse 88. Patient got out of bed and sat on the stool. Appetite good, and she is less restless.

*Dec. 15th*, 4 P.M.—Pulse 88. Patient almost

entirely conscious; she has not spoken yet, but occasionally tries to cry.

*Dec. 16th*. 11 A.M.—Pulse 84. No other change.

*Dec. 19th*.—Pulse 100, but strong. Patient sits up in bed, and is able to read the letters of the alphabet, but is unable to form an answer to questions asked her. Appetite good, bowels regular, extravasation rapidly disappearing. Expression is idiotic.

*Dec. 22nd*.—Pulse 130. Appetite good. Patient endeavours to speak when spoken to.

*Dec. 26th*.—Patient is able to ask for food, and seems to be rapidly gaining strength.

*Dec. 28th*.—Pulse 120. Idiotic appearance gradually disappearing; patient recognizes certain familiar faces. General health is improving rapidly.

*Dec. 30th*.—No change. Ordered quinine and iron.

*Jan. 3rd, 1875*.—Patient rapidly gaining strength; walks around the room, and seems to be able to think, and look for whatever she thinks of. She will do whatever she is told, but not in a perfectly rational manner.

*Jan. 19th*.—Patient apparently perfectly conscious, and able to go around without any assistance.

#### CASE OF ANEURISM.

TREATED SUCCESSFULLY BY DIGITAL PRESSURE.

By Wm. Oldright, M.A., M.D., Curator of Museum and Lecturer on Sanitary Science, Toronto School of Medicine.

On the 27th November last I was asked to visit Mr. W. F. of this city, who was represented as "suffering great pain from an abscess or ulcer in his leg." I found on the inner aspect of the right thigh, about the junction of the middle and lower thirds, a large flattened pulsating tumor, about seven inches in its longest diameter, (in the course of the vessel), and six in its antero-posterior diameter, appearing to extend both anteriorly and posteriorly to the femoral artery. The tumor was extremely painful, the least jar or pressure greatly aggravating the pain. The change in size during temporary compression of the femoral was small, owing I suppose to the flattened shape (lateral extension) and to the nature of the sac, which I supposed to be that of a diffuse aneurism. The pulsations on the dorsum of right foot and in the

right ankle were weaker than those of the opposite side. On a later and more leisurely examination I found also that the heart was enlarged.

I decided to tie the femoral, if necessary; but thought I would first try digital pressure. This was the course advised also by Dr. Aikins, who saw the patient in consultation the next day.

The following gentlemen volunteered their services:—Messrs. Grant, Burton, Tyrrell, Wilkinson, Carthew, Pomeroy, Bentley, Wilson, Leslie, and Park, students of the Toronto School of Medicine, and Messrs. Sparks and Smart, friends of the patient.

The gentlemen were told off in pairs, each pair remaining on duty four hours. The two on duty relieved each other every ten to twenty minutes as found necessary by themselves, the one maintaining pressure, the other keeping his hand on the tumor so as to detect any inadvertent relaxation.

Having secured free evacuations from the bowels before commencing, I afterwards administered occasional doses of opium to control their action and relieve pain during the time occupied by the pressure. This was commenced on the 2nd December at 9 p.m., and was continued until the afternoon of the 4th.

I was unavoidably as late as 1.45 p.m. in making my first visit on the 4th, and I then found on relaxing pressure that pulsation in the tumor had completely stopped. I regret that I am thus unable to state the exact time at which that result obtained, but from what I could gather think it must have been in about thirty-eight hours from the commencement. I then directed light pressure to be kept up for about two hours longer, so as to lessen the force of the pulsations in the artery without completely cutting them off. This was done to avoid any danger of disturbing the clot by the sudden turning on of the pulsating current. This precaution may have been unnecessary, but I thought it better "to make assurance doubly sure."

During the application of the pressure the tumor was very hot, and rather more tender than before. This condition of things disappeared in a day or two.

The clotted vessel could be felt for a couple of inches or so above the tumor, and vertically across the upper part of it. The edges also appeared hardened. On each side of the clotted vessel

fluctuating lobes could be felt from which one would be inclined to argue that the vessel had originally given way posteriorly, and that the tumor had worked its way laterally behind the artery to each side of it, partially surrounding it.

At the present time (Jan. 21, 1875) the fluctuation posterior to the artery has disappeared, the anterior portion still fluctuates, but is growing smaller.

The patient is now walking about, going a mile at a stretch. All pain is gone.

In applying pressure, I adopted the following precautions amongst others: to vary slightly the point of pressure so as to relieve the skin as much as possible; to use violet powder when the skin appeared a little chafed; to be careful about the nails of the operators; to direct them not to make pressure more heavy than necessary to control pulsations. There was no abrasion or sloughing of the skin. I did not allow any intermission (contrary to the directions of Mr. Holmes on this subject); the patient dozing off for short intervals, notwithstanding the continuance of pressure. I had given instructions to the senior students to administer ether, if necessary.

Since the circulation through the tumor has been stopped there has been a feeling of coldness in the foot. This was more noticeable during the compression than since.

#### CASE OF ACUTE POISONING BY PHOSPHORUS.

BY E. G. KITTSO, M.D., HAMILTON, ONT.

An inquest was held in Hamilton before Dr. MacIntosh, Coroner, on the body of a man who had been found dead on Sunday morning, Sept. 20th, 1874, in the eastern end of the city. The post mortem examination was made by Drs. George Mackelcan and E. G. Kittson, with the following results:

The body was that of a well-developed and apparently well-nourished man, aged about sixty years. No external marks of violence were observable. On opening the abdomen to remove the stomach we noticed several adhesions existing between the peritoneum and the abdominal parietes, especially in the median line. The gas-

tric omentum was very adherent and congested. The external surface of the stomach was congested, and this condition of congestion was especially observable behind. Having tied the cardiac and pyloric ends of the stomach we proceeded to remove it, which was done with difficulty owing to the strong adhesions existing. On opening the stomach a strong smell of phosphorus was noticed. The organ contained about  $1\frac{1}{2}$  ounces of a dark greenish fluid having the consistence of mucilage, carefully pouring off this liquid several small solid particles were noticed as a kind of sediment. These were carefully gathered together, and taken into a dark room when, on rubbing them with a knife on our hands, we noticed very plainly that they were quite luminous and gave off a flickering sort of light with light flumes and a distinctly phosphorus smell. The mucous membrane lining the stomach was now examined, and was found to be inflamed and especially so on the posterior surface of the greater curvature where the fluid has gravitated from the man lying on his back, and where, of course, most of its strength was spent. However, the entire mucous lining was inflamed. Numerous small ulcers oval in shape were noticed studding the mucous lining. Most of the ulcers were so placed as to have their long diameter parallel with that of the stomach. No perforations were noticed though carefully looked for. The pyloric end of the stomach was much thickened though not indurated. The duodenum was also inflamed and its outer surface presented the same appearance as that of the stomach. The liver was enlarged and very much softened; the capsule quite adherent and when torn off the substance of the liver came away with it. The spleen was normal. The right kidney was normal in size and had a very healthy appearance; there was a small portion of the cortex which had undergone fatty degeneration. The left kidney was healthy but on one surface had a peculiar outgrowth resembling a vascular sarcoma about the size of a walnut and partly encysted, also a few patches of fatty degeneration were noticed. The other organs were not examined.

REMARKS.—The above notes give shortly the morbid appearances in a case of poisoning by any corrosive poison and the presence of particles of phosphorus in the stomach left us in no doubt as to the cause of death. The length of time which

elapsed between his taking the first dose and his death is unfortunately not accurately known, nor could we determine the quantity of the substance he took. The form in which he took it was as "Parsons & Co's. Bug and Vermin Exterminator," which owes its activity to phosphorus. More than eleven hours could not have elapsed between his taking the first dose and his death, as he was seen quite well on the previous evening (Saturday) about six o'clock, and he was heard moaning about seven the same evening. He was found dead the next morning between five and six a.m. The quantity of phosphorus required to destroy life is very small. One case is reported where one and a half grains destroyed life in twelve days, and another where two grains destroyed life in eight days. This man had once before attempted to destroy his life by taking two doses of Paris Green, but was prevented then by prompt medical interference. At that time he said he wanted to kill himself. He never showed any signs of insanity except on this point. He was addicted to the use of whiskey to a great extent at times. It is very remarkable that fatty degeneration of the organs generally, as the heart, liver, and kidneys, is found as a result of phosphorus poisoning, even when the case ends fatally in a few hours.

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### Correspondence.

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The following communication was received too late for the January issue :

To the Editor of the CANADA LANCET.

SIR,—I beg to enclose the within advertisement, which appeared for some weeks in one of our local papers, more to call the attention of the Medical Council and the profession, to the necessity and duty of protecting the public, as well as themselves, from peripatetic quacks of (Dr.) Arnold's kidney :

**D. R. J. H. ARNOLD,**

LATELY FROM BERLIN, PRUSSIA, AND SURGEON IN THE PRUSSIAN ARMY,

GIVES special attention to all Diseases of the Feet, Hip-joint Diseases, Inflammatory Rheumatism and White Swelling, without taking internal medicines. \* \* \* \*

Cancers and Eye Diseases, and Fistula in Ano cured without the use of the knife. \* \* \* \* Cures are permanent.

Dr. Arnold will only be able to remain in Canada until October, 1874, when his leave of absence expires, and he will return to Prussia. Consultations in English, German, French and Spanish.



Dr. Arnold will not visit the town of Simcoe, professionally, any more, but he can be consulted at any time, either by letter or professionally, at Galt. Consultations free.

The last paragraph of the advertisement requires explanation. Arnold was repeating his monthly visits to Simcoe, when Dr. Covernton (our late efficient representative in the Medical Council) and myself decided that the profession in Simcoe should be consulted as to the propriety of initiating proceedings, in accordance with the Act of 1874, which was agreed upon unanimously, including the Homœopathic practitioner, Dr. McDonald. Dr. Covernton entered the complaint. Dr. Arnold was found guilty of violation of the Act 37th Vic., Cap. 30, and Section 40 of the said Act.

The profession, and especially Dr. Covernton, incurred much popular odium for their manly defence of the law; but—not a word of support from the Medical Council, whose duty it was to see the provisions of the law carried out. The case was appealed (unsuccessfully), but not a word from the Council during the months the appeal was pending.

This brings me to the point at issue, *i. e.*, we must have a public prosecutor. Let the Registrar of the Council be appointed, he is the best man, whoever he may be; Dr. Pyne cannot well be improved upon. Make it his duty, and then our friends will know where to send their complaints, and for whom to gather evidence. We shall then obtain something tangible for our yearly fees. It is a great pity that this was not included in the Bill, when before the House. But a by-law of the Council will be equally efficacious.

I am now a practitioner of twenty-seven years' standing, and I may therefore, perhaps, be permitted to give one word of advice to my brethren, and it is this: While we should ever cultivate an *esprit de corps*, we ought also, at all times, to identify ourselves, in sympathy and in feeling, with the people themselves. Our lives and habits should be such as to endear us to the public—not by sneaking servility—but by honorable lives, free from offensive habit as well as vice; and our influence, that of refined Christian gentlemen,—cheerful, free and frank,—secret alone as regards secrets entrusted to our keeping. Acting thus, we need fear no enemies; as it is now, our worst foes are those of our own household.

Yours, &c.,

JOHN CLARKE.

Legislative Assembly. Dec. 9th, 1874

## Selected Articles.

### CROTON-CHLORAL HYDRATE IN MEGRIM.\*

BY SYDNEY RINGER, M.D.,

Prof. of Materia Medica in University College, London

It is hardly necessary to observe that under the term megrim I include those affections commonly called sick headache, bilious headache, nervous sick headache, and hemicrania. The most characteristic and commonest symptoms of megrim are headache and sickness; but, in a typical case, these symptoms are preceded by other significant and interesting phenomena. At the onset of an attack, a peculiar affection of the sight first occurs, soon to be followed by perversion of the sense of touch and of the muscular sense in the arms and legs; by disordered speech and defective ideation; the headache then comes on, and, as it becomes intensified, nausea gradually sets in.

The affection of the sight may consist of mere absence of vision, beginning at the centre or circumference of the field of sight. When at the circumference, the defect is generally situate to the right or left of the axis of vision. From the centre of the visual field, the blind spot gradually expands, and as it enlarges it gradually clears up in the centre, and so gradually disappears to the circumference. As the blind spot expands, its margin is often lighted up with spectra variously described as glimmering, dazzling, bright zig-zag lines, coruscations, etc.

In ten minutes to half an hour, on one or both sides of the body, numbness and loss of sensibility occur, followed by tingling, formication, "pins and needles," felt most distinctly in the hands, tongue, and lips. Speech is commonly disordered, the aberration in some cases being simply memorial, in others motorial; in others, again, these two derangements of speech are more or less combined. In other words, one patient forgets his words, another forgets how to utter them, whilst a third manifests a combination of these two defects. There is, too, loss of memory, confusion of ideas, and a bewildering feeling, as if the patient were going out of his mind. In half an hour or a little longer, these phenomena are followed by headache, which is generally felt on waking in the morning; it is at first slight, but intensifies till it may become most severe, indeed, almost unbearable. It affects one or both brows, and beginning at one spot, gradually extends, till it may involve the greater part of the head. The throbbing, stabbing, cutting, boring pain is increased by movement, noise, light, smells,

\* Read before the Medical Section at the Annual Meeting of the British Medical Association in Norwich, August 1874

or food. When the area of pain is limited, the complaint is termed *clavus*. As the pain subsides, or even during the whole attack, the patient may suffer dull or shooting pains in the eye of the affected side. There is much tenderness of the scalp during and after an attack.

