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

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Vol. XXIX. |  
No. 8.

TORONTO, APRIL, 1897.

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INDEX TO CONTENTS.

	PAGE.		PAGE.
<b>ORIGINAL COMMUNICATIONS—</b>		<b>NERVOUS DISEASES AND ELECTRO-THERAPEUTICS—</b>	
Chronic Suppuration of the Middle Ear, Mastoid Infection, Sigmoid Sinus Thrombosis, Septic Pneumonia, Death.....	375	Static Electricity in the Treatment of Nervous and Mental Diseases.....	406
The Definition and Scope of Orthopedic Surgery.....	380	<b>NOSE AND THROAT—</b>	
<b>SURGERY—</b>		Eucaine and Cocaine Compared.....	411
A New Ring for use in Intestinal Anastomosis.....	384	Electrolysis for the Reduction of Spurs of the Nasal Septum.....	414
A Review of the Author's Method of Anchoring the Kidney.....	388	<b>PÆDIATRICS—</b>	
<b>MEDICINE—</b>		Eunuchs in China.....	416
Remarks on the Early Feeding of Typhoid Patients.....	392	Indications for Operative Interference in Croup.....	417
The Stimulating Treatment of Pneumonia.....	396	Hysteria in Children.....	418
<b>OBSTETRICS AND GYNAECOLOGY—</b>		The Bicycle.....	418
Symptoms, Diagnosis and Time for Operation in Ruptured Tubal Pregnancy.....	399	Treatment on Stomatitis.....	419
		<b>EDITORIAL—</b>	
		Our American Brethren and the British Medical Association.....	421
		Medical School Journals.....	422
		The Liabilities of Hospital Trustees.....	423
		Cold Air in Incipient Phthisis.....	423
		Holidays.....	424

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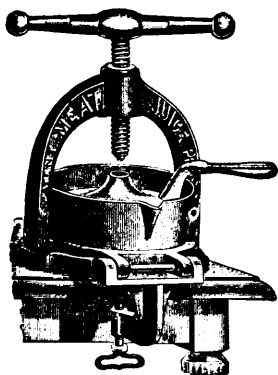
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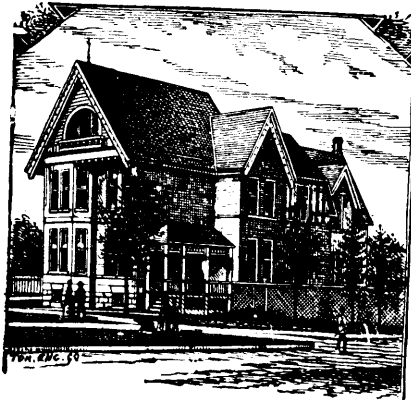
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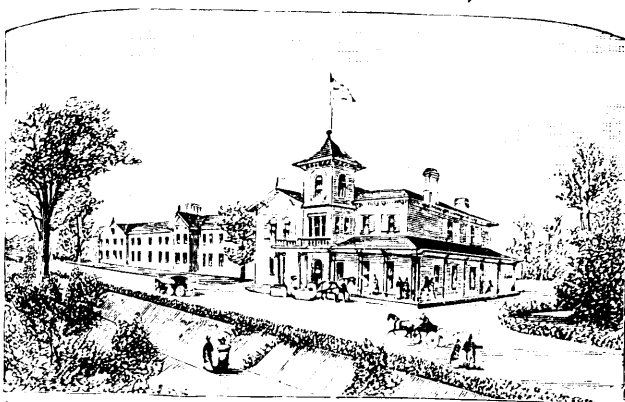
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It is superior to the Pepsin preparations, since it acts with more certainty,  
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Antiperiodics.	Aperients—continued.	Cathartics.
Antiperiodic.	Colocynt et Hyoscyamus.	Cascara Cathart. (Dr. Hinkie.)
Cinchonidæ Sulph.....1 gr.	Ext. Coloc. Co.....2½ grs.	Cascarin.....
Res. Podophylli.....1-20 gr.	Ext. Hyoscyami.....1½ gr.	Aloin.....aa ¼ gr.
Strychniæ Sul.....1-33 gr.	<b>Laxative.</b>	Podophyllin.....1-6 gr.
Gelsemin.....1-20 gr.	Pulv. Aloes. Soc.....1 gr.	Ext. Belladon.....¼ gr.
Ferri Sulph. exs.....½ gr.	Sulphur.....1-5 gr.	Strychnin.....1-60 gr.
Ol. Res. Capsici.....1-10 gtt.	Res. Podophyllin.....2-5 gr.	Gingerine.....½ gr.
<b>Chinoidin, Comp.</b>	Res. Guaiac.....½ gr.	<b>Cathartic Comp. U. S. P.</b>
Chinoidin.....2 grs.	Syr. Rahmni.....q. s.	<b>Cathartic Comp. Imp. 3 grs.</b>
Ferri Sulph. Exsic.....1 gr.	<b>Peristaltic Aperient.</b>	Ext. Col-c. Comp.....
Piperina.....½ gr.	(Warner & Co.)	Ext. Jalap.....
<b>Cinchoniæ Sulph.....2 grs.</b>	Aloin.....1-10 gr.	Podophyllin, Leptandrin..
Cinchonidæ Salicyl.....2½ grs.	Ipecac.....1-30 gr.	Ext. Hyoscyami.....
Cinchonidæ Sulph.....1 gr.	Strych. Sul.....1-100 gr.	Ext. Gentianæ.....
Cinchonidæ Sulph.....2 grs.	Succua. Bellad.....1-20 gr.	Ol. Menth. Pip.....
Cinchonidæ Sulph.....3 grs.	<b>Podophyllin*et Hyoscyamus.</b>	<b>Cathart. Comp. Cholagogue.</b>
Cinchonidæ Comp., Warner & Co.	Podophyllin.	Res. Podophylli.....½ gr.
Cinchonid Sul.....2 grs.	Ext. Hyoscyami.....aa ½ gr.	Pil. Hydrarg.....¼ gr.
Salicylic Ac.....1 gr.	<b>Podophyl. Comp. (Eclectic.)</b>	Ext. Hyoscyami.....½ gr.
Opium.....½ gr.	Podophyllin.....½ gr.	Ext. Nuc. Vom.....1-16 gr.
Ol. Res. Capsici.....½ gr.	Leptandrin.....1-16 gr.	Ol. Res. Capsic.....½ gtt.
<b>Quiniæ Sulph.....1 gr.</b>	Juglandin.....1 16 gr.	<b>Hepatica.</b>
Quiniæ Sulph.....2 grs.	Mecrotin.....1-32 gr.	Pil. Hydrarg.....3 grs.
Quiniæ Bi-Sulph.....1 gr.	Ol. Res. Capsici.....q. s.	Ext. Coloc. Co.....1 gr.
Quiniæ Bi-Sulph.....2 grs.	<b>Podophyl. et. Bellad.</b>	Ext. Hyoscyami.....1 gr.
	Podophyllin.....½ gr.	<b>Podophyllin, ¼ gr.</b>
	Ext. Bellad.....½ gr.	<b>Rhei Comp. U. S. P.</b>
	Ol. Res. Capsici.....½ gr.	<b>Cascara Comp.</b>
	Saccharum Lact.....1 gr.	Ext. Cascara Sag.....3 grs.
	<b>Sumbul Aperient.</b>	Res. Podophyllin.....½ gr.
	(Dr. Shoemaker.)	
<b>Aperients.</b>	Eqt. Sumbul.....1 gr.	<b>Diaphoretics.</b>
Aloes, et Mastich.	Asafetida.....1 gr.	<b>Analeptic.</b>
<b>Anti-Constipation.</b>	Ext. Nuc. Vom.....½ gr.	Pv. Aniraonialis.....¾ gr.
Podophylli.....1-10 gr.	Ext. Cascara Sag.....½ gr.	Pv. Res. Guaiac.....1 gr.
Ext. Nuc. Vom.....½ gr.	Aloin.....½ gr.	Pv. Aloes Socot.....¾ gr.
Pv. Capsicum.....½ gr.	Gingerine.....½ gr.	Pv. Myrrhæ.....½ gr.
Ext. Belladonnæ.....1-10 gr.		
Ext. Hyoscyami.....½ gr.		
<b>Aperient.</b>	<b>Astringents.</b>	
Ext. Nuc. Vom.....½ gr.	<b>Astringent.</b>	<b>Diaphoretic.</b>
Ext. Hyoscyami.....½ gr.	Ext. Geranni.....2 grs.	Morphiæ Acetat.....1-25 gr.
Ext. Coloc. Co.....2 grs.	Pv. Opii.....¼ gr.	Pv. Epecac.....¼ gr.
<b>Cascara Alterative.....Pink</b>	Ol. Menth. Pip.....1-20 gtt.	Pv. Potass. Nitrate.....1 gr.
(Dr. Leutaud).	Ol. Res. Zingiber.....1-20 gtt.	Pv. Camphoræ.....¼ gr.
Cascarin.....½ gr.	<b>Opii et Plumbi Acet.</b>	
Stillingia.....½ gr.	Pulv. Opii.....½ gr.	
Fuonymin.....½ gr.	Plumbi Acet.....1½ gr.	
Piperine.....1-100 gr.		
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Ol. Sabinae..... $\frac{1}{2}$  gr.

### Pil. Phosphori Cum. Cantharide Co.

Phosphori.....1-50 gr.  
Pv. Nuc. Vom.....1 gr.  
Sol. Canthar. Conc't.....1 m.

## Laxative.

### Aloin et Strychnin et Belladon.

Aloin.....1-5 gr.  
Strychnin.....1-60 gr.  
Ext. Belladon..... $\frac{1}{2}$  gr.