Throughout the attack, the patient complains of nausea, which may be slight, but usually increases, and, when the pain is at its worst, ends in vomiting, which may be severe and prolonged, causing much prostration; yet occasionally vomiting affords relief.

Lasting a few hours, the whole day, or even two or three days, the attack generally ends in calm refreshing sleep, but sometimes it gradually subsides or ends abruptly in vomiting, perspiration, or, more rarely, a copious flow of tears. The attack may be preceded and followed by very obstinate constipation or by diarrhoea, the liquid motions being in some instances pale, in others of a deep brown, mahogany colour. Before and after the attack, there is often much dusky discoloration around the eyes.

It is now almost universally held that megrim is an affection of some part of the nervous centre. Dr. Liveing, to whose exhaustive work I am considerably indebted, considers that, in a typical case, the disturbance takes place first in the optic thalamus, and passes backwards and downwards, reaching to the nucleus of the vagus below; for, as he observes, in a typical seizure, the visual disorder is always the initial symptom, the headache the middle, and the vomiting last. Where morbid intellectual phenomena and disorder of speech occur, the affection radiates from the thalamus to the hemispheric ganglia, and, where emotional phenomena occur, to the mesocephale.

Though the affection is seated in the nervous centres, yet it must be recollected that the frequency and severity of the attacks both depend on peripheral causes, due to the stomach, intestines, liver, womb, etc. Even when the affection is strongly developed and the periodic attack recurs apparently spontaneously, the seizures may be rendered more frequent and severe by remote exciting causes; nay, in many cases, the affection may remain so slight, that it lies dormant till roused into activity by some near or distant irritation, on removing which the seizures altogether cease.

The successful treatment of megrim depends less on change to be effected in the disordered nervous centres than on the removal of the existing cause. The treatment of megrim, therefore, falls under three heads:

1. The treatment of the central nervous affection:
2. The removal or prevention of exciting causes:
3. The treatment of the paroxysm.

Many remedies act in a twofold or even threefold way. Thus bromide of potassium is often extremely serviceable in two ways. It is very useful

in those cases where the seizure is due to uterine disturbance, as in menorrhagia and dysmenorrhœa. Sometimes the attacks are more severe and frequent, arising from the exhausted state of the nervous system. Perhaps, from overlong town residence, or from mental troubles, the patient becomes irritable, depressed, nervous, excitable, with broken sleep, harassed by dreams. The ensuing general depression increases the headache. Now, bromide of potassium soothes the patient, and, by promoting refreshing sleep, strengthens the nervous system, and thus lessens the frequency and severity of the headaches. Bromide of potassium, moreover, is serviceable in the paroxysm itself, for it may produce several hours' sleep, from which the patient awakes free from headache.

The pain of megrim is situated in the fifth nerve; and, remembering how closely megrim is allied to neuralgia, and how useful hydrate of croton-chloral is in facial neuralgia, I have been induced to try this remedy for the seizures of megrim, and have found it useful in cases of which the following may be taken as a type.

A woman has been subject for years to nervous sick headache; then, owing to some great trouble, or, to excitement, fatigue, or flooding, or prolonged suckling, or most frequently at the change of life, the headache becomes much more severe. The headache is continuous for weeks, perhaps months, but is intensified greatly by fatigue, excitement, or at the catamenial period. If not actually continuous, the headache comes on daily, lasting, perhaps, for many hours, or several attacks may each day occur. The pain is often intense, and whereas, previously to the worst form of headache, the pain was probably limited to one bone, it now affects both, and perhaps the greater part of the head. The skin is generally very tender. There is also a sensation of bewilderment, or, as some term it, a stupid headache, and the patient often says she feels as if she should "go out of her mind." The sight may be dim, especially during the exacerbations of pain. Some patients of this class are very excitable and irritable, and are upset with the slightest noise. Nausea and even severe vomiting may occur with each exacerbation of the pain. Five grains of croton-chloral every three hours, or even oftener, will give in most cases considerable relief. I need hardly say, that the drug does not entirely free the patient from her attacks; but, in one or two days, the pain ceases to be continuous, then the attacks recur, but only once or twice a week, the interval gradually extending till an onset occurs only every week, then about every fortnight, or even longer, till the illness assumes its old type and periodicity. In some cases, a week's treatment suffices to bring back the headache to its original type of an attack once in three or four weeks. Then the croton-chloral appears to be far less serviceable, manifesting but slight effect on the peri-

odical attacks. In many cases of ordinary periodical headache, the patients say that, in the milder forms, the drug distinctly lessens the severity and duration, but in the severer forms it is without effect, even when sickness is absent. In those cases accompanied by severe vomiting and retching, croton-chloral is useless, being speedily rejected.

Croton-chloral, I have found, will relieve the slight attacks experienced by some delicate and nervous women after any slight fatigue or excitement.

In the continuous sick headache just described, as the pain grows better so the cutaneous tenderness disappears. It seems to me that, in many instances, two kinds of headache coexist, one sometimes predominating, sometimes the other. One appears due to affection of the cutaneous nerves, and is generally accompanied by tenderness. Patients describe the other as a "stupid headache," "a feeling of bewilderment," "a bewildering headache." After the dispersion of the first form by croton-chloral, this stupid headache often continues, but may ordinarily be relieved by bromide of potassium. Indeed, in many cases, I have found it useful to combine these remedies.—*British Medical Journal*.

## IMPRESSIONS OF AMERICAN SURGERY.

BY JOHN ERIC ERICHSEN, F.R.C.S., LONDON.

[We give below some extracts from an address by Prof. Erichsen of London, on his return from a visit to the United States during the past summer]—Ed.

\* \* \* Surgery in the United States certainly stands at a very high level of excellence. The hospital surgeons throughout the country have struck me as being alike practical, progressive, and learned in a very high degree. In practical skill, and aptitude for mechanical appliances of all kinds, they are certainly excelled by no class of practitioners in any country. They are thoroughly up to modern surgery in its most progressive forms, and I have never met with any class of men who are so well read and so perfectly acquainted with all that is done in their profession outside their own country. It would be a great injustice to American surgeons for it to be supposed that surgical skill is confined to the large cities or to the few. On the contrary, I know no country in which, so far as it is possible to judge from contemporary medical literature, there is so widely diffused a high standard of operative skill as in the country districts and more remote provinces of the United States. The bent of the mind of the American surgeon is, like ours, practical rather than scientific; in fact, there are the same mental cha-

acteristics displayed in him that we find here—the same self-reliance, the same practical aptitude, the same *curative* instinct, which leads him to consider his patient rather as a human being to be rescued from the effects of disease or injury than as a scientific object to be studied for the advance of professional knowledge. How, indeed, can it be otherwise than that there should be such a resemblance? It is true that in travelling through America one is struck by the fact that there is a singular combination of the new and the old—of the strange and the familiar. That there are differences of a remarkable character between the New and the Old World there can be no doubt. I use the word "different" rather than "foreign" because I feel it impossible to apply the word "foreign" to anything American. There are differences in climate, differences in the physical configuration of the country. The verdure that clothes its hills and the vegetation that fertilises its plains are different from those that we meet with here; but man, in all his characteristics, is exactly the same. There appears to me, indeed, to be as great, if not a greater difference between the mental characteristics of an Englishman and some of the other inhabitants of Great Britain than there is between an ordinary Englishman and an American of the Atlantic cities. It may be truly said, though perhaps in a sense slightly different from that in which the poet used the words, that

"Cælum non animum mutant qui trans mare currunt."

Those who have crossed the great ocean have changed their clime, but not their characters.

The similarity that exists between American and British surgery, and which has struck me very forcibly, arises not only from the great resemblance that exists between the American and the English character, but from two other causes which have largely contributed to this end. The Art of Surgery is in a great measure traditional. The method of doing things in surgery is transmitted directly from the master to the pupil. The American surgeon of a past generation acquired in this way the traditional art of British surgery, and has transmitted it directly to his descendants. Surgeons of both nations drew their inspiration from the same source and drank at the same fountain of knowledge. The names of Cooper and the Bells, of Liston and of Brodie, are as familiar to the ears of American surgeons as they are to those of this country. I was much struck when visiting the oldest hospital in the United States—the Pennsylvania General Hospital at Philadelphia—by seeing over the entrance to the operating theatre the portrait of a face that I had often seen delineated in this country. At first I thought it must be that of one of the American surgical worthies of a past generation—of Physick or of Mott, of Warren or of Mutter; but on closer inspection I found that they were the well-known features of him who was

in his generation *facile princeps* of British surgery—Sir Astley Cooper. Not only have British traditions thus penetrated deeply into the surgery of the United States, but the modern American surgeon derives his information from the same sources as does his British contemporary. THE LANCET is reprinted, and is as widely circulated in the States as in this country; and I find in my own case that my pupils in America are probably more numerous than those in Great Britain. One of the great advantages—and it is a very great one—that an English writer enjoys is that he addresses eighty millions of people, and that his works are not only disseminated throughout his own country, but, if of any value or importance, are eagerly sought after by that still larger body of readers existing in the "Greater Britain" which now encircles the globe. And if it be true, as has been said, that the judgment of enlightened foreign contemporaries is an anticipation of that which posterity will give, he may possibly have a foreshadowing of the verdict that a future generation of his own countrymen will pass upon him, in the estimate in which he is now held amongst those who inhabit the regions beyond the Atlantic.

Surgical practice in America does not differ in any very essential respect from that adopted here. There are necessarily some modifications, and many ingenious appliances; but essentially there is no greater difference between American and English surgery generally than is to be found between the practice adopted in any two London hospitals.

The treatment of wounds is sufficiently simple, and presents nothing peculiar. I observe that American surgeons are careful about the drainage of wounds, and employ drainage tubes or similar appliances freely.

"Antiseptics" do not appear to be much, if at all, employed; at least, in a methodical form. Carbolic acid in the form of lotion or wash is commonly used. Indeed, antiseptics are not so much needed in the American hospitals as in ours. The object of antiseptics is to prevent the contamination of a wound by septic impurities from without. These sources of contamination do not exist in such hospitals as those that I have been describing to the same extent that they do in less perfectly constructed and less hygienically conducted establishments, and hence antiseptics are proportionately less needed. In America it is attempted to accomplish by improved construction of hospitals, and by close attention to hygienic requirements, those great results which we are here driven to attain by "antiseptic" methods of treatment. In consequence of the ignorance in all matters that relate to the hygiene of hospitals that prevails amongst the architects and managers of these institutions, an undue burden of anxiety, responsibility, and care is thrown upon the surgeon, who is now un-

ceasingly engaged in combating septic disease; and in order to keep down that rate of mortality which is the direct consequence of septic hospital influences he is driven to the employment of elaborate and complicated methods of antiseptic treatment. Cleanliness in its broadest sense is the best and most efficient antiseptic. If the constructors and conductors of hospitals were acquainted with or would adopt those hygienic rules on which hospitals should be built and managed, if hospitals were not overcrowded, if the system of ventilation was perfect, if there was a continuous water-supply, a proper isolation of wards and distribution of patients, the causes of septic diseases would not be generated. Those foul and filth-begotten diseases, pyæmia and hospital gangrene, would disappear, and antiseptics, in the absence of septic influences, would become unnecessary. Contamination of hospital air would be prevented; we should not, as now under defective hygienic arrangements, first allow the pollution to take place, and then be driven to the use of antiseptics in order to prevent infection of wounds by the already septic-laden atmosphere. Under the present system we begin at the wrong end. Instead of preventing the possibility of atmospheric contamination by perfect hospital hygiene, we allow the septic poison to be engendered, and then, before it can be implanted on the wound, seek to destroy it by the employment of chemical agents.—*The Lancet*.

#### ACTION OF DIGITALIS.

When digitalis is administered to man, the first thing we observe is a diminution in the number of heart-beats and an alteration of the character of the pulse, which becomes full, and hard, and strong. You can recognize by the feel of the blood-wave that both the force of the contraction of the heart and the amount of blood thrown out during the systole are increased. If the drug is given in poisonous doses the pulse may, it is true, become rapid, and smaller than normal. The meaning of this can be explained by referring again to the animal. We find that here the same phenomena are observed, and that if a very large dose is given the heart may be suddenly arrested in systole from irritation of the cardiac muscle; before this happens, for a time, the tendency to contract is so great that the systole will occur before the complete filling up of the cavities. Two short imperfect waves are thus produced instead of one long one: this is the double beat,—forming a dicrotic pulse. In man the "dicrotic pulse" of digitalis is classical, and its mechanism is evidently the same as that of the double arterial wave in the lower animals: instead of a long pause and a full dilatation, the first attempt at diastole is interrupted by an abortive systolic contraction. As in animals, pro-

bably in these cases also, the apex of the heart scarcely relaxes at all. Again, a person under the influence of digitalis may have a heart beating 50 or 60 per minute when in the recumbent posture, but on sitting up the pulse may suddenly become weak and mount to 100 or 120. The action of digitalis has been carried into such a case to the point at which an excess will throw stimulation into overstimulation and imperfect contraction. The act of rising brings an extra strain on the heart, and the muscle loses its power of regular action.