## Sedative.

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Ext. Belladon..... $\frac{1}{2}$  gr.

### Sedative.

Ext. Sumbul..... $\frac{1}{2}$  gr.  
Ext. Valeriana..... $\frac{1}{2}$  gr.  
Ext. Hyoscyami..... $\frac{1}{2}$  gr.  
Ext. Cannab. Ind.....1-10 gr.

### Ulsemin..... $\frac{1}{2}$ gr.

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Phosphori.....1-50 gr.  
Ext. Cannab. Ind..... $\frac{1}{2}$  gr.

## Tonics.

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Pulv. Aloes Socot..... $\frac{1}{2}$  gr.  
Pulv. Zingib. Jam.....1 gr.  
Ferri Sulph. Exsic.....1 gr.  
Ext. Conii..... $\frac{1}{2}$  gr.

## Tonics—continued.

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Pulv. Aloes Soc.....1 $\frac{1}{2}$  grs.  
Ext. Nuc. Vomice..... $\frac{1}{2}$  gr.

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Sulphite Soda.....1 gr.  
Salicylic Acid.....1 gr.  
Ext. Nuc. Vom..... $\frac{1}{2}$  gr.  
Powd. Capsicum.....1-10 gr.  
Concent. Pepsin.....1 gr.

### Chalybeate.....3 grs. Pink (Warner & Co.)

Ferri Sulph.....1 $\frac{1}{2}$  grs.  
Potass. Carb.....1 $\frac{1}{2}$  grs.

### Chalybeate Compound (Warner & Co.).....Pink

Chalybeate Mass.....2 $\frac{1}{2}$  grs.  
Ext. Nuc. Vom..... $\frac{1}{2}$  gr.

### Damiana Cum. Phosph. et Nuc. Vom.

Ext. Damiana.....2 grs.  
Phosphori.....1-100 gr.  
Ext. Nuc. Vom..... $\frac{1}{2}$  gr.

### Digestiva (Warner & Co.)

Pepsin Concentrat.....1 gr.  
Pv. Nuc. Vom..... $\frac{1}{2}$  gr.  
Gingerine.....1-16 gr.  
Sulphur..... $\frac{1}{2}$  gr.

### Ferri (Quevennes).....2 grs.

### Ferri Carb (Vallett's), U.S.P. 3 grs.

### Ferri Iodid.....1 gr.

### Neuralgic.

Quinia Sulph.....2 grs.  
Morphia Sulph.....1-20 gr.  
Strychnia.....1-30 gr.  
Acid Arsenious.....1-20 gr.  
Ext. Aconiti..... $\frac{1}{2}$  gr.

### Quidia Comp.

Quinia Sulph.....1 gr.  
Ferri Carb. (Vallett's).....2 grs.  
Acid Arsenious.....1-60 gr.

### Quinia et Ferri.

Quinia Sulph.....1 gr.  
Ferri Redact.....1 gr.

### Quinia et Ferri et Strych. Phos.

Quinia Phos.....1 gr.  
Ferri Phos.....1 gr.  
Strychnia Phos.....1-60 gr.

## Tonics—continued.

### Quinia Iodoform et Ferri.

Iodoform.....1 gr.  
Fer. Carb. (Vallett's).....1 gr.  
Quinia Sulph..... $\frac{1}{2}$  gr.

### Sumbul Comp. (Dr. Goodell.)

Ext. Sumbul.....1 gr.  
Asafetida.....2 grs.  
Ferri Sulph. Exsic.....1 gr.  
Acid Arsen.....1-40 gr.

### Tonic.

Ext. Gentiana.....1 gr.  
Ext. Humuli..... $\frac{1}{2}$  gr.  
Ferri Carb. Sacch..... $\frac{1}{2}$  gr.  
Ext. Nuc. Vom.....1-20 gr.  
Res. Podophylli.....1-25 gr.  
Ol. Res. Zingib.....1-10 gr.

### Zinci Posphide and Nuc. Vom.

Zinci Phos.....1-10 gr.  
Ext. Nuc. Vom..... $\frac{1}{2}$  gr.

### Strychnia.....1-16, 1-20, 1-30, 1-32, 1-40 and 1-60 gr.

### Pil. Phosphori, 1-25, 1-50, 1-100 gr.

### Pil. Phosphori Comp.

Phosphori.....1-100 gr.  
Ext. Nuc. Vom..... $\frac{1}{2}$  gr.

### Pil. Phosphori Cum. Nuc. Vom.

Phosphori.....1-50 gr.  
Ext. Nuc. Vom..... $\frac{1}{2}$  gr.

### Pil. Phosphori Cum Ferro.

Phosphori.....1-50 gr.  
Ferri Redact.....1 gr.

### Pil. Phosphori Cum Ferro et Nuc. Vom.

Phosphori.....1-100 gr.  
Ferri Carb.....1 gr.  
Ext. Nuc. Vom..... $\frac{1}{2}$  gr.

### Pil. Phosphori Cum Ferro et Quinia et Nuc. Vom.

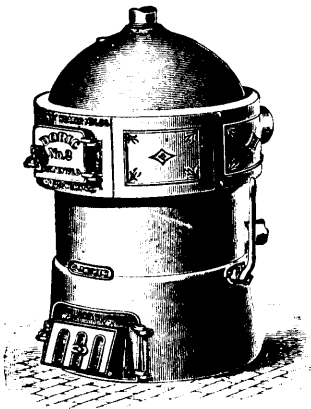
Phosphori.....1-100 gr.  
Ferri Carb.....1 gr.  
Quinia Sul.....1 gr.  
Ext. Nuc. Vom..... $\frac{1}{2}$  gr.

### Pil. Phosphori Cum Quinia.

Phosphori.....1-50 gr.  
Quinia Sulph.....1 gr.

### Quinia et Ferri Carb.

Quinia Sulph.....1 gr.  
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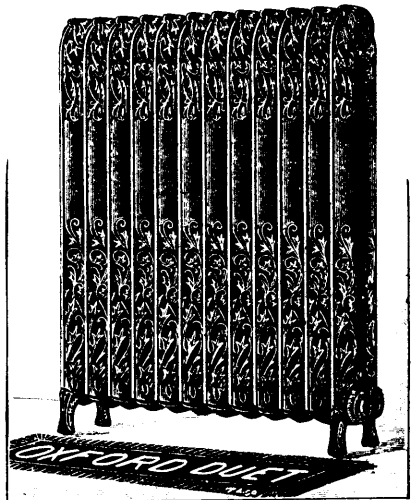
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## CHRONIC SUPPURATION OF THE MIDDLE EAR, MASTOID INFECTION, SIGMOID SINUS THROMBOSIS, SEPTIC PNEUMONIA, DEATH.

BY ALFRED J. HORSEY, M.D., M.R.C.S. ENG., ETC., OTTAWA, ONT.

Geo. L—, a strong, hearty farm lad, aged 19 years, who has had a purulent discharge from his right ear, more or less constantly, for twelve years, consulted me on Dec. 24th, 1896, because he had recently suffered considerable pain in the right ear on two or three occasions. There was an offensive purulent discharge from the meatus, which came from the middle ear through a perforation in the membrana tympani, which was occupied by a polypus. There were no local signs over or about the mastoid process, even on pressure, so that the case presented the ordinary conditions of chronic middle ear suppuration excepting the earache, before mentioned, which made him seek relief.

He visited me at my surgery for about two weeks, receiving the usual treatment in such cases, with seeming relief from pain and a lessening of the discharge from his ear, but at the end of a week had a return of severe pain in his ear, so that he could not rest at night, and which was only partially relieved by hot water injections and hot fomentations. His appetite failed and he appeared stupid and miserable.

On Monday, Jan. 11th, 1897, he came to the surgery presenting a very worn and weary aspect, saying he had passed a painful night, had shivered and vomited. The discharge from the ear had ceased. His pulse and temperature were taken for the first time, the former being 120 and



the latter so high as  $102\frac{1}{5}$  F. He was at once driven to the hospital, a history of his case given, and so he passed from under my care, as his lodging afforded no facilities for nursing one so seriously ill, with the probability of the necessity for a grave surgical operation close at hand.

The same day as he entered hospital (Jan. 11th) he had a recurrence of vomiting, frontal headache and rigors, with frequent pulse and temperature of  $105^{\circ}$  which fell in a few hours to near the normal point. His condition for the next five days was not improved. His nights were painful and restless, his pulse frequent, with daily rigors, sweating and vomiting, and relaxed bowels, while his temperature was very unstable, showing extreme variability within short intervals.

On Friday, Jan. 15th, he was again placed under my care, when the previous diagnosis of mastoiditis and sigmoid sinus involvement was more fully confirmed. There were now local signs, which before were absent, viz., swelling and great tenderness on the right side of the neck, at the anterior border of the sterno mastoid over the internal jugular, so that he was unable to turn his head, on account of the pain it gave him. The mastoid process was not edematous or swollen, nor its posterior border tender on pressure where the mastoid vein emerges.

He had lost weight, and so critical was his condition that, notwithstanding the slight local mastoid signs, it was decided to open the antero and make a full communication between it and the middle ear. Further extent of operation (possibly opening and cleaning out any septic thrombosis of the sigmoid sinus, or trephining over the temporo sphenoidal lobe) being left in abeyance.

The patient was prepared generally by a purgative, and locally by shaving the scalp above and behind the ear, by shampooing, washing with turpentine, and the application of moist stoops of hyd. sol. continuously applied for 24 hours before operation.

Chloroform was the chosen anesthetic. A vertical incision through the soft tissues down to the bone was made, from near the apex of the mastoid to the posterior root of the ligoma. Any bleeding was arrested, the periosteum was carefully elevated from the bone and dissected forwards until the osseous ext. auditory meatus was exposed, and the auricle and soft tissues could be drawn forwards by retractors.