Digitalis, then, in man, by its action on the inhibitory apparatus, prolongs the period of diastole, thus giving time for the ventricles to fill up with more blood than usual, and also increases the muscular power of the heart, so that when it contracts, a greater volume of blood is thrown with a greater force in the arterial system. Before we begin to apply these principles, remember also that the vascular system under the control of the vaso-motor nerves is probably kept in a state of contraction by the influence of digitalis.

Almost nothing but common sense is needed now to apply these facts to the treatment of heart-diseases. If what has been said is true, digitalis ought to be useful when there is a deficiency of heart-power. Remember that it is not a rag that will stop up a leak; and do not fall into the common error of expecting the drug to perform impossibilities. It cannot tighten a leaking valve. It cannot open and smooth down a contracted orifice. In other words, in valvular lesions it can only indirectly remedy the defects; and, although often you will get the most surprising results from its use, yet in every case of valvular lesion there comes, sooner or later, a stage when digitalis is powerless. It is when the valves are healthy, and the cardiac failure is due simply to weakness of the muscular walls, that digitalis exerts its most wonderful powers. Nothing is more marvellous in clinical medicine than the relief you can sometimes rapidly afford in cases of simple dilatation of the heart.—*Med. Times.*

#### SIR JAMES PAGET ON BLOOD-LETTING AND MERCURY.

At the meeting of the British Medical Association, Sir James Paget, as President of the section on surgery, delivered an able address. He observed that in the present day we over-valued the blood and estimated too cautiously the loss of it. There were few persons in the room who might not be bled to fainting, and to-morrow be almost unconscious of it; perhaps in this week of hospitalities they might even be the better for it. (A laugh.) Referring to the use of mercury, Sir James observed that in his youth mercury was largely administered. It probably did good in a

large number of the cases of which the real nature was not at that time discerned, and in a large proportion of the chronic diseases of internal organs which we now assigned to syphilis. Years ago there was no suspicion that syphilis affected any but the external parts. We knew now a multitude of syphilitic affections of the liver, of the lungs, of the spleen, and many more still of the nervous system, which formerly were vaguely put down to chronic inflammation of unknown origin, or to tumors, thickenings, or productions of substances which needed to be absorbed. At the present time we were rather apt to think that pathology should be the guide of therapeutics, while there was a large number of cases in which therapeutics should rather be the guide of pathology. The fact that a medicine cured a given disease was as much a fact and quite as significant a one as the employment of a chemical test for discerning the nature of a solution. It could be repeated from time to time, and with the same results. There was hardly anything in the chemistry of complex bodies more sure than that quinine cured ague and a large number of periodic diseases. As with quinine, so with mercury. If in his youth the value of therapeutic tests for indicating disease had been fairly estimated, we should have come many years sooner than we did to a knowledge of the syphilitic nature of a large number of internal chronic diseases. We were, he believed, too much under the guidance of what might be justly called inferential therapeutics. Because we knew something of pathology we might, therefore, proceed at once from pathology to the knowledge of the remedies of disease. It was a fair method of study if it were not carried to excess, but it should be studied side by side with the other fact that therapeutics might just as fairly be a guide to pathological knowledge.—*Pacific Medical and Surgical Journal.*

**AILANTHUS GLANDULOSA IN DYSENTERY.**—Dr. Robert, medical chief of the British navy in China, extols the bark of the root of this tree as superior to ipecacuanha or any other drug in the treatment of dysentery. It is intensely bitter, like quinia, and produces vomiting when freely used. Dr. Robert found the dried bark of the root as good as the recent. The Chinese physicians who employ it give a cup of the strong infusion twice a day. The tree grows luxuriantly in all parts of the United States, having been introduced for the purpose of shade. It is a very rapid grower, and propagates itself abundantly by shoots from the root, being almost a nuisance in this respect. The tree is quite common in California, and is known as the Ailanthus or Pride of China. Some further account of its remedial application may be found in the *American Journal of Pharmacy* for June, 1874.—*Pacific Med. Journal.*

## THE PATHOLOGY OF THE BLOOD.

M. Laptshinsky, of St. Petersburg, contributes a paper to the *Centralblatt* on the microscopic changes undergone by blood in various diseases. He finds that in various diseases in which marked febrile symptoms are present, the microscopic aspect of the blood is essentially different from that of health. The changes consist in the blood-corpuscles not running into regularly formed rouleaux, but accumulating in heaps or clumps of various size and shape. The individual blood-corpuscles frequently appear swollen and cloudy, and their contours less distinct than natural. Small corpuscles, one third of the normal size, are often met with, some of which exhibit a more intense colour than natural, whilst others are completely pale. In the interspaces of the clumps of red corpuscles, great numbers of white corpuscles may be seen, often coalescing to form groups of from 3 to 8. In typhus he counted from 60 to 80, and more in one field of vision: in cholera from 110 to 130. Careful enumeration of the relative numbers of white and red corpuscles four days after death in the above cases showed that there was 1 white to 60 red corpuscles in the case of typhus, and 1 white to 23 colored in the case of cholera. In a very anæmic woman, suffering from suppuration in the knee-joint, the proportion of the white rose to 1 to 13 red. The white corpuscles in these cases presented unusually active and extensive amoeboid movements. The nuclei of the colourless corpuscles took a part in the amoeboid movements, and could be seen altering their position and form in the interior of the white corpuscles. The thorn-apple or horse-chestnut-like form of red corpuscles he did not find to be unusually frequent. He found, however, large quantities of granular or detritus-like material in the blood of febrile, but not much in the blood of cachectic and anæmic, patients. From this enumeration he feels satisfied that in febrile disease, and in Bright's disease, the conversion or development of white corpuscles into red is either materially retarded or is entirely arrested.—*The Lancet*.

## CONGENITAL HYDROCELE.

NOTES ON CLINIC BY PROF. GROSS, PHILADELPHIA.

This child, three months old, has had a swelling upon the left side of the scrotum ever since he was born. The tumor is not soft and gaseous, as was the tumor upon the child that has just been before us.

The testis is *not* at the inferior extremity of the tumor, as in the other case. Pressure does not reduce the tumor. The tumor never disappears, but is sometimes smaller than at other times.

When the integument is tightened over the tumor, a certain amount of translucency becomes apparent. This could be more perfectly demonstrated by placing a light between the tumor and a dark background; but the present examination will suffice.

In this affection, which we may call hydrocele, the testis is at the posterior part of the tumor, not below; although there are exceptional cases to this general rule. As a rule, the testis is situated at the junction of the inferior with the middle third of the scrotal tumor, but nearer to the bottom of the tumor than to the upper extremity. In hydrocele the tumor cannot be diminished in size by pressure, as in the reducible hernia. The tumor may vary somewhat in its bulk, depending upon the state of the system and the condition of the absorbent vessels; hence there is occasionally a diminution in the quantity of water that the tumor may contain; but the tumor may be said to remain in the same condition, and gradually increasing in bulk.

The tumor in this case is not conical, as in the other case, but is quite globular; this, however, is a mere accidental circumstance. In a case like this there is no material change in the overlying structures and integument; but in both the hydrocele and hernia there is *usually* considerable stretching of the integument. The spermatic cord is usually felt at the upper portion of a hydrocele without difficulty, and it is only when the tumor extends into the inguinal canal that there is any difficulty experienced in its detection; but in hernia the spermatic cord is posterior to the bowel and omentum, and is usually felt in that position. In hernia we find also that the tumor is more in the groin than is the case with hydrocele. There is more or less of fluctuation in the hydrocele, whereas in the hernia there is never anything of that kind at all. In the hernia the contents of the tumor feel gaseous because the bowel contains more or less of air; and in the reducible variety there is always a gurgling, croaking noise when the reduction is made. Whenever there is any doubt with regard to diagnosis, the exploring-needle at once relieves that doubt. The best exploring-needle that can be used in these cases is the common sewing needle or a cataract needle.

(At this point a fine cambric needle was introduced, and water oozed from the puncture.)

The fluid which is at present in these fluids is perfectly clear, is saline in its taste, and coagulable by heat, alcohol, and acids. It is simply the serum of the blood, and has accumulated in this sac because there was a loss of balance in the secreting and absorbing vessels. In the natural state this balance is preserved, and the vaginal tunic is simply lubricated. Nothing more need be done in way of treatment to-day than the simple puncture that has been made. Several punctures of this kind may occasionally, in cases of recent standing, pro-

duce a radical cure. The external applications that may be made, and in many cases with benefit, are quite numerous, and among them the following may be regarded as the most serviceable :

R—Tr. Iodini ..... One part.  
Alcohol ..... Six or eight parts.—M.

Strong solutions of Goulard's extract, or acetate of lead or of alum, are also not unfrequently employed.

When the case is obstinate, the best plan of treatment is to traverse the interior of the sac with one solitary, delicate, well-waxed silk thread, and allowing it to remain for a period of eighteen to twenty-four hours ; but no longer than twenty-four hours in any case. For, delicate as the operation is, it is harsh enough to excite sufficient inflammatory action and effusion of lymph to glue together the sides of the sac.

When the case is cured by means of external applications, it is not unlikely to occur as the result simply of restoration of balance between the secretant and absorbent powers of the vessel.—*Med. Record.*

#### THE RADICAL TREATMENT OF HYDROCELE BY INJECTION OF CARBOLIC ACID.

A man came to the hospital suffering from a hydrocele of the vaginal tunic of the testicle on the right side, which he stated first began to trouble him a year previous. Six weeks before admission it had been tapped, and more than a pint of fluid was drawn off, but it rapidly re-developed, and he accordingly presented himself for radical treatment.

As the ordinary mode of treating hydrocele by injecting tincture of iodine into the sac is sometimes unsuccessful, and at other times is followed by an excessive degree of inflammation, and even by suppuration, it was determined to employ carbolic acid as an irritant, which would it is believed, excite sufficient inflammatory action, and yet, as it checks the formation of pus when externally applied, would have a tendency to limit the inflammation in the sac within the degree of suppuration.

After the serous fluid, which amounted to a pint, had been drawn off by the trocar the operator injected into the vaginal tunic two fluidrachms of a solution of carbolic acid in glycerin, in the proportion of one part by weight of crystallized acid to two of the menstruum. He then, by manipulation, brought the fluid in contact with every portion of the serous surface, in order that the approximated sides of the sac might be rendered adherent by lymph thrown out upon the supervention of plastic inflammation. The patient did not experience any pain whatever from the introduction of the

fluid, such as is the case when tincture of iodine is injected, and which is severe and extends along the course of the genito-crural nerve. It was thought that this painlessness of the procedure might be due to the fact that carbolic acid is capable of inducing local anæsthesia.

At the end of twenty-four hours the tumor was quite large, but had rather a doughy feel, and there seemed to be more inflammation present than generally exists one day after the usual iodine injection has been used ; but the swelling was neither painful to the patient nor very sensitive to pressure.

The remarkable feature of the case is the almost entire absence of pain in this method of treating hydrocele.

Carbolic acid seems theoretically to meet all the requirements of the radical cure of hydrocele ; but it will require continued experience to determine the practical value of this new method of treatment.—*Dr. Lewis, Penn. Hospital, Southern Med. Record.*

JABORANDI.—M. Coutinho, of Rio Janeiro, describes in the *Journal de Thérapeutique*, No. 511-161, the effects of a Brazilian plant, known to the natives as jaborandi. It appears to be by far the most powerful diaphoretic known, not depending for its powers, like most other diaphoretics, in great part upon the heat of the menstruum. It may be taken in cold infusion. The salivary secretion is also greatly increased, so that the patient is for a time almost unable to speak, so rapidly does his mouth fill with fluid. The bronchial secretion is also augmented.

M. Gubler, the editor of the periodical just quoted, has confirmed the observations of Dr. Coutinho. He has several times collected a litre (about a quart) or more of saliva in less than two hours. One of his pupils who perspires with great difficulty, obtained a sweat by taking, while sitting up, a cup of the infusion scarcely warm. He says that the plant brought by Dr. Coutinho is the first undoubted example of a diaphoretic truly worthy of the name, that is to say, a drug having the power directly to provoke the secretion of the sweat by a special stimulation of the sudoriparous apparatus.

The specimens brought by Dr. Coutinho, having no flowers, could not easily be identified ; but, from a comparison with a collection of Brazilian plants, it appears that jaborandi is identical with a species of the family rutaceæ, the *pilocarpus pin-natus*, growing in the province of St. Paul in Brazil.

Rabuteau (*L'Union Médicale*, 1874, No. 45' and *Centrabblatt*, 1874, p. 528) has still further confirmed, by experiments upon himself, the statements of Coutinho.—*Boston Med. and Surg. Jour.*

## PERICARDITIS WITH EFFUSION; ASPIRATION OF PERICARDIUM.

BY T. H. BARTLEET, F.R.C.S., SURGEON TO THE GENERAL HOSPITAL, BIRMINGHAM.

Dr. Harvey, under whose care the case is, reports that the patient, Henry H—, aged twenty, had been for fourteen days suffering from acute rheumatism, but under his care for four days only. Symptoms of pericarditis were observed on Dr. Harvey's first visit. On Nov. 13th he found the patient suffering from urgent dyspnoea. There was a considerably increased area of cardiac dulness and marked failure of pulse. At noon on Nov. 13th Dr. Russell saw the patient with Dr. Harvey, and reports: Very feeble and rapid pulse; very rapid breathing; much dyspnoea.

Cardiac dulness extended to one inch to the right of the sternum and to the upper border of the first rib above, though here the dulness was not complete. The limit of the dulness on the left side was uncertain, owing to effusion in the chest. On auscultation, the heart-sounds were very feeble and distant; no friction-sound. There was a faint mitral bruit. The character of the heart-sounds was not affected by posture. The impulse of the heart could not be felt, otherwise than as an ill-defined movement of the chest-wall at the region of the apex, spreading over a space the size of a crown-piece. The history of cardiac disorder at a former period suggested the possibility of pericardial adhesion.

At 8 P.M. on Nov. 13th aspiration was performed. A No. 2 aspirator needle, unguarded, was used. This was passed in the intercostal space between the fourth and fifth ribs, two inches to the left of the central line of the sternum. The needle was used as an exhausted needle; and directly the pericardium was penetrated, as shown by fluid freely passing into the aspirator, the point of the needle was pressed up against the chest-wall as closely as possible. The fluid flowed freely to fourteen ounces, and then stopped flowing. It was deeply tinged with blood, and deposited speedily a scanty coagulum, and subsequently a layer of blood debris. The supernatant fluid, still somewhat tinged, had a specific gravity of 1.024.

During the latter part of the operation it was noticed by all present that the needle could be felt when held by the finger to be moved with the contraction of the heart. The patient was breathing deeply from pain or excitement, and thus prevented any cardiographic movements of the needle being seen. During and for half an hour after the operation the patient complained of severe aching pain. This ceased after a dose of fifteen minims of liq. opii. After the operation the line of dulness had receded to close upon the middle line of the

sternum. The subclavian dulness had not disappeared, but was much less marked.

Nov. 14th.—Had passed a good night. Dr. Harvey thought the dulness a little increasing.

15th.—Reported considerably better. Lying down with ease; no dyspnoea; marked improvement in his look; pericardial dulness hardly reaches the right edge of the sternum. The first and second intercostal spaces are clear; third rib partly so.

Dec. 3rd.—Dr. Harvey reports that the pericardial dulness has nearly disappeared, and the pleuritic fluid has been mostly absorbed. Now that the heart-sounds can be plainly heard, a loud regurgitant mitral sound is developed.

10th.—Dr. Harvey reports to-day that the patient is able to sit up and walk about in the house.

*Remarks.*—This case shows the ease and safety with which paracentesis pericardii can be performed, for the relief of urgent symptoms resulting directly or indirectly from pericardial effusion. There was no difficulty in the operation itself, nor was there any subsequent symptom to mar the steady progress of the case to recovery. One point more is of especial interest—namely, that no peculiar or unfavourable importance need be attached to a free admixture of the blood with the fluid withdrawn—*The Lancet.*

PODOPHYLLIN FOR ACUTE RHEUMATISM.—Dr. R. F. Dyer, of Ottawa, Illinois, says that about five years ago he discovered that the active principle of podophyllum peltatum promptly relieves the pains in acute rheumatism. He usually follows it with the "alkaline treatment," and if the pains return, he recurs to the podophyllin. He commences with light doses, combined with Dover's powder at intervals of two to four hours until the bowels are moved very freely several times, and has been frequently astonished at the amount required to effect this. In some cases, he has given it in broken doses for three days before it took effect. The more severe the case, the more it required. While the bowels could be acted upon easily by other remedies, the action of this was delayed. Sometimes two or three evacuations relieved; at others it required eight or ten. After the bowels are evacuated, if relief be not obtained, he continues the use of the medicine in broken doses, not large enough to produce vomiting. If the pain return in two or three days, he repeats the treatment. He has thought that perhaps it was the free purgation that afforded relief, but upon trying active catharsis from other remedies, he is fully satisfied that there is some specific influence exerted by the podophyllin. Having fully tested this remedy for the past five years, he now recommends it to the profession.—*American Journal of Medical Sciences*, July, 1874



**TREATMENT OF UTERINE FIBROID BY HYPODERMIC INJECTIONS OF ERGOTINE.**—Dr. Theophilus Parvin records (*American Practitioner*, May, 1874) three cases of uterine fibroid, in which marked benefit followed the hypodermic administration of ergot. In all the cases heretofore treated, so far, as Dr. Parvin knows, the ergotine has been administered with glycerine, which Dr. J. T. Bowls, of Knightstown, Indiana, states to be a needless, and maybe injurious, addition, causing in some cases painful inflammation and threatening abscesses, which was not observed when the glycerine was omitted, and the efficiency of the injection was not found to be lessened.—Dr. A. Reeves Jackson reported to the Chicago Society of Physicians and Surgeons (*Chicago Medical Journal*, June, 1874) five cases of fibrous tumor of the uterus treated by the method of Hildebrandt, and in three of them with decidedly favourable results. Dr. Jackson obtained the best results from a solution prepared according to the following form: "Fifty grains of the extract (Squibb's) are dissolved in two hundred and fifty minims of water, the solution filtered and made up to three hundred minims, by passing water through the filter to wash it and the residue upon it. It represents ergot, grain for minim, free from alcohol or other irritating substance." Latterly he has used this solution exclusively, and thus far has seen no irritation, pain, or inflammation result from it. He no longer selects the abdomen as the site for injection. Although some parts of the abdominal wall—as about the umbilicus, for example—may be less sensitive to puncture than others, yet all parts of it are more sensitive than the deltoid region; and, inasmuch as the latter is more convenient, and the injections placed there equally efficacious, he now habitually selects the arm in preference to any other part of the body.—Another case was reported to the Society by Dr. J. H. Ethridge, three by Dr. H. P. Merriman, and one by Dr. S. Fisher, in all of which beneficial results followed the hypodermic use of ergotine.—*American Journal of Medical Sciences*, July, 1874.

**NO ANTAGONISM BETWEEN STRYCHNIA AND MORPHIA.**—The opinion that the life of animals poisoned by strychnia may be saved by morphia, was not supported by recent experiments made with animals. Dr. Froehlick, under the guidance of Prof. Rossbach, undertook to examine the behaviour of rabbits, placed under the influence of the alkaloids. He fixed the smallest lethal dose of strychnia and morphia, administered then first either the strychnia, and after some time the morphia, or *vice versa*. The animals were taken by tetanic cramps and died. When a mediate or deep morphia narcosis was obtained, the action of strychnia was more striking.—*Schmidt's Jahrb.*, July, 1874.—*Detroit Med. Review*.

It is contemplated to erect a memorial statue in honor of Ephraim McDowell, M.D., of Kentucky, the *founder of ovariectomy*. The appeal for aid to the project is first made to the women of the world who have been rescued by ovariectomy; next to the members of the medical profession, whose resources, have been so greatly increased; lastly to all who appreciate this advance in surgery, and its originator as worthy of the gratitude of the human race. All contributions to the memorial fund should be sent by money order or registered letter, addressed to Dr. James M. Kellar, No. 58 Green Street, Louisville, Ky., who has been appointed-secretary and treasurer by the committee.—(*Boston Med. and Surg. Journal*).

**A DIFFICULTY IN FŒTAL AUSCULTATION.**—Dr. J. Braxton Hicks calls attention to a point with regard to the diagnosis of pregnancy and the life of the foetus, by means of the existence of the foetal heart-sounds—which he had not unfrequently observed in the course of his practice, but which he does not remember to have seen in print—and summed up his observations as follows: First, that the number of vibrations of the abdominal muscles in a state of half-suspension can be distinctly counted, watch in hand; second, that their number and sound is so like those of a very rapid foetal heart that they may be mistaken for them.—*Philadelphia Medical Reporter—Medical Examiner*.

**TREATMENT OF SPASMODIC ASTHMA.**—Dr. Julio J. Lamadrid recommends the combination of chloral hydrate with the bromide of potassium in the treatment of spasmodic asthma. The following is the formula which he employs:

R—Chloral hydrat..... ʒj.  
Potassi bromide..... ʒijss.  
Syr. flor. aurantii,  
Aqæ dest., aa..... f. ʒi.

Sig. A teaspoonful in half a wineglass of water every two hours, until sleep is induced or dyspnoea is relieved.—*Phila. Med. Times*, Aug. 29, 1874.

**FUNCTION OF THE OPTIC THALAMI.**—Professor Fothnagel, of Freyburg, gives in a recent number of the *Centralblatt* the results of a series of experiments he has performed on rabbits to determine the functions of the optic thalami. They are—1. That these ganglia have nothing whatever to do with the innervation of the voluntary movements. 2. After their extirpation no indications can be obtained of any direct disturbance of the sensibility of the skin. 3. They appear to have immediate relation to the muscular sense.

**CROUP.**—What are *diseases which can simulate croup*?

Dr. H. Roger, of Paris, gives the following reply to this question.

1. (*Edema of the larynx*; but it is exceedingly rare amongst children, and by the examination of the superior part of the aryteno-epiglottic folds all doubt is removed.

2. The introduction of *foreign bodies*, such as a cherry-stone, a bean, &c.; but there is no fever; besides, recollection comes in aid, as well as the other signs of which we have spoken.

3. *Retro-pharyngeal abscess*, which gives rise to these symptoms—cough, fever, difficulty of respiration, suffocation; but the examination of the throat suffices to put an end to all idea of croup.—*The Doctor.*

**SOOTHING APPLICATION IN HERPES ZOSTER.**—

R—Collodion, ℥ j;

Morphiæ muriat., gr. viij.—M.

To be painted over the vesicles without breaking them open.

### REMOVAL OF THE UTERUS AND ITS APPENDAGES FOR FIBRO-CYSTIC TUMOR.

By E. H. TRENHOLME, M.D., B.C.L., Prof. of Midwifery and Diseases of Women and Children, Bishop's College, Montreal.

*Read before the Medico-Chirurgical Society of Montreal.*

Miss Isabella Buchanan, aged 33 years, born in Brantford, Ontario, was examined by me for the first time, in October, 1873, presenting a healthy appearance, of medium height and dark complexion, but somewhat spare in flesh. On special examination, a large globular tumor occupied the abdominal cavity, the abdominal walls very thin, and the skin over the tumor marked by numerous silver lines due to extreme distention; a dark line extends down the middle, and the superficial veins dilated; areolæ of both nipples dark and well marked. The tumor is firm, appears non-adherent, as it can be freely moved in all directions. Percussion elicits a dull note, and a small collection of fluid detected at upper part. Tenderness on pressure at the sides. Measurements are as follows:—Girth at umbilicus, 41 inches; ensiform cartilage to umbilicus, 9 inches; from latter to symphysis, 11 inches; from right ant. sup. spinous process to umbilicus, 10½ inches; from left ditto to ditto, 9¼ inches. Vagina greatly elongated and pointing to left side. Uterus cannot be brought into view with the speculum, and also beyond reach of finger, except when standing with the left leg somewhat elevated. The uterus and right ovary can be felt on the left side of the abdomen, over the tumor, before and during menstruation; left ovary not felt. The menses began

when fourteen years old, and have always been regular, but painful, till the appearance of the tumor, since which time they have been free from pain. During the menstrual flow cannot lie on the left side; at other times can rest equally on either side. Urinary organs in good order. The bladder is expanded upwards above the pubes, and when the urine does not flow freely it is readily expelled by pressure of the hand. Digestion and appetite good; bowels regular, but for some months has been troubled with flatulence.

**HISTORY.** Is of healthy parentage on the side of both father and mother; all her relatives are in good health.

The present ill health began in September, 1870, at which time she had an attack of what her physician called "gravel and inflammation of the bladder." After recovery from this sickness, she felt a growth in the left groin, which gradually increased in size. In 1871 the tumor grew rapidly and extended toward the right side. During the year had a slight leucorrhœal discharge, but, otherwise suffered no inconvenience.

In February, 1872, had an attack of menorrhagia, which recurred again in May of the same year, and three or four times since; the last of which was in July 1873. She continued in good health from this time to the end of January 1874, when an offensive vaginal discharge made its appearance, which gradually increased in quantity till the last week of the following month (February), when she had what she called a congestive chill, followed by high fever and profuse perspiration. The patient's flesh and strength now rapidly failed. Night sweats set in; the vaginal discharge has continued and is of a highly offensive odor. The menstrual flow is always preceded and accompanied by abdominal distention and intense pain. There are also continuous nausea, a foetid exhalation from the skin, and a foetid breath.

**Diagnosis.**—That the tumor is fibro cystic, involving the body of the uterus toward the left side; that the ovaries are intact; and that a communication exists between the cavity of the uterus and a suppurating cyst of the tumor.

**Prognosis.**—From the decided failure in flesh and strength, since seen last fall, the presence of a suppurating cyst, the increasing agony and distention of the abdomen during every monthly period, the incipient urinary disorder, and the depression of spirits, I judged that the present state of things could not last more than two or three months before death would supervene. When seen during last fall, I refused to operate so long as she could enjoy life, and as she had reached the limit of that period I now, at her earnest solicitation, concluded to remove the tumor, together with the uterus and its appendages. The condition of the urine indicated the administration of carbonate of lithia, (effervescing) for some days before operating.