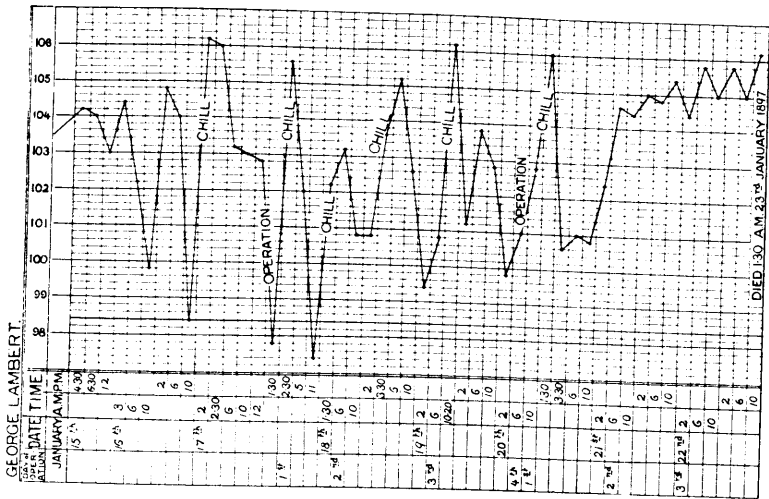
The supra meatal triangle, within which the opening into the autrum was to be made, was readily defined.

This angle is formed by the posterior root of the ligoma above the posterior osseous boundary of the meatus below, and by an imaginary line joining these parts. The autrum can, with due care, be safely opened in this space, by cutting inwards and forwards to a depth of  $\frac{1}{8}$  to  $\frac{3}{4}$  of an inch, which depth varies in normal skulls as well as pathological ones, where there may be increase or diminution in the thickness of the mastoid walls.

In the case reported a depth of  $\frac{3}{4}$  of an inch was reached, when the autrum was opened and about two drachms of pus let out.

The other mastoid cells were broken into the mastoid ablated and communication made with the middle ear, so that fluid injected into the wound welled out of the meatus and vice-versa.

The chief instruments used were mallet and gouge. As pus had been reached and the mastoid cells broken down so as to make one large cavity, which was cleansed and made aseptic as far as possible, dusting it freely with a powder of boracic acid and iodoform, it was decided not to open the sig. sinus or tempero qotem lobe, but await the results of what had been done before resorting to so formidable an operation as opening the cranial cavity, or the lateral sinus itself.



The temperature, which was 106 in the early morning of the day of operation (Jan. 17th), pulse 130, and resp. 30, had fallen to T. 103, P. 100, R. 26, at midday, immediately before the operation, and gradually further fell during the day, so that at 10 o'clock p.m. the chart showed T. 97 $\frac{2}{3}$ , P. 73, R. 20. Intellect clear as it had been all along, takes food, free from pain, rested well.

This hopeful report was not confirmed by that of next day, Jan. 18th, which read as follows: 1 o'clock a.m., T. 102, P. 103, R. 29. Had a severe chill lasting twenty-five minutes. 10 a.m., another chill, T. 106 $\frac{1}{3}$ ; 1 p.m., sweating freely; 3.30 p.m., chill lasting 23 minutes; 6 p.m., T. 105 $\frac{1}{3}$ , P. 120, full and regular, R. 40.

Jan. 19th, 2 o'clock a.m., T. 99 $\frac{2}{3}$ , P. 75, R. 23, sleeping well.

Jan. 19th, 8.30 a.m., violent chill shaking bed, lasting twenty-five minutes. Face cyanosed, features pinched.

1 p.m., wound dressed, no discharge. The lungs, which had been examined daily, were free from disease.

Jan. 20th, 2 a.m., severe circumscribed pain in left chest, relieved by synapsim. T. 99 $\frac{4}{5}$ , P. 100, R. 28.

Jan. 20th, 1 p.m., a free, opening between autrum and middle ear was made, and a disc of bone removed by trephine half-an-inch in diameter, an inch above and a quarter of an inch behind the osseous meatus over the tempero sphenoidal lobe. There was no bulging, and pulsation was not observed. The dura, which looked darker and more congested than

normal, was divided and the sphenoidal lobe gently and carefully explored in two directions with an antiseptic canula, with negative results.

Jan. 20th, 6 p.m., pain in left side during afternoon, T. 101, P. 108, R. 41. The chest, which had been examined daily, now showed signs of involvement (septic pneumonia) without cough or expectoration, which might have easily escaped undetected had it not been anticipated.

Jan. 21st, pains in chest more diffused, physical signs of pneumonia more marked. T. 102 $\frac{2}{3}$ , P. 106, R. 38, and general.

6 a.m., T. 104 $\frac{1}{2}$ , complains pain in side and back, intellect quite clear.

11 a.m., dressed wound, slight discharge from meatus, general condition unaltered.

6 p.m., pulse more rapid, irregular, resp. increased and shallower, large moist rales throughout lungs.

Jan. 22nd, 2 a.m., much the same.

6 a.m., T. 105 $\frac{1}{4}$ , P. 150, R. 68.

10 p.m., T. 106 $\frac{1}{2}$ , P. 175, R. 78. Intellect still clear.

Jan. 23rd, 1 a.m., died.

A post-mortem examination was made 12 hours after death.

There was a slight discharge of fœtid pus from the meatus.

The cerebrum and cerebellum with their meninges were normal.

No pus was found in the temporo sphenoidal lobe, or other portions of the brain.

The right sigmoid sinus for the greater part of its extent gave marked evidence of inflammation. Its walls were thickened and thrombosed, but it was not occluded; it contained pus and disintegrating clot.

The sig. sinus on the left side presented none of these conditions, and was in marked contrast with the right. The tegnum tympani had been eroded and produced inflammation by contiguity of the sig. sinus.

The lungs were pneumonic throughout, and contained foci of purulent matter.

#### REMARKS.

Though the case is not one of common occurrence, it is a frequent sequel of chronic middle ear disease, though not always recognized as such, being classed under such headings as pneumonia, meningitis, typhoid fever, the latter especially, when it tends towards the abdominal type, rather than the pulmonary or meningeal type. In this case the symptoms indicated more particularly sigmoid sinus thrombosis, viz.: High vacillating temperature, rigors, vomiting, sweating, with slight swelling and tenderness over the internal jugular vein.

It also shows the danger of a chronic discharge from the ear, which McEwen of Glasgow says is as dangerous as having a charge of dynamite in one's head, liable to cause an explosion at any time.

Also that local manifestations of mastoid infection may be almost wanting, and yet its cells contain considerable pus.

It was evident that his trouble had arisen from chronic middle ear disease, causing necrosis in the roof of the tympanic cavity, and the inflammation had spread to the sigmoid sinus, involving its walls, setting up phlebitis and forming a thrombus.

The products of septic inflammation within the circulation causing the severe systemic disturbance.

Septic emboli were carried to the lungs, setting up pneumonia, the last and fatal link in the pathological chain.

The high vacillating temperatures without diurnal or nocturnal abnormal regularity, with almost daily rigor, profuse sweating, and relaxation of the bowels indicated severe systemic disturbance of a pyemic nature. The sudden onset and rapid course of the illness occurring in one having a chronic otorrhœa, with the above symptoms fully developed, not having a low temperature, a slow pulse, tardy cerebration, no impairment of sensation or special sense, no optic neuritis, or prepillary disturbances, was against abscess, or, at least, a large one.

Yet, to offset this. McEwen says that in inflammatory lesions of the temporo sphenoidal lobe there are seldom any localizing symptoms unless the abscess be of large size.

The sigmoid sinus was not opened at the same time as the mastoid cells were, because of the finding of pus in them, the evacuation of which and their cleansing, and the application of iodoform and boracic acid powder might give relief without resorting to a most formidable operation.

There was also the uncertainty of finding the sigmoid sinus occluded, as the mastoid vein which empties into it, and is considered a valuable guide, was not occluded.

Trephining over the temporo-sphenoidal lobe was done as a *dernier ressort*, in hope of finding a foci of pyemic infection, as this is the most likely point for an abscess in such cases, though the indications did not particularly favor it.

Had the sigmoid sinus been opened, which in itself is an operation beset with many dangers and difficulties, it is doubtful if the result would have been otherwise, as the sigmoid sinus, at the post-mortem, showed incomplete thrombosis without occlusion, and an extensive disintegrating purulent clot, which it would have been extremely difficult or impossible to have removed.

DANGERS OF KOLA.—Kola has been taken up, says *Pharm. Products*, by people who would never enslave themselves to rum or opium, because it is announced as a stimulant without reaction. That is the sheerest nonsense. There must be reaction from the exhilaration of any stimulant. The first effect of kola is hardly noticeable; the man who takes it simply feels refreshed, but after eight or ten hours the heart's action is increased enormously; then, later, in the habitual kola drinker or eater, there is the lassitude, the nervous weakness and the tremulousness that ensue from over-drinking; the difference is that with kola the reaction comes on more gradually. The wise bicyclist will let kola in all its forms severely alone. It is in the insidiousness of the drug that the danger lies. It does away with the fatigue that a long bicycle ride brings, but before long it comes to be relied upon, when the development of the slavery is easy. The important point for the public to bear in mind is that kola is not harmless, but must be used with the same caution as opium or morphine.

## THE DEFINITION AND SCOPE OF ORTHOPEDIC SURGERY.

BY B. E. MCKENZIE, B.A., M.D., AND H. P. H. GALLOWAY, M.D., TORONTO.

Many words in common use have gradually undergone such change and amplification of meaning that their present significance is very different from that with which they started out. "Orthopedy" is one of the words which has experienced this kind of evolution.