OPERATION.—On the 12th of June, 1874 assisted by Drs. Hingston, Kennedy, & Gardner and in the presence of several other physicians—the operation was commenced by making an exploratory incision in the mesial line to the extent of about six inches—the upper end of the incision reaching to within one inch of the umbilicus. The subjacent tissues were then carefully divided on a director. On opening the abdomen it was found that the peritoneum was extensively adherent to the whole surface of tumor. During this part of the operation many small bleeding points appeared, but were perfectly controlled by the unsparing use of Pean's forceps. The adhesions on the anterior surface being now all separated, Wells' trocar was introduced at a point where there seemed to be indistinct fluctuation, but no fluid obtained. It was then found necessary to extend the incision  $2\frac{1}{2}$  inches above the umbilicus, and downward to within 2 inches of the pubes, in all making an incision of about 13 inches in length. The adhesions on its posterior surface were also found to be numerous. The tumor was then firmly grasped by the operator, and elevated from below upwards and forwards—adhesions were separated, and the uterine ligaments divided by the actual cautery. Whenever it became necessary to ligate vessels that were divided during the operation, fine flaxen carbolized ligatures were employed, and the ends cut off near the knot. About forty such ligatures were used and left in the cavity of the abdomen. The separation of all adhesions, among which was an attachment of the bowels about ten inches in extent, being accomplished, the tumor was elevated, and the vessels by which it had been nourished—passing from behind forwards to the posterior surface of the uterus just about the junction of the fundus with the cervix uteri, and on the left side—were secured; and strong carbolized linen ligatures applied and cut short, and the vessels divided. A triangular piece of peritoneum, three inches long and two broad (at the wide end) was torn from its connections—by the weight of the tumor—and removed. The tumor was then drawn upwards and backwards to bring into view the cervix uteri, which was found much elongated. The position of the ostium externum was next ascertained by external palpation. The vagina was observed to be much elongated likewise. A bougie about three-fourths of an inch in diameter was then introduced into the vagina, so as to elevate the pedicle, which was now transfixed with a long curved needle armed with a strong hempen ligature. The two halves were then securely ligated, and the wire écraseur applied about one-third of an inch above the ligatures. A few revolutions of the handle of that instrument sufficed for the constriction of the pedicle, which was then divided just above the constricted portion, and the tumor thus extirpated in two hours and fifteen minutes from first incision. The parts in the

neighborhood of the wound were now carefully sponged, and the abdominal cavity cleared of clots of blood and other foreign matter—carbolized sponges being constantly used. Considerable oozing, deep down in the right inguinal region, soon became apparent. It was ascertained to be arterial, and the bleeding vessel was secured and ligated—the ends of the ligature being cut off short near the knot, in this as in every other instance of ligation. The edges of the wound were brought together and closed by eight deep sutures of strong carbolized linen, and superficially by the same number of horsehair sutures. The pedicle was transfixed by two steel pins across the abdomen, the one in the centre and the other in the upper edge of the pedicle embracing the incision on each side; the écraseur was left as an additional security to prevent removal of the pedicle from between the edges of the wound. The cut surface of the pedicle was then smeared over with carbolic acid and perchloride of iron. The wound was covered with two layers of carbolized lint and secured by broad straps of adhesive plaster, passed from side to side. Cotton wool was placed over the abdomen and secured by a flannel bandage about ten inches wide. The patient's pulse at this time, as well as about half an hour previously, had become very weak, alternately flagging and reviving. Brandy was administered about every ten minutes, until the pulse grew stronger and fuller. She was not removed from the table until reaction had commenced, when she was put to bed—the bed-linen having been previously well-warmed—and hot bricks applied to her feet. She was then warmly covered with blankets. The temperature of the room had been made sufficiently warm and comfortable by a fire which was kindled for the purpose of heating the cautery irons.

AFTER TREATMENT.—After being comfortably placed in bed, a quarter grain dose of morph. mur. was administered against my judgment, at the urgent advice of some medical friends. Slept for a few moments at a time up to 4 p.m., when vomiting supervened, for which tincture of aconite was administered every hour with good effect.

At 10 p.m. drew off  $\mathfrak{z}\text{ij}$  of urine, and as the skin was acting well and temperature and pulse high; omitted aconite, and gave brandy and veratrum viride. Vomited but once since four o'clock.

13th, (2nd day,) 1 a.m.—Slept quietly for the last three-quarters of an hour; wind in bowels beginning to cause trouble; slight nausea and belching of wind. 4 a.m.—The medicine causes nausea and is omitted; removed  $\mathfrak{z}\text{ij}$  healthy urine. Has slept more than half the time since 1 o'clock. At 5 a.m. vomited; and at 6 a.m. nausea continues; skin acting freely. 7 a.m.—Took some milk and water; removed  $\mathfrak{z}\text{ij}$  urine. 11 a.m.—Vomited bilious fluid with ingesta. Gave tr. capsici. 5p.m.—Has slept well during the greater part of the

afternoon; skin acts well; feels easy. As pulse was a little hard, and fearing peritonitis, gave the verat. viride-*once more*, but was obliged to discontinue it as it caused nausea and emesis. About  $\frac{3}{4}$  of urine was removed at 3 p. m., and  $\frac{3}{4}$  at 7 p. m. 9 p. m.—Passed flatus per anum; attempts at emesis occurred at the same time, also at 10 p. m., when more gas escaped; after which she had what she called a “refreshing sleep,” for about twenty minutes. 11 p. m.—Skin cool and moist; tongue slightly furred. Drew off  $\frac{3}{4}$  urine, after which she slept well for one hour.

14th, (3rd day).—From 1 to 3 had a quiet, comfortable time; skin moist and cool; drew off  $\frac{3}{4}$  of clear, normal-looking urine, with a slight ammoniacal odor. 7 a. m.—Has been troubled a good deal with abdominal distension from difficulty in passing wind, which has not escaped for some hours. Is troubled with nausea, and vomited once. Gave aconite (Flemmings’)  $\frac{1}{4}$  drop, which gave some relief, but induced great diaphoresis. At 7.30, flatus escaped easily and freely. 9 a. m.—Nausea and a short spasm of pain in bowels, with a chill, and followed by emesis and perspiration. 10 a. m.—Skin cool; flatus escaped freely several times, followed by a natural stool. Dressed the wound, which is united by first intention, 11.30.—Passed urine naturally, without trouble; there is still slight nausea. Vomited again at noon, after which felt easy. Tongue a little coated. 1 p. m.—Took beef tea with relish, for the first time; before this had taken ice and water only. At 4 o’clock and again at 7 o’clock, passed urine naturally, and slept a good part of the afternoon quietly and well. At 10 p. m., her temperature was normal and pulse 100; skin cool and moist; passed urine and flatus easily. From this time till 3 p. m., 15th June, (4th day), she slept well the greater part of the time, the pulse gradually going down till it touched 86, and the temperature remaining normal. Changed her bed at 1 p. m., when she passed urine as usual. After this complained of phlegm in the throat and a tendency to cough, which greatly distresses on account of the pins passed through the pedicle hurting the abdomen. 8 p. m., skin moist but rather hot, thinks the heat of the day makes her feel so warm. Is very free from pain; takes beef tea well; flatus passes freely.

16th June, (5th day). 1 a. m.—Has not slept for last twelve hours, and says she is tired. 2 a. m.—Can’t sleep for bad dreams; skin hot and dry; pulse rather wiry; gave one drop aconite every hour. 4.30.—Pulse softer; skin cool and moist; tongue moist but furred; no pain; is tired; dreams still trouble. 8 a. m.—Cough begins to give much distress, for which gave ext. nucis vomici (fld.) in 1-20 drop doses every hour or two. 12 m.—Cough easy; slept well; skin cool and moist. 4 p. m.—Cough troubled a good deal at one o’clock, but since then easy and well; took half a cup of chicken

broth and a crumb of bread; skin moist; tongue clean. 6 p. m.—Cough troubles still; urine all right; takes broth freely.

17th June, (6th day), 9 a. m.—Had a good night; slept nearly all the time. All going well, except a little pain with last few drops of urine; says she “feels as though she should be out of bed.”

18th June, (7th day). 8 a. m.—All going on well; had a good night; pedicle troubles somewhat, and on examination find it nearly separated; there is a little pocket of pus at site of upper needle; all else looks well; urine passes freely, but of a smoky color. Ordered night and morning the effer. carb. lithia water.

19th June, (8th day). 8 a. m.—Slept since ten last night splendidly, and feels all right, “sleep very refreshing;” passed  $\frac{3}{4}$  normal urine; removed two deep sutures.

20th June, (9th day). 11 a. m.—Passed a fair night, but cough and bad dreams troubled her a good deal; urine a little smoky-colored but quite free; had very severe perspiration between 2 and 4 a. m.; every thing on her wet by it, but skin is now normal. There is free suppuration and discharge around pedicle, which is rapidly separating from the healthy tissue below; removed écreaseur and left the wire around pedicle in situ. Cough troubles. 10 p. m.—While dressing pedicle it separated, and with the two needles came away. The whole of the neck of the uterus came away and left a deep cavity, partly due to this cause and partly to elevation of abdominal walls. Wound looks well.

22nd June, (11th day). 10 a. m.—Feels well; tongue clean; urine abundant and normal; wound discharges freely, but very deep from retraction of vagina; had purulent discharge “per vaginam.” 10 p. m.—Heat of the day has prostrated her a good deal; all going on favorably.

23rd June, (12th day). 10 a. m.—Gave castor oil to open bowels, as she has had no passage since evening of third day. 10 a. m.—Bowels acted well, and abdomen not distended much. Removed all adhesive straps, and kept dressing in its place by a flannel roller only; removed about  $\frac{3}{4}$  pus, with some shreds of cellular tissue from around wound; passed a good day and feels well.

24th June, (13th day). 10 a. m.—Had a good night but bowels slightly loose; some slight pain and tenderness over bowels, also tympanites; wound looks very well and filling up fast with healthy granulations. 10 p. m.—On dressing wound and removing some shreds of cellular tissue, find a small pocket of pus to the left and above Poupart’s ligament communicating with a cavity of the wound.

25th June, (14th day). Appetite good; looks well; although slept little last night; tongue clean, urine normal; wound doing well and filling up rapidly; pocket of pus nearly gone.

26th June, (15th day.) 9 a.m.—Had a good night, slept nearly all the time; very free escape of pus from wound; the indurated and hyperplastic tissue around pedicle seems to be dissolving away, although a little still remains on the right side.

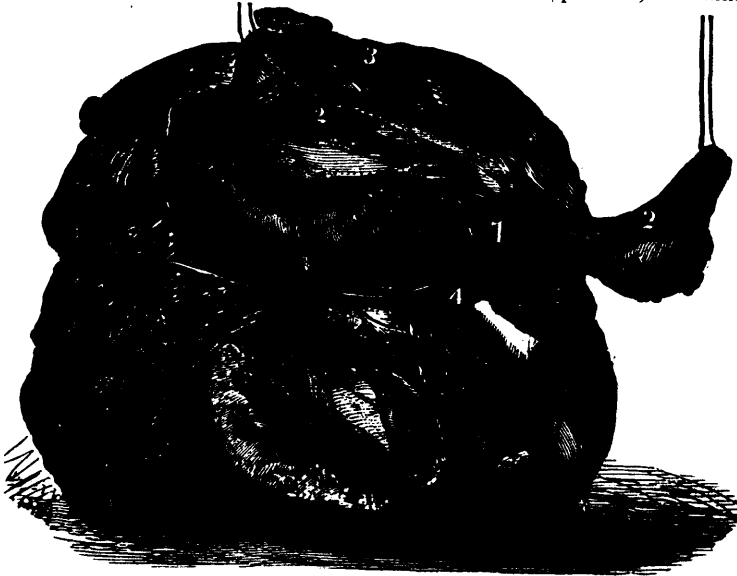
27th June, (16th day). 10 a.m.—Passed a poor night on account of wind in bowels. Gave veratrum viride again, but it caused emesis. Tongue, skin, etc., all well; wound doing well. 10 p.m.—Gave an injection—confection of senna failing to move the bowels—which opened then twice; changed the bed linen and placed a new hair mattress under her. Gave 5 grs. calomel which moved bowels freely at 11.30, after which she felt quite easy.

29th June. 3 p.m.—Doing well. Free discharge of pus. Sat up in bed for a short time.

side of the centre of the body of that organ. A No. 10 sound can be passed through a fistulous opening into a cavity situated in the centre and upper part of the anterior aspect of the tumour, which cavity will hold about 35 ozs. When removed this cavity was full of pus. The rest of the growth is of a uniform firm, fleshy character. The accompanying illustration gives a correct view of its contour and peculiarities of formation:

The operation, the details of which I have the pleasure of laying before you this evening, is one that has not as yet secured for itself a place among the recognized and legitimate operations of the surgeon.

That this *should have been* the case is not to be wondered at, when one considers its formidable character, and the grave risks to the life of the patient; but that it *can continue* to be thus placed



1. Uterus. 2. Ovaries.
3. Round Ligament.
4. Piece of paper which was put into the cervical canal for the purpose of indicating its position, as also the divided portion of the cervix.

2nd July—Wound discharges freely, although nearly filled up to a level with abdomen.

Continued doing well up to 6th July, when I discovered a pocket of pus on right side, which, by gentle pressure, freely escaped by the wound.

9th July.—Pocket of pus in right side gone; but there is one formed on left side. Bowels distended with gas, which does not pass off as easily as usual.

12th July.—Pocket on left side disappeared; wound doing well. Got up in an easy chair while bed was being made, and enjoyed the change.

17th July, (35th day).—Walked down town as far as Victoria Square; is perfectly well, but feels weak. Is gaining flesh rapidly; weighs 102 lbs., 32 lbs less than before the operation.

From the above date, till she left for her home in Ontario, she gained half a pound per day in weight, and is quite active on foot.

The tumor weighs 16 lbs, including the uterus and ovaries. It springs from the posterior and left

beyond the sphere of warrantable surgery is quite impossible in the face of the wonderful success that has of late attended it in the hands of such men as Pean and Keberle. True the risk is, notwithstanding the known perfection of detail in operating, fearfully great, and we would not pen one word that would tend to remove a particle of the heavy weight of responsibility from the shoulders of him who undertakes it; but, on the other hand, it is no small gratification and pleasure to be a fellow-worker with those who, in dealing with these unfavourable cases, have, by skill and daring, rescued some few of such doomed ones from an early grave.

I trust that the report of this case will not long remain the only successful one on record in Canada, and that where life has become a burden and in imminent danger of an abrupt termination, others may take heart and undertake the operation with hopeful courage, trusting that their efforts may be crowned with a similar success.—*Can. Med. Record.*

# THE CANADA LANCET:

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AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; J. M. BALDWIN, 805 Broadway, New York, and BALLIERE, TINDALL & Cox, 20 King William street, Strand, London, England.

TORONTO, FEBRUARY 1, 1875.

## MEDICAL ACCOUNTS.

In any month of the year it is to be presumed that with the medical practitioner the question of accounts must be a seasonable one. The customs and traditions of the old land have made of Christmas time, this interesting season. The exigencies of the people of this country, as being in the main an agricultural population, have made the autumn and early winter months the season of realization, the country doctor sharing the fortunes of his farmer client in this respect. In cities, medical accounts are usually settled annually, though the practice is becoming more general, of rendering bills every half year, or even every quarter. The long credit system is felt to be an evil, and productive of much loss; so that it is fit and proper that the professional man should follow more closely the practice of merchants, and require prompt payments on short credits. The modern physician would no doubt, find it exceedingly difficult, if not impossible, to get back to the good old times—when the fee was regularly paid at the time of the visit; but if this cannot be hoped for—or if it be not desirable, as some may think—we may at least, by united action, effect an improvement in medical financing.

We have oftentimes been compelled to regret that so many medical graduates set out in the practice of their profession with unformed business habits, and yet, from the nature of the system of medical education, which until lately left all the training of the student to be acquired within college walls, this essential requisite to success, of correct and well-formed business habits has been neglected. Note how differently the lawyer's edu-

cation is made complete. Lately, however, we have made an approach to giving the medical student something of the same business training that the lawyer's clerk receives. It is true, that a knowledge of pharmacy is made the primary object of the new system of requiring a student to compound medicines in the office of a qualified practitioner for a period of twelve months; but the incidental opportunity thus afforded of acquiring a business training—supposing the pupil to have a business man for his preceptor—cannot fail to be of great value.

The improvement required in medical finance, is, the institution of a more regular, oft-recurring and thorough system of collecting accounts. It is a reproach to the business habits of the profession to have to say, that a doctor only realises two dollars out of every three that he earns; and yet this is so generally asserted that we must accept it as a fact. This heavy percentage of loss will be likely to continue so long as people are permitted to incur indebtedness to medical men with the universality and recklessness that everywhere throughout Ontario seem to be the case. A lawyer acts with ten times the prudence that a medical man does in giving credit; and the merchant would speedily be ruined who should act with anything like the carelessness of the ordinary medical practitioner.

We advise the profession to insist on cash payments for all office consultations of a transient character, and to form the habit of regularly sending out the accounts at short intervals, say at the termination of a case if it be of short duration, at the end of every month in the case of artizans and small dealers, and every quarter or every half year in the case of persons in a better position to sustain their credit. The smaller the bill the easier it will be paid, the oftener the accounts are made out the less room will there be for serious loss; the sooner the happy moment of gratitude which ensues upon recovery is seized to collect the fees for the cure, the more satisfactory will the transaction be to the practitioner.

On all these grounds and considerations then, it behoves the medical man to be active and methodic, and to attend strictly to the business part of his labours.

The London *Lancet* is said to net an annual income of nearly twenty-five thousand dollars.

## PUBLIC HEALTH LEGISLATION.

The period for the assembling of the Dominion Legislature is approaching, and we trust Dr. Brouse will bring forward at an early day a Public Health Act requiring the appointment of Sanitary Officers either by civic corporations and town councils, or better still, by the Legislature, appointing a Health Officer for cities and counties, who should *ex officio* preside over Local Boards, exercising a due regard to the special qualifications of the individuals so named; the concurrence of the Local Boards in the sanitary measures proposed being made obligatory.

The reports of the State Board of Health of Massachusetts sufficiently demonstrate the advantages resulting from the enforcement of the laws relating to vaccination, and the continued prevalence of Small-pox in Montreal makes it abundantly evident that enactments more coercive than are now in existence, are an absolute necessity for the protection of the public. City and Town Boards of Health should have either plenary powers entrusted to them for the removal of persons affected with Small-pox to a Hospital sufficiently distant from the city or town, or otherwise, for the maintaining of a strict *cordon sanitaire* around the affected locality, thus effectually isolating the infected from the healthy. As a further precaution against the spread of the disease, Local Boards should carefully provide for the protection of recent vaccination, as also for the destruction of the virus in all infected clothing and premises, due regard being also paid to the sewerage and crowding in tenement houses of infected localities. Very great powers are given by the General Statutes to secure the public health in the State of Massachusetts, the Local Boards being empowered to make such ordinances as they may conceive necessary, and a penalty not exceeding a hundred dollars is affixed to the violation of any rule by them established. The effectual carrying out of the regulations depends then only on the judicious and fearless action of the persons appointed.

The legislation of the future should be mainly directed to the prevention of disease, and with this object in view competent physicians should always have a seat at the Board, who will be the best able to discriminate between what is and what is not harmful to the public in the character of the soil, of the water and of the air; also in the removal of

nuisances, e. g. slaughter houses, factories of soap and glue, imperfectly cared for latrines, pollution of streams, sewage, and water supply, imperfect house accommodation of the poor, &c. Adulteration and impurities of food should also be a matter for strict legislation, the two principal factors of cholera infantum in cities being unquestionably foul air from imperfectly trapped waste pipes, sewers, &c., and adulterated milk.

Dr. Nichols, in his report on the adulteration of milk, advocates, that when offenders are dragged to light they should be subjected to a severer penalty than fine; he says, "Once let it be understood that the perpetrator, when detected, shall be subjected to some ignominious punishment proportionate to the offence—shall be for instance, imprisoned in the House of Correction, in that case a different moral standard will at once be created, and what is now considered as a trivial misdemeanour, will henceforth take rank among the unpermissible as well as forbidden offences." To render the law more definite, and leave little to the discretion of juries, it would be desirable to establish a uniform standard of comparison, that is to say, to determine the limits beyond which the composition of pure milk is known not to vary, a point easily settled by competent chemists.

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 UNLICENSED PRACTITIONERS *vs.* LIFE INSURANCE COMPANIES.

A correspondent asks the question—Can a graduate from the United States who has not registered in Ontario, and who came here subsequent to the passing of the present Medical Act, examine applicants for any Insurance Company? or, in other words, is examining applicants for Life Insurance Companies practising medicine?

There is no doubt that such examinations come within the scope of the Medical Act, and all persons so practising are liable to the full penalty of the law. This matter would easily correct itself if the public were given to understand that a legal quibble might be raised when the policy became a claim, because the examiner was not a legally qualified medical practitioner. It would be well also for the medical referees, when referred to in regard to the appointment of examiners in different parts of the country, to ascertain whether the candidates for appointment as examiners are registered or not

before recommending them. We would advise our correspondent to write to the President of the Company, and inform him that the medical examiner is not a "legally qualified medical practitioner" according to the laws of the Province. Complaints are coming in from various parts of the country, and it is high time the Executive Committee of the Council took some action with a view to suppress irregular and unlicensed practitioners, either on its own behalf or by the appointment of a public prosecutor. The members of the profession cannot be expected to pay their annual tax for the support of the Council whilst unlicensed and irregular practitioners of every shade are practising un molested all around them.

#### CLINICAL LECTURES.

The Messrs Putnam & Sons, of New York, are about to commence the publication of a series of *Clinical Lectures* by representative American Medical Teachers, upon topics of practical interest. It is intended to select for publication in the series only lectures by recognized Medical instructors; either Professors in Colleges, or Hospital Physicians, in the large cities of the United States. These lectures will be upon medical, surgical, and a few special topics, and will express not only the personal views of the lecturers upon the subjects treated of, but also the latest pathological and therapeutical opinions connected with these topics, and will therefore be trustworthy guides to practice. The series will be begun by the publication of one lecture each month, but if sufficient encouragement be received, it is proposed to make the issue semi-monthly. The lectures will be printed in pamphlet form; each number to contain from twenty to thirty octavo pages. For the first year no subscriptions will be received, but the lectures will be sold separately at from 30 to 50 cents each. The series will be under the editorial control of Dr. F. C. Seguin. The first number will be ready about February 1st, and will consist of a lecture by Prof. Lewis A. Sayre, on Disease of the Hip-joint. This will be followed by lectures from Profs. Flint, Sr., Loomis, Jacobi, Thomas, Thompson, Sands, Draper and others.

**A NEW ANTISEPTIC.**—Certain experimental observations by Prof. Kolbe, of Leipzig, have demonstrated that salicylic acid possesses antiseptic properties of a superior order. It is capable of arresting the process of fermentation in grape sugar in a very short time, completely destroying the ferment. Small quantities of the acid rubbed into pieces of fresh meat prevents decomposition from taking place. It can also be easily removed by washing or rinsing, leaving very little trace behind. Sprinkled on ulcerated cancerous surfaces or sloughing sores, it destroys offensive smell and accelerates the healing process. It has also been tried in the form of spray in surgical operations with very good results. Possessed of such properties, this substance, Prof. Kolbe claims, is entitled to a place on the list of really useful articles of the *Materia Medica*.

**INDUCTION OF PREMATURE LABOR.**—Prof. Carl Braun, of Vienna, after having tried all the various plans for the induction of premature labor recommended by different authors, finds the following to give better results than any other. He has had very large experience, and therefore his opinion is entitled to consideration. His method consists in the employment of a pointed quill, with which the membranes are punctured. The point of the quill is placed on the palmar surface of the index finger, and then passed up through the cervix; or better still, a small sound is placed inside the quill, and a little beyond its point, so as to introduce it through the cervix, after which the sound is withdrawn, and the quill made to puncture the membranes.

The *British Medical Journal* reports a case of death from the administration of bichloride of methylene which occurred a short time since at the Royal London Ophthalmic Hospital. The patient was suffering from caries of bone near the lachrymal sac.\* Mr. Buller administered the anæsthetic, bichloride of methylene, by means of a perforated leather inhaler covered with flannel. Three drachms were inhaled, and in two minutes the breathing became stertorous. After the operation, the pulse at the wrist suddenly failed, and respiration ceased. All the ordinary means for restoration were employed, but without avail.



Professor Billroth, of Vienna, (*Boston Med. & Surg. Journal*) has recently, for the second time, performed the operation of extirpation of the entire larynx. The patient, a man aged fifty years, had for some time suffered from hoarseness and increasing dyspnoea. Dr. Schrotter, by laryngoscopic examination, detected on the left vocal cord a nodulated growth, apparently adherent to the mucous membrane, and which he diagnosticated to be an epithelioma. By the rapid progress of the disease the larynx became affected and the dyspnoea constantly increased, so that Dr. Billroth proposed to operate, giving at the same time a favorable prognosis with regard to the return of the disease, on the ground that no infiltration of the adjacent lymphatic glands could be detected. After the operation, a microscopic examination of the specimen completely confirmed the diagnosis of Dr. Schrotter. The patient died in five days apparently from hypostatic pneumonia.

IMPROVED TEST FOR SUGAR.—Dr. Haines, in the *Med. Examiner*, Chicago, gives an improved test for sugar. It is based on Fehling's test. Fehling's test consists of a solution of sulphate of copper, the neutral tartrate of potassium and caustic soda. This, when added to urine containing sugar, and heat applied, gives a yellowish-red precipitate. These substances cannot always be obtained in a state of purity, and the solution is liable also to become spoiled when allowed to stand for some length of time. He therefore proposes the following:—Sulphate of copper, 30 grs.; hydrate of potassium, one and a-half drachms; pure glycerine, two fluid drachms; pure water, six fluid ozs.—dissolve. This solution will, he says, keep for any length of time, without spoiling.

FIBROUS vs. BONY ANCHLOSIS.—Dr. Sayre, (*Med. Record* No. 3), in speaking of the importance of diagnosing between fibrous and bony anchlosis, says if movements are made at the joint and any motion whatever is secured during the manipulation necessary to a thorough examination of the case, it will be followed by more or less pain within twenty-four hours if the ankylosis is fibrous in its character. When bony ankylosis is present no movement at the joint can be effected, and consequently pain will not be produced. This he considers a most reliable diagnostic point.

PEPSIN IN CROUP.—Dr. J. E. Brown, of Cloverport, Kentucky, details in the *American Practitioner* for December, two cases of croup, in which he employed pepsin in powders, with a view to exert its solvent action on the false membrane obstructing the air passages. Other agents, as the atomization of the nitrate of silver, were employed, but Dr. Brown attributes the cure in both cases to the action of the pepsin. Giving this to a child of three and a-half years old, in four grain doses every two hours, along with quinine, he states that in the course of ten hours, at almost every act of coughing, large flakes of lymph were expectorated. In the second case, that of a girl four years old, the symptoms grew better from the beginning of the treatment by pepsin and quinine, and soon disappeared altogether. The membrane, which was not well organized, came away in forty-two hours after beginning the pepsin.