The exact derivation of the word is uncertain. Sayre<sup>1</sup> and also Gibney<sup>2</sup> say that it is derived from *orthos* straight, *paideuo* I teach, and therefore signifies "to teach or educate straight." The medical dictionaries of Gould and of Foster give *orthos* and *païs*, a child, as the derivation; this is accepted by Whitman<sup>3</sup> and by Young,<sup>4</sup> the latter of whom says, "The word orthopedy . . . according to its derivation and its earlier use, implies the art of removing deformities in young children." Others believe the latter part of the word to be derived from the word for foot rather than from the Greek for child, and that in its early use it signified the straightening of deformed feet only. Whatever etymological uncertainty may attach to the word orthopedy, there can be no doubt that early orthopedic practice occupied an exceedingly narrow field, extending little, if at all, beyond the treatment of deformities by various mechanical appliances; and even to-day there is not wanting abundant evidence of a prevailing impression that the therapeutic resources of the orthopedic surgeon are limited to iron rods, leather straps and plaster of Paris bandages.

It is extremely doubtful if a perfectly satisfactory definition of orthopedic surgery is possible, for such definition must be based not upon the derivation of the word orthopedic, nor upon the conception of its scope held by those of a past time; it must represent the actual field of work of the specialists in orthopedic practice of to-day, and they are not fully agreed as to where the line of demarcation between orthopedic and general surgery should be drawn.

Of the many definitions that have been proposed we shall reproduce only two. Royal Whitman<sup>3</sup> quotes the following from an American text-book of surgery: "Orthopedic surgery has to do properly with the treatment of deformities and contractions, especially by some form or other of mechanical appliance; though of late its field has been somewhat extended, so as to include the consideration of many of the deformity-producing joint affections." He then shows how imperfectly this statement represents actual orthopedic practice by saying: "Of the two hundred and eighty-four papers to be found in the eight volumes of transactions of this Association" (American Orthopedic Association) "but seventy five are limited to the sixteen subjects that, according to this text-book, represent the scope of orthopedic surgery. Of the seventy-five, thirty-two are on club-foot alone, and nineteen of these consider its operative treatment. One must conclude, then, that this section of a modern text-book represents the orthopedic surgery of a past time." Whitman then suggests the following definition, basing it upon the view that the scope and compass of

modern orthopedic surgery are best indicated by the work of the American Orthopedic Association: "Orthopedic surgery is that division of surgery which treats of disabilities and diseases of the locomotive apparatus and of the prevention and treatment of deformities of the framework of the body." Although perhaps open to criticism, this is probably the best definition that has yet been produced.

While the proper boundaries of this specialty may be determined with little difficulty throughout the greater part of their extent, there are certain surgical conditions where it must at present remain a matter of opinion as to whether they lie properly in the domain of orthopedic or of general surgery. For example, Whitman's definition above quoted would certainly bring fractures and dislocations into the realm of orthopedic surgery; and while it is true that the daily contact of the specialist in this department with purely mechanical and mathematical problems, and his wide experience in devising mechanical apparatus to meet special conditions, should make his counsel and assistance of some value in certain unusual cases of these injuries, it may well be doubted whether ordinary fractures and dislocations will ever pass out of the province of the general surgeon, or even of the general practitioner.

Again, some orthopedic surgeons consider that the treatment of hernia comes within the limits of orthopedic work, on account of the skilful mechanical treatment required in many cases<sup>5</sup>; but the writers do not share this opinion, believing that hernia belongs to general or to abdominal surgery, especially in view of the increasingly frequent and satisfactory employment of operations for the radical cure of this condition. Possibly the simplest way to state the scope of orthopedic surgery would be to enumerate in a general way the diseases and disabilities that are regularly taken charge of by such practitioners of this specialty as are neither manacled by the traditions and conservatism of the infancy of orthopedic practice, nor, on the other hand, inclined to extend unreasonably the boundaries of their work.

One not cognizant of the kinds of cases that seek the advice of the orthopedic surgeon will be surprised at the number of cases of disease of the nervous system that present themselves, usually not in the early days of the affection, but later, when deformity, or local weakness, interferes with erectness of bearing or with the power of locomotion. In the one case some of the most satisfactory results ensue, as a very large proportion of the deformities resulting from disease of the nervous system are amenable to correction; in the other, while improvement is slower and often the ultimate gain less marked, yet by the aid of massage and physical training many cases may be helped to a degree that is a surprise to those who have not employed such treatment and have looked upon these cases as hopeless.

Therapeutic gymnastics, as a part of the resources available to the orthopedic surgeon, is worthy of notice. In deformities of the trunk, especially, such as lateral curvature and round shoulders, there is no other means by which correction can be effected with so much satisfaction. In general it may be said that most of these deformities are seen in girls, and are due either to lack of muscular development and general weakness,

or to vicious attitudes, at first temporarily assumed and afterwards become more or less habitual and permanent. The older practice of employing braces in such patients is, in the end, generally productive of harm: while physical training may be employed not only to develop muscle, but to educate such cases into right attitudes and the proper employment of their muscles. At the same time, great gain always results in general health of the patient.

It is needless to dwell on the fact that all forms of chronic joint disease and all deformities of the locomotor apparatus are the orthopedic surgeon's regular stock in practice. Demanding, as these do, generally operative attention and specifically adapted mechanical appliances, both operative attention and specifically adapted mechanical appliances, the most satisfactory results are not attainable unless fitness and skill, in both these fields of work, combine in the same practitioner. On the one hand the mere mechanic must often labor long and unsuccessfully with such cases as congenital club-foot; and on the other, the surgeon who operates, however successful, but who for any reason fails to follow up his cases with mechanical treatment, sometimes for several years, will be humiliated many a time by finding that the result is little or no gain upon the condition before operation.

Negatively, it may be said that some deformities come much more appropriately under the care of others whose training and every-day experience fit them for so dealing with these cases as to obtain the best results, *e.g.*, hare-lip.

A consideration of the scope of orthopedic surgery always introduces the question of its claims to be regarded as a specialty. What need is there for separating it from general surgery? Several sufficient reasons might easily be set down. The evolution of all specialties occurs in obedience to the broad general principle that advantages are gained by a division of labor. The field of medicine and surgery has become so limitless that it is simply impossible for any one mind to thoroughly compass all of it. No man can be an all-round expert. Indeed, nothing is more certain than that those who limit themselves to ophthalmology, laryngology, gynecology, neurology, orthopedic surgery, etc., feel their energies taxed to the utmost in the effort to do the best work that is capable of being done in their several departments of practice.

The difficulties and annoyances incident to providing the various mechanical appliances essential to the treatment of many orthopedic cases can be appreciated only by those who have actually undertaken such work on a large scale; while the caprice of some of the patients who require the appliances is at times almost intolerable. The presence in any town or city of one or more surgical machinists does not by any means solve all the difficulties encountered in producing such appliances, for mere mechanical skill can never take the place of anatomical and physiological knowledge; and unless the surgeon is in a position to personally supervise the manufacture, serious and annoying imperfections in the execution of his well designed plans will constantly result, to say nothing of the humiliating experience of frequently finding himself occupying a secondary place to that of his instrument maker.

The practice of orthopedic surgery is peculiarly time-absorbing. Per-

sonal attention to minute details, continued often for years, are essential to the achievement of the best results; and it is a fact that the busy general surgeon finds it absolutely essential to leave many details to subordinates, his time and attention being fully occupied by the more important phases of his work; and without at all calling in question the *ability* of general surgeons to do orthopedic work, it may be fairly stated that the special difficulties of orthopedic practice cause this class of cases to be more or less neglected by general surgeons, and it was largely this fact that led to the development of this department of surgery into a specialty. "It is the mechanical specialty, but no longer in the old and narrow sense, mechanical because it has to do directly with the human machine. One must not only know the causes of disease, but he must become an expert in the statistics and dynamics of this machine."<sup>3</sup>

Some are of the opinion that the orthopedic surgeon ought to limit his therapeutics to mechanical appliances, but should call in the general surgeon to perform such surgical operations as may be required. From this view we unhesitatingly dissent. We emphatically agree with those who believe that a specialty should be complete in itself, and that every orthopedic surgeon worthy of the name should feel fully prepared to undertake not only tenotomies, but excisions, tendon-transplantations, arthrodeses, or any other operations that may be required in any of the cases that come under his care. Possibly the best evidences of the need of special instruction and training in orthopedic work is to be found in the significant fact that many of the foremost medical educational institutions, on this continent at least, have established chairs in orthopedic surgery; and the time is at hand when the medical school that fails to furnish such special instruction will be regarded as failing to fully provide for the needs of its students.

1 Lewis A. Sayre: Lectures on Orthopedic Surgery and Diseases of the Joints, 1876, p. 7.

2 Dennis: System of Surgery, 1895, p. 276.

3 *New York Med. Journal*, June 20, 1896.

4 Orthopedic Surgery, 1894, p. 17.

5 Transactions of the American Orthopedic Association, Vol. VII., p. 40.

PRURITUS ANI.—Sufferers from pruritus ani are usually either arthritic or nervous.—*Ann. Gyn. and Ped.*

℞ Menthol, 4 parts.  
Alcohol, 30 parts.  
Distilled water, 60 parts.  
Dilute acetic acid, 150 parts.

For external use only.

℞ Carbolic acid, 5 parts.  
Hydrated potassa, 2 parts.  
Linseed oil, 30 parts.  
Bergamot oil, 9½ parts.

Apply at bedtime.

In very severe cases deep cauterization of the parts with nitrate of silver or the thermocautery may be employed. Section of the nerves gives good results in pruritis of the anus, vulva and scrotum, when the affection is very intense.



## SURGERY.

IN CHARGE OF

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### A NEW RING FOR USE IN INTESTINAL ANASTOMOSIS.