USES OF CARBOLIC ACID.—Among the recent applications of carbolic acid in therapeutics, may be mentioned its subcutaneous injection for the cure of intermittent fever, and of its injection for the cure of adenitis, erysipelas, arthritis and other local inflammations. It is asserted in a German journal that it immediately relieves the pain and quells the local fevers of these affections. Dr. Aufrecht, in the *Centralblatt*, speaks highly of the injection of carbolic acid in erysipelas. He says, "Not only were the erysipelatous swelling and redness rapidly dissipated, but the temperature, pulse and general health were remarkably improved." Carbolic acid, in aqueous solution, has also been given internally in the treatment of diabetes. It is relied upon to check the formation of fermenting principles, and in certain cases it has been of service in diminishing the amount of sugar in the urine. In other cases, however, it has proved ineffective.

ERRATA.—The following errata occur in the article in last month's issue on Injection of the Prostate, by Dr. Burt, page 131, 2nd col., 18th line, for "tonic" read "toxic;" page 134, 1st col., 25th line, for "prevalent" read "purulent;" 27th line, for "thing" read "theory;" 2nd col., 32nd line, for "ligation" read "injection;" page 135, 1st col., 34th line, for "their" read "this."

**ACTION OF EUCALYPTOL.**—This drug has been extolled as a febrifuge, but, according to the *Edinburgh Medical Journal*, Dr. E. Burdell does not think very highly of it. He considers that, as a febrifuge, it is slow and inconstant in its action, and in the treatment of ague he finds it in every respect inferior to quinine.

**APPOINTMENTS.**—Alexander McLellan, M. D., Amberley, Associate Coroner for the County of Bruce. Arthur Jukes Johnson, M. B., M. R. C. S., F. R. M. S., Yorkville, Associate Coroner for the County of York. Jackson Graham Davidson, M. D., Bowmanville, Associate Coroner for the United Counties of Northumberland and Durham.

### DEATHS.

On the 25th Nov., of malignant sore throat, Sarah Ester, youngest daughter of Dr. Boddington, Sparta, aged 1 year 3 months and 10 days. Also on the 26th Nov., of convulsions following scarlet fever, Amy Winnifred, eldest daughter of same, aged 3 years.

On the 11th ult., Mary Willmette Ann, eldest daughter of Dr. Field, Woodstock, aged 11 years. Also Alfred Headley, third son of same, aged 3 years.

### Toronto Hospital Reports.

#### CASE OF LUPUS NON EXEDENS.

UNDER THE CARE OF DR. GRAHAM.

H. Mc., æt. 28, single, a sailor by occupation, was admitted into the General Hospital Oct. 12th, 1874. Parents alive and healthy; says he has never had any disease except intermittent fever. About 10 years ago he noticed a small pimple the size of a pin's head over the region of the coccyx, which would occasionally break out and then heal. This continued for three or four years, and then it began to spread, and has continued to do so ever since. It now covers both sides of the buttocks, and extends anteriorly around the hips into the groin, also along the perineum. The diseased surface presents a dark reddish fleshy appearance; is raised about  $\frac{1}{4}$  of an inch above the level of the surrounding parts, and is everywhere studded with pustules. It is not very pain-

ful, feels spongy, and is attended with considerable itching at times. With the exception of this he seems to enjoy very good health; appetite good and bowels regular.

*Treatment*—R. Pot. Iodidi grs. xxx., Syr. Ferri Iodidi, ℥ss., Tr. Gent. co. ℥ij., Aq. ℥viiij—a tablespoonful three times a day. The local treatment consists in the application of Tr. Iodine, which, however, was found to produce too much irritation; zinc ointment and cod-liver oil. A lotion of lead and opium has also been used for some time. The case seems to be improving slowly under the above treatment.

**CASE OF FAVUS.**—P. J., æt. 22, was admitted into the Hospital Dec. 18th, 1874. Last Spring he had an attack of Typhoid Fever, and was attended in the Montreal General Hospital. About two months ago small yellowish crusts began to form on the crown of the head, and gradually spread over the entire scalp. The disease commenced in the hair follicles, and growing up spread around and formed small yellowish crusts. The hair became matted, and the scalp emitted the peculiar odor characteristic of this affection—a smell of mice.

*Treatment.*—The scalp was first soaked in olive oil, and then washed in castile soap and water. The hairs were then pulled out, and red precipitate ointment well rubbed in. Latterly the oleate of mercury has been used as an ointment. The case is improving.

PECULIAR CASE OF NERVOUS DISEASE, UNDER THE CARE OF DR. RICHARDSON.

H. H., æt. 24, a farmer, was admitted into the Hospital Dec. 29th, 1874. He had always been very healthy, until about two years ago he got wet, from which he took a severe cold; this was followed by loss of voice, due to paralysis of the nerves of phonation, and he has never been able to speak much since. About nine weeks ago he was seized with spasmodic contraction of the flexor of the left arm. This was preceded by pains at the elbow, and subsequently at the back of the wrist, ulnar side. His legs are also affected with slight spasmodic contractions, and as a consequence he walks with a peculiar springing gait. The family history could not be obtained.

*Treatment.*—Stimulating liniments applied to the limbs along the course of the nerves, and over painful parts, together with a liberal supply of good nourishing and easily digested food.

**FRACTURE OF THE PATELLA.**—W. C., æt. 28, laborer on board a dredging machine on the Welland Canal, was admitted Nov. 3rd, 1875. Some time in July last he was thrown from a buggy, alighting on his head and knee. When lifted up the patella was found to be broken across in the transverse direction. He was treated for about six weeks by some medical man in Welland, and then returned to his work. A short time afterward he slipped on the frost on the deck of the dredge, and fell breaking it a second time. This fracture is also in the transverse direction, the upper fragment being drawn up to a considerable extent.

*Treatment.*—He is placed on a firm mattress, with the fractured limb raised on an inclined plane at an angle of about 40 degrees. Strong and broad strips of adhesive plaster are applied to the integument above and upon the upper fragment, which is drawn downwards in apposition, and a figure-of-eight bandage applied to retain it in situ, and also to hold the strips of adhesive plaster firmly in place. Extension is kept up by means of a weight and pulley, connected to the strips of adhesive plaster; a weight of about 12 pounds being sufficient for the purpose.

**CASE OF POTTS' FRACTURE, UNDER THE CARE OF DR. CASSIDY.**

T. M., æt. 40, laborer, of good family history; admitted Nov. 29th, 1874. The leg was fractured by attempting to kick a dog, but missed him and struck the stove. There was much deformity and great swelling when admitted. The leg was first placed on pillows, and extended until swelling was reduced, after which it was put up in a plaster-of-Paris bandage. The bandage is made of two plies of old blanket in the shape of a stocking slit open in front and stitched along the posterior part so as to form a sort of hinge. Plaster-of-Paris, mixed with water to the consistence of cream, is then laid on between the folds on each side and moulded to the form of the limb, and pared off in front so as to meet, and then allowed to harden. The stitching along the posterior part forms a hinge-like arrangement which permits it to be opened up at any time to examine the parts.

**CASE OF CHRONIC LEAD POISONING.**—T. C., æt. 31, laborer, worked at silver smelting in Wyoming Territory, U. S., and Fraser's River for about four years. He also worked for some time in the

gold mines, Cariboo, previous to this; he was admitted into the Hospital, Toronto, on the 24th of June, 1874. He was first seized with paralysis about 17 months ago. It came on suddenly in both arms and legs. At the time of his admission he could scarcely walk. He had very little power of the hands or fingers, especially of the left side, and the muscles were very weak and flabby in both arms and legs. There was obstinate constipation of the bowels.

*Treatment.*—Occasional doses of calomel and jalap, followed by black draught, to unload the bowels, and Iodide of Potassium in infusion of calumba thrice daily, constitute the principal treatment.

### Book Notices.

**THE MEDICAL REGISTER AND DIRECTORY OF THE UNITED STATES**, by S. W. Butler, M.D. Philadelphia: Price \$6.00 American currency.

The above work is a very handsome volume, and comprises about 800 pages of closely printed matter. It is systematically arranged by States in alphabetical order, and contains the names and post-office addresses of more than fifty thousand physicians, with lists of medical societies, colleges, hospitals and other medical institutions, and abstracts of the medical laws of each State, notices of mineral springs, &c. The labor bestowed on the compilation of this book must have been very great, and no wonder the author's health gave way under such a load of work as this, together with his labors as editor of the *Med. & Sur. Reporter* entailed on him. The work contains a fund of information regarding medical and charitable institutions of every kind, not to be found elsewhere. It should find a place in the library of every medical man in the United States and Canada.

**CROUP IN ITS RELATIONS TO TRACHEOTOMY**, by J. Solis Cohen, Lecturer on Diseases of the Throat, Jefferson Medical College. Philadelphia: Lindsay & Blakiston. Toronto: Hart & Rawlinson. Price \$1.00.

The Essay which forms this book was read before the Philadelphia Co. Med. Society, July 14, 1874, and referred by that Society to the Medical Society of the State of Pennsylvania. The latter Society ordered it to be printed in their transactions

for the year 1874. The essay is based on a careful study of the published records of more than 5,000 cases of Tracheotomy in Croup, performed in various portions of the world. In summing up the points discussed in the Essay, he draws the following conclusions:—

1. That there are no insuperable contra-indications to tracheotomy in croup;
2. That the administration of an anæsthetic for the purpose of controlling the child's movements is admissible in performing the operation; but that it should be used with great caution;
3. That a careful dissection should be made down to the wind-pipe, and hemorrhage be arrested before incising it, whenever there is at all time to do so;
4. That the incision should be made into the trachea as near the cricoid cartilage as possible, to avoid excessive hemorrhage, and subsequent accidents which might occasion emphysema;
5. That a dilator should be used, or a piece of the trachea be excised, whenever any difficulty is encountered in introducing the tube;
6. That the tube should be dispensed with as soon as possible; or altogether if the case will admit of it;
7. That assiduous attention should be bestowed upon the after-treatment, especially that of the wound; and that a skilled attendant should be within a moment's call for the first twenty-four or forty-eight hours immediately following the operation.

A GUIDE TO THE PRACTICAL EXAMINATION OF URINE, FOR THE USE OF PHYSICIANS AND STUDENTS, by James Tyson, M.D., with illustrations: Philadelphia, Lindsay & Blakison: Toronto, Hart & Rawlinson. Price \$1.50.

A PRACTICAL TREATISE ON THE MEDICAL & SURGICAL USES OF ELECTRICITY, including Localized and General Faradization, Galvanization, Electrolysis and Galvano-Coutery, by Geo. M. Beard, A.M., M.D., and A. D. Rockwell, A.M., M.D., New York. New York, Wm Wood & Co.: Toronto, Willing & Williamsom.

This is a second edition revised, enlarged and mostly re-written, and contains nearly two hundred illustrations. It comprises about 800 pages of closely printed matter, and is the most complete treatise on the subject yet published. It is divided into three parts, "Electrophysics," in which is discussed the science of electricity and galvanism, the different forms of batteries, the currents, &c.; "Electro-therapeutics," or its application to diseased conditions, and "Electro-surgery."

The book itself is well printed on good paper, and with clear new type—the more prominent points being set in italics. Those who wish to keep themselves posted on this branch of Therapeutics should not fail to secure a copy.

ARCHIVES OF ELECTROLOGY AND NEUROLOGY, a Journal of Electro-Therapeutics and Nervous Diseases; for Nov. 1874. Edited by George M. Beard, A.M., M.D.

TRANSACTIONS OF THE AMERICAN OTOLOGICAL SOCIETY. 7th annual meeting, July 15, '74. Boston: James Campbell.

ON REFLEX IRRITATIONS throughout the Genito-urinary tract, resulting from contraction of the urethra at or near the meatus urinarius, by Fessenden N. Otis, M.D., New York.

### Medical Items and News.

Dr. Adolphus (Chicago *Medical Examiner*), says: The time will arrive, and it is foreshadowed now in the practice of not a few practitioners, when the forceps will be used in cases where delivery would have terminated by the natural powers, whenever the second stage of labor ceases to be actively progressive. By this procedure much anxiety, pain and exhaustion is spared the mother. It is especially indicated in primipara, where owing to delay, so many children are still-born.

ABSENCE OF THE CORPUS CALLOSUM.—Dr Malinverni, Professor of Pathological Anatomy in the University of Turin, reports in the *Gazetta delle Cliniche* a case where there was no corpus callosum. The patient, who died of typhoid fever, was well known to have had well-developed intellectual faculties. The septum lucidum and the convolution of the corpus callosum were absent, and the lateral ventricles communicated freely with each other.—*Med. Record*.

ACCIDENTAL NEPHROTOMY.—The *Wiener Med. Woch.*, states that a man of twenty-five, having been stabbed in the left renal region, a fleshy tumour extruded through the wound by the act of coughing. This was found to be the kidney, which was eventually removed after a double ligature had been applied to the pedicle. The man did well.—*London Lancet*.

A HANDSOME MEDICAL FEE.—Dr. Waldau, of Berlin, assistant of the late Von Graefe, received 25,000 thalers from the banker Bleichroeder, for a cataract operation.—*Medical Record*.

**A NEW CATARACT-KNIFE** (*The Lancet*, Nov. 28, 1874)—C. Bader, Ophthalmic Surgeon to Guy's Hospital, gives the following description of a new knife, which has of late been used to obviate the inconvenience arising from the inward movement of the eyeball when commencing the corneal incision in the operation for cataract. It so thoroughly answers its purpose that it can be recommended in preference to other cataract-knives. If, standing behind the patient, we wish to operate upon the right eye with the left hand, two different knives—one for the right and one for the left eye—are required, unless the operator prefers using the right hand only, when the bent knife, used with the right hand for the left eye, may be used for the right eye also, commencing, however, the incision at the outer margin of the corner. By the employment of the bent cataract-knife, commencing the incision at the inner margin of the cornea, great control is obtained over the movements of the eyeball, whether the incision be made upwards or downwards. The natural inclination of the eyeball to roll inwards towards the nose when operating in the usual manner, instead of being a source of trouble, becomes a help by the use of the bent knife. The blade is somewhat wider than that of Von Graefe's knife, the point is in a line with the back, and the blade is bent away from the handle in such an angle as to admit of easy access to the inner (nasal) margin of the cornea.—*Med. Times, Philadelphia.*

**SULPHO-CARBOLATE OF ZINC IN PRURITIS.**—Mrs J. G. Brown, M.D., of the Illinois Women's Hospital. (*Med. Examiner*,) recommends as an effectual remedy for obstinate pruritis of the vulva, a solution of sulpho-carbolate of zinc, 30 grains to the ounce of water. After washing with warm water, the solution is applied and left to dry. The application may be made twice a day, to begin with, afterwards once a day, or two or three times a week.

**THE UNIVERSITY OF VIENNA.**—The total number of matriculated students in the University of Vienna during the year 1873-'74 was 7,526; of whom 1,109 were medical students in the winter session, and 1,036 in the summer session. The number of new entries in the medical department was 194. Among the largest medical classes were those of Profs. Brucke (885); Hyrtl (680); Bamberger (540); Billroth (509); Dumreicher (495); Rokitsansky (354).

**ONYCHIA MALIGNA AND INGROWING NAIL FINGERS.**—Both of these troubles can be relieved by the local application of powdered Nitrate of Lead, to the inflamed and ulcerated part. But few applications are needed, about once in three or four days. The projecting edge or edges of nails should first be clipped away.

**WHOOPING COUGH.**—Dr. Wilde (*Deutsches Archiv*), claims that he can cure every case of whooping cough within eight days, by the following mode of treatment:

The patient should be kept in-door to avoid exposure to cold. Then, at the commencement of every paroxysm, a teaspoonful of the following mixture:

R—Chloroformi, ℥ʒi.  
Æther Sulphur, ℥ʒij.  
Ol. Terebinth, ℥ʒiij.—M.

is poured on a cloth and held about two inches from the mouth of the patient till the paroxysm subsides.—*Chicago Medical Examiner.*

**REMEDY FOR DYSMENORRHOEA.**—Dr. Edis recommends in some cases a suppository of half a grain of morphia with one-seventh of a grain of atropine inserted at bed time in dysmenorrhœa. This, he says, will often allay the most severe pain, and enable the patient to procure sleep, when otherwise she would have passed the night in agony, the stomach itself refusing to absorb anodyne mixtures, rejecting them as soon as swallowed, and thus cutting the patient off from the ordinary means of relief. In other cases of dysmenorrhœa he recommends an enema of water as hot as the patient can conveniently bear, combined or not with half a drachm of laudanum.—*Medical Press & Circular.*

The Drs. Mayencon and Bergeret have announced in *La France Medicale*, as the result of extended observations in regard to the action of arsenic and antimony upon the organisms of men and animals, the following general conclusions:

1. Arsenic is absorbed and diffused in the organism with very great promptness. Elimination through the urine takes place immediately; but more is eliminated by the liver than by the kidneys.

2. Antimony is absorbed and diffused more slowly. Urinary elimination rarely begins on the first day; but more is carried off by the liver than by the kidneys.

**A NEW CAUSE FOR BLUE (LEAD) LINE ON GUMS.**—A writer in the London *Lancet* asserts that the constant use of powdered charcoal as a dentifrice will produce a blue line on the gums, closely simulating that of lead-poisoning.—*Medical Record.*

The *Liberal*, a new Reform paper, has been started in Toronto by Messrs Cameron & Co., of London, editors and proprietors of the London *Advertiser*. We gladly welcome this new paper to our exchange list, and wish the proprietors success in their new and promising enterprise.

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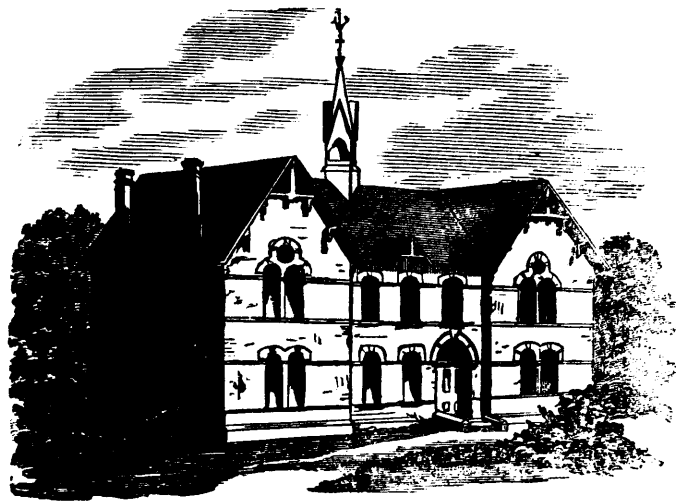
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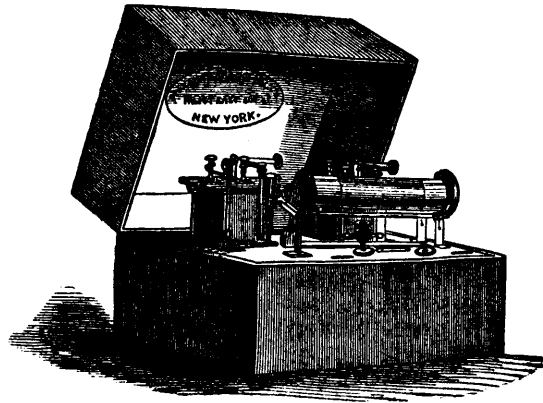
The Session will commence on THURSDAY, the 1st of October, 1874, and continue for Six Months. The Lectures will be delivered in the new College building, close to the Toronto General Hospital. Full information respecting Lectures, Fees, Gold and Silver Medals, Scholarships, Certificates of Honor, Graduation, &c., will be given in the annual announcement.

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THE Registrar hereby gives notice, that the REGISTER for the year 1874 will, in a short time, be ready for distribution, and will be sent free of cost to the Registered Members who have already paid the annual fee of \$1 for the year 1874. It will also be sent free of cost to those members who have not already paid, as soon as the Registrar receives the annual fee. The Registrar trusts that the above notice will be sufficient to insure the immediate payment of the fees, and distribution of the REGISTER to all Registered members of the profession.

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

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

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

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

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

### CAUTION.—BEWARE OF PIRACY AND IMITATIONS.

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

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

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

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

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

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" Sulph.....	" 0 33	" Bismuth.....	" 0 45	" Ammon. Co.....	" 0 20
" Co.....	" 0 28	" Donovan.....	" 0 28	Syr. Aurant.....	" 0 90
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Argenti Nit. fus.....	" 1 30	" Potassæ.....	" 0 17	" Ferri Iod.....	" 0 65
Balsam Copaib.....	8 oz. bot. 0 63	Mist. Ferri Co.....	8 oz. bot. 0 20	" Strych. Phos. Co.....	" 0 45
Bismuth, Car.....	oz. 0 35	Morph. Sul.....	oz. 6 50	" Hypophos.....	" 0 40
Ceril Oxalas.....	" 0 50	" Mur.....	" 6 50	" Phosph. Co.....	" 0 30
Chloral Hydrate.....	" 0 15	Ol. Crotonis.....	lb. 0 25	" Senegæ.....	" 0 20
Chlorodyne.....	" 0 15	" Jecoris Asselli.....	" 0 30	" Scillæ.....	" 0 24
Chloroform.....	lb. 1 40	" Olivæ Opt.....	" 0 85	Tinct. Aconit.....	" 0 24
Cinchon, Sul.....	oz. 0 60	Opium.....	" 1 00	" Arnica.....	" 0 20
Ergot, pulv.....	" 0 13	" Powd.....	gross. 0 30	" Calumb.....	" 0 20
Emp. Lyttæ.....	lb. 1 25	Pl. Aloes.....	" 0 30	" Camph. Co.....	" 0 20
Ext. Belladon.....	oz. 0 12	" " et Ferri.....	" 0 38	" Cardam. Co.....	" 0 20
" Colocynth Co.....	" 0 05	" " Myr.....	" 0 30	" Catechu.....	" 0 24
" Gentian.....	" 0 20	" Assafetid.....	" 0 45	" Cinchon Co.....	" 0 20
" Hyosciam, Ang.....	" 0 30	" Cath. Co., U. S.....	lb. 1 75	" Colch. Sem.....	" 0 20
" Sarza Co., Ang.....	" 0 75	" Hydrarg., Mass.....	gross. 0 30	" Digital.....	" 0 30
" Nucis Vom.....	" 0 07	" Subchlor. Co.....	" 0 35	" Ergot.....	" 0 18
" Taraxacum.....	" 0 50	" Rhei. Co.....	" 0 40	" Ferri Perchlor.....	" 0 20
Fol. Buchu.....	" 0 30	" Podophyllin, Co.....	" 0 25	" Gentian Co.....	" 0 20
" Senna.....	" 0 90	Plumbi Acet.....	lb. 0 60	" Hyosciam.....	" 0 75
Gum, Aloes Soc.....	" 1 10	Potass. Acet.....	" 0 35	" Iodine.....	" 0 24
" " pulv.....	" 0 60	" Bicarb.....	" 1 25	" Nucis Vom.....	" 0 63
Acacia, pulv.....	lb. 0 40	" Bromid.....	" 7 00	" Opil.....	" 0 30
Glycerine, pure.....	oz. 0 12	" Iodid.....	" 0 75	" Rhei Co.....	" 0 20
Ferri, Am. Cit.....	" 0 65	Pulv. Creta Co.....	" 3 00	" Valer.....	" 0 25
" et Quin. Cit.....	" 0 15	" " C Opio.....	" 2 40	" Verat Vir.....	" 0 70
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Ferrum Redact.....	" 0 15	" " Co.....	" 2 40	" Zinci.....	" 0 80
Hydrarg. Chlor.....	" 0 12	" Jalapa.....	oz. 2 75	Vin. Ipecac.....	8 oz. bot. 0 30
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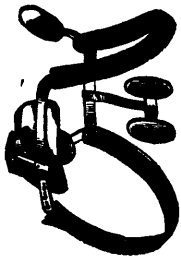
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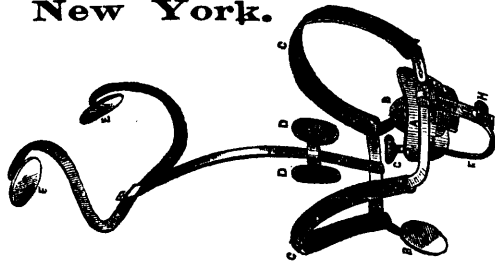
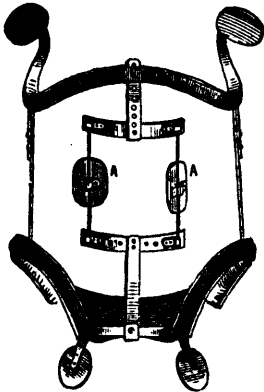


Fig. No. 19.

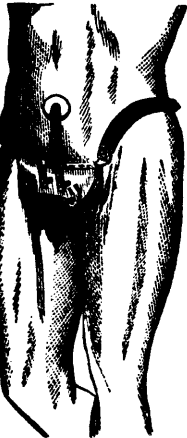
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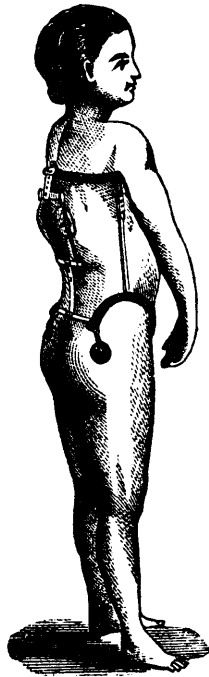
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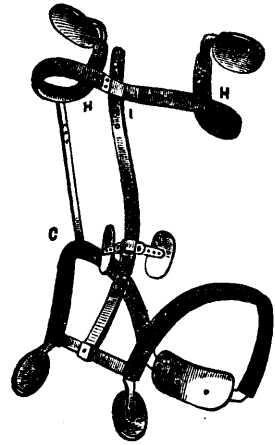
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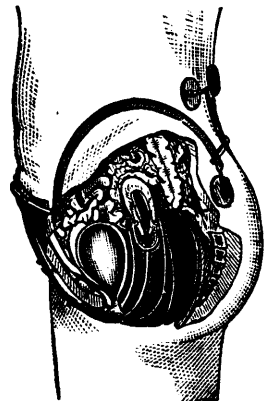
Fig. No. 14.

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