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Of all the devices in use to hold together the cut ends of the bowel, in the operation of intestinal anastomosis, Murphy's button, Senn's decalcified bone plates, and Abbe's catgut rings are the best, and any of these may be more desirable in a given case than the others.

Murphy's button is the simplest, and more than any of them facilitates rapidity of work; but there are a few cases in which its use would seem to be attended with uncertainty. They are among those with old and extensive adhesions of the bowel, in which for various reasons it may not be possible or wise to sever all the adhesions, and in which, consequently, the lumen of the bowel may at some point be left narrowed after the operation. In such cases the button, after detachment from the point of operation, may become lodged in a narrow segment of the bowel and form a permanent obstruction.

Senn's bone plates, being digestible, are free from this objection, but they are expensive and must be obtained from the instrument maker, which cannot always be done at short notice. Of course it might be said that the surgeon should keep some on hand constantly, and thus be prepared for emergencies; but then, with the multitude of other little things to care for, we all are apt to overlook occasionally the need of things which may be used perhaps only once in a year.

Abbe's catgut rings, which he himself discarded in favor of plain suturing, answer this last requirement in so far that they can be made by the surgeon; but it cannot be done at short notice. They must be made of moistened gut, and when finished dried under pressure that their form may be retained. Then, in sterilizing them at the time of operation, if they, with the attached silk threads, are put into the antiseptic solution a little too soon, or delay occurs after they have been put in, they are apt to warp and curl out of shape. As the same distortion is apt to occur in

the bowel, they are not adapted for use in end to end anastomosis, and furthermore it is difficult to make them in good ring form.

Under the stress of necessity I hit upon a ring which I think possesses all the advantages of Senn's bone plates and Abbe's catgut rings, without the objection I have made against Murphy's buttons.

Being called some distance from home, two years ago, to operate for fecal fistula, resulting from strangulated hernia, I ordered a set of Murphy's buttons. The day for the operation had been fixed and the buttons came to hand late. Upon examining them it occurred to me that in case there would be extensive adhesions and matting together of the bowel, which it might not be expedient to undo entirely, there might be left bands which would constrict the bowel so as to prevent the passage downward of the button after its detachment from the seat of operation. Having on hand neither bone plates nor catgut rings, and time being short for making of the latter after Abbe's method, I constructed two sets of rings, using catgut and rubber tubing. Taking a piece of light rubber tubing with one-eighth inch calibre, three and one-quarter inches long, and a piece of chromicized number six catgut eighteen inches long, I pushed one end of the gut through the tube, then carried it around and passed it through again in the same direction, and so on until the tube was filled with strands of gut. Pulling upon the ends of the gut then until the ends of the tube were brought in apposition, I had a complete ring. The ends of the gut were then cut off one-half inch from the tube and stuck into it in opposite directions, and the ends of the tube closely approximated. The result was a smooth elastic well-shaped ring, an inch in diameter. Now four small openings were cut into one side of the ring with a scissors, equal distances apart, and so placed that the break in the tubing was midway between two of them. Through these openings a medium-sized silk thread was passed on a cambric needle, around one side of the enclosed gut, through the tubing on the opposite side, back through the same puncture, around the other side of the gut, and out at the opening, the first point of entrance. The thread was now around the gut in the tube, and both ends out at the opening made with the scissors. A firm slip knot was now made and slid back into the tube, while the thread was drawn tightly on the gut, care being taken to have the knot small enough to pass easily through the hole in the tube, so that it might not hold the tube after solution of the gut subsequent to the operation. The thread was then cut at a length of nine inches, and a knot put in the end to prevent the needle dropping off. The four threads having been passed in this way, the ring was finished and ready for use. In this case the button could fortunately be used and the rings were consequently not needed.

A year and a half later a case of fecal fistula, resulting from an operation for suspensio uteri by another person, came under my care. The fistula had existed four months, and various efforts had been made to heal it. I began the operation with the intention of using Murphy's button, but also got ready my rings.

Upon opening the abdomen a large mass of agglutinated bowel was found beneath the fistula, and the adhesions were so thick and vascular

as to make their detachment slow and tedious work. After loosening about a foot of bowel above and below the opening, so as to give myself room for work, it seemed best, on account of free bleeding and a very friable condition of the tissue, to leave the balance of the mass undisturbed. As there were probably several feet more bowel held in it, I feared that a Murphy button might not pass through, and hence used the rings.

The rings were placed in the bowel, and the threads carried through it about one-quarter inch from the edges. The two ends were then whipped together with a continuous silk suture, through all the coats, over about one-fourth of the circumference of the bowel, the middle of the line of suture being over the attachment of the mesentery. The threads on the rings were then drawn tightly and tied, and a line of continuous fine silk suture from side to side run through the peritoneal coat over the whole line of approximation.

The patient, who was fifty years old, recovered without an unfavorable symptom. The rubber tubes were not found in the stool, but as nearly six months have elapsed since the operation, it may be presumed that they have passed, or at least they can do no harm.

The fistula was so high in the jejunum that the discharges from it were entirely free from fecal odor, and that, as the patient expressed it, "there was hardly any use of drinking water because in a few minutes it would run out of the hole."

My object is not to present these rings as a substitute for Senn's bone plates when they are at hand or can be procured in good time, but in their absence in cases of emergency, and in lieu of Murphy's button when as in this case there is doubt as to whether it would find its way out of the bowel. Under these circumstances they are superior to anything I have ever seen offered for this purpose.

For use in lateral anastomosis with linear or elliptical opening an ellipse could easily be made by using two pieces of tubing of the desired length and pulling on the ends of the catgut until the ends of the tubing would be brought together in pairs. The silk threads could then be put half an inch apart and opposite each other in pairs, in the same way as into the rings. In position in the bowel, this would really be only a modification of the old quill suture as applied on other parts of the body—modified by the presence of the soluble catgut in the quill.

The advantages of the rings are, that they can be prepared in a few minutes by the surgeon; their trifling cost; the smooth and firm surface of the rubber tube which is to lie against the bowel; the protection which the tubing gives to the contained catgut by which its solution in the bowel is retarded; that after the catgut dissolves the rubber will drop away from the silk ligatures, not as a ring, but as a small straight piece of thin flexible tubing, which can hardly, under any conditions, be arrested in its downward passage.

Suturing of the ends of the bowel without mechanical support, either laterally, as Abbe has done since he put aside his rings, or end to end is not applicable to all cases.

It is necessary to have good healthy peritoneum at the seat of operation, which cannot always be obtained in cases of fistula in which exten-

sive inflammation with agglutination of the bowel around the opening has occurred. If the peritoneum has been involved in an inflammatory process, it disappears in the newly-formed tissue or becomes so fragile that it will not hold stitches sufficiently, unless two or three rows are made. Then the operation is certainly tedious, and much slower than when rings are used, and the surgeon cannot leave his patient with the feeling of security which the rings afford. Of course this objection may be met by excising the denuded portion of bowel, but conservative surgery would certainly not permit such a sacrifice simply as an expression of preference of one method over others.

In the case here presented several inches of bowel were cut off to avoid making the anastomosis where nearly the whole circumference of the organ was bare of peritoneum, and yet at the place of election the Lembert sutures put around the rings gave way at several points, and required reinforcement by a second line. Without the firm support of the rings inside of the Lembert sutures, I would have been loth to drop the bowels into the abdomen, with those weak spots in the seam; but with them, I had no fear of the result. It would have been impossible in this case to have found, on the two feet of bowel which was extricated from the mass, two spaces four and a half inches long with sufficient healthy peritoneum to suture them and hold them together side by side.

The objections which have been urged against Senn's plates and other mechanic supports in lateral anastomosis, upon the ground that they obstruct peristalsis, seem to me to be ill-founded. Lateral union of three or four inches of bowel will, regardless of how it has been produced, interfere with the peristaltic wave, but the interference caused by doubling the bowel upon itself and uniting the folds by six lines of suture would certainly not be increased much by the addition of a flexible splint, and at the worst the increase would be only of temporary duration.

That lateral anastomosis will retard peristalsis was proved to me in an experimental operation I did upon a dog with Abbe's rings soon after he called attention to them. The animal got on comfortably for a year and a half. Then he was taken with symptoms of obstruction of the bowel, with which he died in the course of a week. Examination showed the blind end of the upper section of the bowel, which at the time of the operation was half an inch in length below the opening between the two ends, very much dilated and packed with a hard mass the size of a walnut, composed of hair and other solid matter, which extended above the edge of the opening. The opening had contracted from an original slit one and a half inches in length to an ellipse three-quarters of an inch long. This aperture was larger than necessary to permit the passage of any of the particles which made up the mass, and hence the collection was not due to obstruction, but to arrested peristalsis in the pocket below the opening and consequent deposit and accretion of material there. In this way the mass increased in size until it did obstruct the artificial opening.

The operation with these rings is decidedly easier to perform and can be done in much shorter time than any form of lateral operation. Should I be called upon to use them again, which would be done in any case in which a transverse operation could be performed, and for any reason

Murphy's button might be thought unsuitable, I would modify the operation by putting three interrupted catgut sutures through the approximated ends, in the part not covered by the continuous suture of one-quarter the circle opposite the mesentery, placing them between the threads on the rings. With rings one and one-quarter inch in diameter, this would place a suture embracing the whole wall of the bowel for about every quarter inch of line, and this with the rings well adapted, and one row of Lembert's stitches around them would make a perfect union.—*Med. and Surg. Reporter.*

### A REVIEW OF THE AUTHOR'S METHOD OF ANCHORING THE KIDNEY.

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The frequency with which surgeons meet both floating and movable kidney has long since attracted attention as to the best method of anchoring this organ so as to preserve its normal functions. The multitude of complex disturbances and reflex symptoms associated with a floating or movable kidney are such that the surgeon is constantly called upon to render relief. These abnormal conditions may last for years without serious results, yet they are liable to give rise to degenerative changes which may necessitate a nephrectomy or a nephrotomy at any moment. Palliative treatment, by means of rest and bandaging, as a rule, avails but little. The difficulty of holding a kidney in place with a bandage is such that little reliance can be placed on this method of treatment.

From the fact that this abnormal condition is chiefly a source of annoyance rather than danger, patients hesitate in submitting to an operation for the purpose of anchoring the kidney, as it seems to them a very large undertaking for the purpose of accomplishing very small results. It is hard to make them understand the importance of having the kidney anchored and the danger that is likely to arise from neglect of the proper surgical treatment. At the same time we can hardly blame them or their family physician for not urging an operation which requires a large oblique gash through the lumbar muscles and a number of buried sutures which are difficult to insert. Only those who have attempted to perform this operation can appreciate how hard it is to hold the kidney in place by the old-fashioned method until it is sutured to the deep muscles of the back. The difficulty of this procedure stimulated me to devise a new operation which had for its object simplicity, rapidity and efficiency.

Referring to a paper read before the Columbus Academy of Medicine, November 19, 1894, on "A New Method of Anchoring the Kidney," published in the *Columbus Medical Journal*, December 25, 1894, you will find that my operation consists "in making the ordinary perpendicular abdominal incision over the median line of the kidney. As a rule, it need not exceed two and a half inches in length, depending largely on the thick-

ness of the abdominal walls. Having made the incision sufficiently large to get the fingers in and bring the kidney to its normal place, I then use a long needle which I have had made on purpose, seven inches in length. Two of these needles are threaded with aseptic silkworm gut or aseptic silk, using but one ligature. Having placed the kidney in its normal position (and in the case of a floating kidney scored the peritoneum so as to favor adhesions), I now insert my first needle through the upper and inner part of the cortical substance of the kidney directly through the muscles of the back, bringing it out between the eleventh and twelfth ribs. The second needle, which is on the other end of the ligature, is also passed through in a similar manner, about an inch from its fellow, through the upper and outer cortical substance of the kidney, making, as you will recognize, a staple stitch. These ligatures are tied on the integument of the patient's back by an assistant. If necessary, another suture is inserted in a similar manner through the outer margin of the kidney, the first needle of the second suture being passed about an inch below the last needle of the first suture, and the second needle of the second suture about an inch below the first needle of the second suture, through the cortical substance of the outer portion of the kidney."

You will readily see that this is a very simple operation, does not involve any vital structures and can be performed in a few moments with little or no danger to the patient, while the results have been even more than anticipated. In explaining the method I had adopted to my friends, I found but practically one criticism, and that was a lack of confidence in obtaining satisfactory results. Recognizing the fact that it required several sutures, by the old method, to hold the kidney in place, they did not see how it was possible for one or two sutures to accomplish the same. If you stop to study the difference between the two methods, you will readily observe that the new method "clinches," so to speak, the kidney by a staple suture, while the old method simply sutured the posterior portion to the deep lumbar muscles. The merest tyro will readily see the mechanical difference between the two sutures. The one not only embraces the entire kidney, but pierces the lumbar muscles and is re-enforced by the integument on the back, while the other simply involves a portion of the friable cortex of the kidney and a small portion of the tenderloin; hence it is quite evident that more sutures would be required by the old method than the new.

Since devising this plan for anchoring the kidney, I have had an opportunity for demonstrating its practical utility in five (the author operated his sixth case at the University Hospital, during the recent meeting of the Ohio State Medical Society, which made a prompt and uneventful recovery, making a total of seven cases with seven recoveries by this method) cases operated by myself and one by my colleague, Dr. Means, with the most satisfactory results in each case. The rapidity with which the operations were done is one of the marked features. It is only necessary to make a very small opening into the abdominal cavity, bring the kidney to its normal position, pierce it with the needles, as above described, tie the sutures over a piece of iodoform gauze on the back and close the abdominal wound. There are seldom any constitutional symp-

toms following the operation. The patient has little or no pain or rise of temperature, while the pulse remains practically normal. In about ten days the suture can be removed, leaving the kidney entirely free from any foreign substance. I usually have the patient remain quiet from two to three weeks after the operation.

Up to date there has not been a single instance of a return of the disease, so far as I have any knowledge, the patients are all enjoying good health, and are entirely free from the reflex symptoms which were so annoying prior to operation. In two of these cases it was my fortune to have an opportunity to examine the result; in one case several months afterwards, and the other nearly two years. In each case the patient had to be operated for ovarian trouble, and in each I made a careful examination of the kidney which had been anchored and found it firmly fixed, and, so far as I was able to judge, in a perfectly healthy condition.

I do not claim that the few cases which I have reported are sufficient to establish the fact that this method is without fault, but I do claim that up to date the results secured are better than those usually obtained by other methods.

**SUBPHRENIC ABSCESS.**—The difficulty of diagnosing this condition is well shown by the fact that in only two of the five cases observed by Dr. Carl Beck, was the true nature of the case recognized before operation. He states that it is sometimes impossible to distinguish an encysted pyothorax from a subphrenic abscess. As regards exploratory measures, he advises that after every aseptic precaution had been observed, the exploratory needle should be introduced over the seat of abscess. If the first trial is negative, the needle should be reintroduced several times in different places—as the pus cavity may be either of small extent or it may contain a cheesy accumulation, or, finally, it may be divided into several minor cavities by adhesions. After each negative result a wire should be pushed through the needle, so that any pus which may have remained adherent to the inner surface of the needle may become detached. Occasionally, it will be found useful to fill the syringe with sterile water after the operation and force the solution through the needle into a Petri dish. If the microscope does not give sufficient information, after examining this fluid, cultures may be made in properly prepared tubes.

The treatment of subphrenic abscess is practically the same as that of pyothorax, that is, resection of a piece of rib, the subphrenic abscess generally being within the extent of the ribs. Only resection secures a sufficiently wide opening for thorough evacuation.

As a rule, the eighth, ninth or tenth rib, preferably in the median axillary line, is selected. If the abscess be large, in subphrenic abscess as well as in pyothorax, two or three ribs should be resected in order to be able to pack the whole cavity with gauze, which procedure seems to be the ideal treatment of any abscess. If the abscess be small, it will not generally be found within the axillary line; then the exploratory needle will always indicate the ultimate route of the incision line. Exceptionally, such abscesses may be reached below the costal arches or the xiphoid process.

**VOLVULUS TEN DAYS AFTER OPERATION FOR APPENDICITIS.**—Dr. Charles McBurney presented a boy eleven years of age, who had come under his care in the hospital on the last day of February of this year, with symptoms of appendicitis for forty-eight hours. The pain and tenderness had been marked, but the temperature was only 99° F. and the pulse 100. Still, the tenderness extended over a wide area and the general look of the boy was that of one suffering from a grave illness. The operation was done the same day, and he found extensive lesion of the appendix, which was perforated at two points and partly gangrenous. Two concretions were found lying still in it. Pus and general peritonitis were found in every part of the abdominal cavity except the extreme left hypochondrium. At least, the sponge thrust over to that side did not bring out fluid. The whole cavity was washed out very generously with normal salt solution; it was dried out, and a large glass tube was put down into the pelvis, draining from that point and packing above. Everything went along very satisfactorily, indeed, until ten days after the operation, when the boy began to complain of occasional and scattering pain in the abdomen. This complaint was made with rather increasing frequency for a week, when the symptoms became alarming. There were continuous severe pains, vomiting and impending collapse. On the surface of the abdomen dilatation of some coils of intestine could plainly be made out, making it sure that there was bowel obstruction from some cause.

Dr. McBurney opened the abdomen a little to the right of the median line, the seat of greatest pain, on March 16th. The intestines were free from adhesions or signs of inflammation, and it was only after considerable search that he found the cause of the obstruction and local distention, consisting of a coil of small intestine held in a position half twisted upon itself by adhesion of the omentum. It was very easy to pull out the intestine, give it half a twist back, and then on closing the wound the boy made a prompt and complete recovery.

The speaker thought that one of the most singular features of these cases of general septic peritonitis with lymph scattered over the entire abdomen, was the fact that when they got well they did not have adhesions, as one might expect, for when occasion arose to open the abdomen again the adhesions were likely to have all disappeared. To have an omental band form of the kind found in this case was unusual.—*Med. Record.*

**THE ABDOMINAL BELT AFTER CÆLIOTOMIES.**—As the result of correspondence with a large number of surgeons, Dr. McGuire, of Richmond (*Maryl. Med. Jour.*), states that the majority of the writers employ an abdominal belt after cœliotomies—some from conviction, some from doubt, and some from indifference. The fact, however, that a single competent observer has discarded its use, and found no reason to regret abandoning artificial support, proves that in the large majority of cases it is unnecessary. Because an abdominal belt is indicated in some instances is no reason why it should be employed in all cases. Routine practice is bad practice.



## MEDICINE.

IN CHARGE OF

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### REMARKS ON THE EARLY FEEDING OF TYPHOID PATIENTS.

BY SAMUEL WEST, M.D., F.R.C.P.

The management of the diet in typhoid fever is of the greatest practical importance, and it is well that from time to time the subject should be considered. Certain points have been raised by Dr. Barrs in his recent article upon the early feeding of typhoid patients with solid food, and it is because I think there is a great deal to be said against both his reasons and his conclusions that his article calls for criticism.

The usual practice of the present day is to place a typhoid patient, as soon as the disease is recognised, upon a fluid diet, and not to change it until all trace of fever has been absent for a week or more, and then to make the change to ordinary diet gradually and with great caution.

As to the best kind of fluid diet during the early stage of the fever, and the best method of changing the diet when the time has come, as well as the time at which the diet could be most advantageously changed, there may be considerable differences of opinion. The two first questions need not be raised in the present communication. It is the third question which is raised—namely, as to when the change in diet may be safely made.

The reason that the diet is not changed until the eighth or tenth day after the fever is that there is a general belief that to do so sooner introduces a risk, and many think a considerable risk, of relapse. Dr. Barrs, on the contrary, advocates an early change from liquid to solid food; first, because he does not share this belief; secondly, because he cannot understand the reasons for it; thirdly, because his own experience is against it; lastly, because the patients are underfed and require more food.

In respect to the last objection it may be asserted that no one intentionally starves a fever patient nowadays. On the contrary, as much food, of a suitable kind, is given as the patient can digest. Nor is milk, if taken in sufficient quantity, a starvation diet. Other patients may live for months upon a milk diet only, and be capable of a considerable amount of active exertion and mental work, and why should typhoid patients starve on it? The wasting and anæmia and debility of a typhoid patient is not the result of his diet, but of the fever, and is similar to

that seen in tuberculosis, in which disease the appetite may be even large and yet the wasting continue. What is called a low diet, that is, a fluid diet, is not necessarily a starvation diet. It is often the patient that is low, not the diet, just as asthenic fever describes the patient and not the disease. If a typhoid patient requires more food it can be given him by increasing the quantity of the liquid diet, whatever it is which is being taken, without necessarily making any change in it, and still less putting the patient upon a solid diet.

Nor are the patient's desires necessarily a safe guide in this respect; so far as there is a mere feeling of hunger this can be easily dealt with by increasing the amount of fluid food he is already taking. So far as the desire is for different food, the propriety of yielding to it must be determined by other considerations, for the cravings in disease are sometimes after what is harmful and not after what is good.

After all, then, we come back to the question of fact: Is it, or is it not, a fact that there is a risk in changing the diet too soon?

The general opinion is that too early change in diet introduces a risk of relapse. This is a risk only, and not a certainty, of course, and how great a risk it is impossible to express in figures; but, as the dangers of relapse are so considerable, the general opinion is that this risk should not be run.

Against this opinion Dr. Barrs quotes 31 cases; but it is to be observed that out of these 31 cases 2 had relapses, that is, 6.2 per cent.

In typhoid fever statistics are notoriously unreliable. I dealt with this question some years ago, in a paper read before the Medical Society of London, and showed what utterly fallacious results can be drawn when the number of typhoid fever patients is small, and that even when the numbers are comparatively large, conclusions may be arrived at which are not borne out by bedside observations.

In questions of the kind we have now under consideration the general floating opinion of the profession is much more likely to be correct. The only doubt which might be thrown upon such an opinion would arise if the question at issue were one to which the attention of the profession at large had not been clearly directed, or upon which there had been a very strong tradition. In the present case neither of these objections hold, for typhoid fever is an extremely common disease, and one of which every practitioner, whether in hospital or family practice, has experience, and the practitioner is called upon in every individual case to decide this most important question of diet, and, above all things, he has to consider when and how he shall make any change in it. He could not avoid the question if he would, for it is sure to be forcibly brought before his notice, if not by the patient, at any rate by the patient's friends. If, then, the general experience has led to a strong opinion that the diet should not be changed until the eighth or tenth day after the fever is past, depend upon it it is an opinion that is worthy of respect. It should not be lightly set aside because it cannot be actually put into a statistical form, still less must it be upset by appeal to a small number of cases, or because the *rationale* of it is not obvious.

*A priori* considerations should not, as Dr. Barrs himself says, influence

our practice too much, but that is equally true whether they appear to support or to oppose any special line of treatment. One of Dr. Barrs' chief objections to the present mode of treatment is that the explanations given are to him unsatisfactory. They are equally unsatisfactory to me, and I believe them to be incorrect; but still, a wrong explanation does not affect the value of a fact.

I am confirmed by my own observation in the opinion generally held that too early and incautious a change of diet from liquid to solid is attended with a considerable risk of relapse. I have seen relapse follow so often that I cannot question the fact; and the relapses have occurred not only in cases in which solid food has been given somewhat prematurely, but even in cases where the change of diet has been from one kind of liquid food to another. Thus I have seen it follow, and I believe result from, the taking of orange-juice or grape-juice without the pips, just as I have seen it follow a plum bun or piece of Christmas pudding smuggled in. The risk that premature change of diet introduces is of a relapse—that is, of a recrudescence of the disease—with all its consequences, whether it be perforation, hæmorrhage, or what not. There is no evidence to show that the food itself induces perforation or any other morbid process except the relapse, and then all the accidents may occur which are met with in the original attack.

If it be a fact, as I believe, that a too early change in diet may lead to relapse, and the explanations suggested are unsatisfactory or wrong, what explanation is there? We cannot answer this question until we know why it is that any fever ever comes to an end spontaneously. We can at the present time only speculate as to the answer. As far as we can judge, the spontaneous limitation of these infectious fevers seems to be dependent upon very subtle changes produced in the body of a chemical or physical character by which either the germs are prevented from developing, or the poisonous products they produce neutralized. If it depends upon the production of antitoxins, bodies of very complicated chemical composition, it is quite a conceivable possibility that very slight chemical changes may so far modify them as to lead to their complete transformation or neutralization, or actually to stop their production, in which case the original toxins would produce their symptoms all afresh, and a relapse would occur.

There is some evidence to be produced in favor of these chemical changes to which I am referring. Some years ago, in the course of some observations upon the excretion of urea, I noticed the remarkable influence which an abrupt change of diet has upon the amount of urea passed. For instance, in a patient who had been placed upon a fixed diet for some time and was passing an average percentage of about 1.5 of urea the diet was changed, as, for instance, by the administration of a single egg, or something of that kind. The percentage ran up at once to 3.5, or even 4, and remained at that height for some little time. This was quite independent of the new article of food given, for if the same diet was continued the percentage of urea fell in the course of time to what it was before, namely, 1.5; or, if the offending article was withheld, so that the diet continued what it was before, the percentage still remained high for

a time; so that the total excretion of urea amounted to many times the equivalent or the nitrogen contained in the article of diet which had been added. This is a very instructive and suggestive fact, and shows how considerable the chemical changes may be which slight causes can produce.

Diabetes mellitus affords another illustration of the same kind, for the ingestion of a small quantity of sugar or starchy food is followed by a very considerable increase in the amount of sugar eliminated, and this may last many days, and be altogether out of proportion to the actual amount taken, so that sugar acts upon a diabetic patient as an active poison.

In another disease of an entirely different character from typhoid fever, namely, rheumatic fever, I have similar observations upon the excretion of urea to show what profound effect is produced by slight alterations in diet. But rheumatic fever is of especial interest in relation to the question we are discussing, for it has been long accepted as a clinical fact that it is very easy to determine relapse by changes in diet. Rheumatic fever is no doubt a germ disease, just as typhoid fever is, and no doubt the true explanation of relapse is much the same in either case.

If this conclusion to which observation has led me be true, we have a sufficient explanation of relapses occurring in various diseases as well as in typhoid fever, as the result of comparatively slight disturbing causes, of which a change in diet may be one. In typhoid fever the physiological equilibrium is unstable. In all the metabolic processes the same instability is seen which is so obvious in the temperature. How easily this is upset by intestinal disturbance we have daily clinical experience.

If what I have said is true, it is change as change which does the mischief in typhoid fever, and not so much the alteration from one kind of diet to another, although it is quite clear that the more abrupt the alteration the more likely it is to produce these effects. This is, I believe, the essential fact in typhoid fever, and it so far influences my practice. In the febrile stage it is important first of all to find out a diet which suits the patient. Milk is the simplest diet, and fortunately it suits most people, but it does not suit all. If milk cannot be taken the diet must be modified, and this or that form tried until one is found which agrees with the patient. As soon as the suitable diet is found, it should be continued, and not changed without good reason. "Leave well alone" is an excellent maxim in medicine, and it is one of constant use in typhoid fever. If there are exceptional cases, or exceptional circumstances arise in any case, exceptional treatment may be necessary. So with the diet: if change is necessary, change must be made, but it should be made as it were under protest, and only when distinct necessity arises. Opinions differ greatly as to what is absolutely the best diet for typhoid patients. Some lay great stress upon the feeding, the giving of milk only, and the avoiding of beef tea. Others do not object to a combination of milk and beef tea or prepared foods. Some like eggs added to the milk, and so forth. To my mind it matters little so long as the diet is liquid, sufficient in quantity, and agrees with the patient, if it be not changed. If I come to a patient and find that patient upon a diet which suits him,

although it might be one which I should not myself have originally selected, I should not change it if the patient were doing well.

In regard to the other question—namely, at what period of convalescence it may be safe to pass from the diet of fever to a more ordinary diet, I believe the best rule is that which is laid down by most authorities in the present day, and which I always practise—namely, to make no change whatever in the food until the temperature has never risen above the normal for ten days. I have never seen any harm done by keeping a patient a few days longer on the ordinary liquid diet, especially if its quantity has been increased, and if it is not necessary why should any risk be run at all, especially when it is remembered how serious a relapse may be? During the first day or two the risk of a relapse being produced by a change of diet is considerable, and it becomes less and less with every day of the post-febrile stage; it is less at the eighth day, and still less at the tenth.

As a rule I think it may be safely said that if the patient passes the tenth day the risk of relapse is extremely small. This, however, is only a general rule, and there are exceptions to it; thus I have lately seen a case in which the relapse occurred on the fifteenth day.

I do not think this question should be treated as an open one, as if it had not been seriously considered hitherto, for the current opinion is really the outcome of a multitude of observations conducted without bias over a series of years, and all the more trustworthy because no attempt is made to prove it by figures. So far as my own personal experience is concerned, I am led to endorse the current opinion with emphasis. I cannot but believe that if change of diet from liquid to solid food in the early days of convalescence, and still more before the fever has ended and convalescence commenced, become the routine practice, some of the individuals upon whom the experiment is tried will suffer, while in the end the conclusion will be that the current opinion is correct.

### THE STIMULATING TREATMENT OF PNEUMONIA.

In the *London Lancet* for April 4th, 1896, was an interesting paper by Dr. Squire, strongly advocating the stimulating treatment of pneumonia, in which a hospital case was cited in illustration of its efficacy. The patient was "so far gone" that the physician in attendance gave him up as in a hopeless condition. The interne and the nurse, however, determined he should not die if they could help it, and, accordingly, plied him with brandy, as much as they could get down. The result was that he took in twenty-four hours thirty-two ounces of brandy, with decided benefit, and following up the treatment the man got well. A good abstract of the paper is published in the *Therapeutic Gazette* of August 15th.

This case brings very forcibly to my mind one under my care in the Massachusetts General Hospital some years since. The patient was a respectable young woman, eighteen years old, who at the time of her admission was suffering from double pneumonia, the lower half of both lungs being solidified. She was, of course, in a very critical condition

requiring that she should be held up by all the means that could be employed. She absolutely refused, however, to take any form of nourishment, even milk. Happily, she did not object to stimulants, so I directed the nurse to give her as much good French brandy as she could persuade her to take, properly diluted, watching carefully for any sign of over-stimulation.

On the following morning I was astonished to find that she had taken half of a so-called quart bottle of the stimulant (a little short of sixteen ounces) without the least discomfort or over-excitement. The treatment was continued, the same quantity of brandy being given her each of the two following days, with no bad result. On the morning of the fourth day whisky was substituted for brandy, and of this she took three-quarters of a quart bottle each day for four successive days, without the least discomfort or over-stimulation. On the morning of the eighth day there was a decided change for the better, and the patient absolutely refused to take a drop more of liquor. This was accordingly omitted, and she took without any objection milk and other light nourishment, such as her condition called for, and her recovery was complete and rapid. It was interesting to note how readily the patient, who was not an habitual user of stimulants, took them as prescribed—how entirely free she was from any appearance of intoxication while taking them—and her instant rebellion against them when the demands of nature had been satisfied. She took no drugs from the beginning to the end of her illness. I will only add that I cannot recall any other case in my practice in which I have thought it advisable to give stimulants so freely. Of course I have used them very often, as the case required, but never, so far as I can remember, to the entire exclusion of food and drugs.—Dr. S. L. Abbott in *Boston Med. and Surg. Jour.*

NOTHING NEW UNDER THE SUN.—It is worthy of note that while the science of medicine in its various branches has been studied and practised in India from time immemorial, and that many of what are regarded as modern discoveries in Europe have long been familiarly known in the East, yet practically nothing has been understood there of what we have learned to call sanitation. From the remarkable book just given to the world by the Indian Prince known as the Thakore Sahib of Gondal, on the "History of Aryan Medical Science," we learn that much was known to the practitioners of ancient India which is usually understood to be the result of quite recent European discovery. It is rather startling to be told that not only were the practices of percussion and auscultation familiar to the Indian medical men of 2,000 years ago, but they were acquainted with the circulation of the blood, and practised vaccination for smallpox, and cranial and abdominal surgery. The use of anæsthetics, and even of a rudimentary sort of antiseptics, is said to have been known, and the latter at least may be regarded as belonging to the domain of preventive medicine. But of sanitation in general, as that word is understood in our days, they seem to have known nothing; and their descendants have been content to dwell in equally

blessed ignorance, until awakened to knowledge and aroused to action by the troublesome "doctor *sahib*," backed up by the Mohammedan or Hindoo policeman. Perhaps, after all, no better thing could have happened to Calcutta and Bombay than this visitation of bubonic fever; for the wholesome alarm caused by the outbreak will probably lead to the adoption of preventive measures which will be of inestimable benefit to both cities, and which, through them, will more or less intimately affect the whole of India.—*The Sanitary Record*.

MEDICAL SPELLING.—The *Maryland Medical Journal* so thoroughly voices our opinion of this subject that we reproduce the major portion thereof:

"The absence of any uniformly recognized authority on orthography in the United States has caused a wide diversity in the spelling of certain words and the almost too ready coinage of new words without sufficient sanction as to form and construction.

"If some body of learned men could act as god-father to all new terms and words, settling once for all the correct spelling and definition, then the multiplication of dictionaries with the varied orthography would be avoided. The best medical dictionary in English is marred by spelling which robs so many words of their philological originality. The history of a nation may be traced through its language, and while changes in the forms of words must of necessity take place, such changes are usually gradual.

"Some publishing houses, notably the Appletons, adhere closely to British orthography, and it must be confessed this is much preferable to that employed in some of the medical journals. Even the final 'our' in such words as 'colour' is refreshing after reading in one of the newer journals of a 'clinic lecture.'

"Would-be philologists should remember that the language of a nation is sacred and, except perhaps in dialect stories, should be respected."

ATROPHY OF THE TESTES AND PROSTATE AFTER SECTION OF THE VAS.—Isivrđi (*Riforma Medical*) showed before the Academia de Medicina of Turin an old man of 72 years, whose vas he had divided six weeks before for enlarged prostate. For the last year the man had suffered from the advanced symptoms of enlarged prostate, which had been rebellious to all forms of treatment. The prostate was much enlarged, and the patient had to put himself in odd positions before he could micturate.

Twelve days after the operation the symptoms began to diminish and disappeared within a month. He can now hold his water for seven hours during the night, and pass it voluntarily and without pain. The urine, which was before purulent and blood-stained, is now clear and normal. There is induration over the incision, extending down to the epididymis; the testicles are diminished in size, and the prostate is impalpable.—*Univ. Med. Mag.*

## OBSTETRICS AND GYNAECOLOGY.

IN CHARGE OF

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SYMPTOMS, DIAGNOSIS AND TIME FOR OPERATION IN  
RUPTURED TUBAL PREGNANCY.\*

BY JOSEPH PRICE, M.D., PHILADELPHIA, PA.

*(Concluded.)*

It must be admitted that the removal of a growing and almost universally attached placenta is one of the most difficult procedures in surgery. The hemorrhage is profuse and sometimes uncontrollable ; the contraction of all tissues to which it is attached simulates that of uterine tissue. Rapid separation, heat and firm pressure will commonly succeed in controlling it. As to choice of time for the operation, I am of the strong conviction that there is but one choice, and that is prompt removal when the accident is first recognized.

It is better to act promptly. The steps of procedure are clear and should be completed at any risk. It is better to contend primarily with the loss of blood than later with overwhelming sepsis. Tubal pregnancy is dangerous throughout its existence ; the subject *is never safe until surgically relieved*. *Exceptionally*, is the trouble recognized before rupture. I have never recognized one before rupture ; all before is conjecture rather than knowledge.

An important element of the history connected with these cases is that few of them are kept under observation with the definite purpose of removing the viable child at the period of spurious labor ; alarming symptoms develop and subside, and consultation with a specialist, if they are at any time consulted, follows the death of the child ; it rarely antedates it. Then all the conditions are found greatly aggravated by delay or neglect, or that which is infinitely worse than either or both, inexcusable ignorance. Consultations for suspected extra-uterine pregnancy are quite common in those peculiar cases of much-attenuated uterine walls in normal gestation, but the ectopic cases are permitted to pass through the primary rupture, recurring ruptures, almost constant pain and spurious labor, entailing impaired general health without suspicion of the patient's peril.

\* Read in the section on Obstetrics and Diseases of Women, at the forty-seventh annual meeting of the American Medical Association, at Atlanta, Ga., May 5-8, 1896.



An English authority has stated what, in connection with these cases, should be accepted as sound dictum: "As all know, the Fallopian tube is, in the vast majority of instances, the starting point of extra-uterine gestation; the most common result of this is that rupture occurs usually at the second month, through some part of the tube covered with peritoneum; a result almost universally fatal if left alone, and as *invariably curable if operated on in time* by abdominal section."

DISCUSSION ON PAPERS OF DRs. MACDONALD AND PRICE.

Dr. Joseph Eastman, Indianapolis—So far as I am able to judge from reading the literature of this subject, and from experience, there is but one treatment for extra-uterine pregnancy, and that is surgery. I will refer to one case which came under my observation, because it was an extraordinary one, and it illustrates still further the futility of packing with ice and the use of electricity. A man supposed to be a competent electrician and well posted in the treatment of extra-uterine pregnancy by electricity, tried for six months to kill the fetus and failed. He then tried packing with ice for three weeks more. When the patient was *in extremis* there was a change of physicians. On opening the abdomen I found the sac containing a living child in such an advanced gangrenous condition that I could not for a moment think of leaving it. Following the rule which I always insist on, that we shall first find the uterus, if possible, I slipped my hand down, found the origin of the tube toward the uterus, believing that all cases of extra-uterine pregnancy are primarily tubal, seized the tube at cornu of the uterus, which felt fully as large as my wrist, and in doing so I detached a portion of the placenta from the gangrenous sac. Blood poured out freely; my assistant had gone to resuscitate the child, leaving me with a couple of nurses to do the best I could under the circumstances. Crushing down the sac (as you would crush a cherry-stone out by squeezing the cherry) with clamped forceps which I have, with fingers like my own, I seized the sac below; then to my own astonishment I found the sac was adherent in a number of places to the intestines. With this clamp attached, after applying six ligatures around the points of hemorrhage, we got the gangrenous sac out, then quilting with iodized silk, we had the pedicle, to the cornu of the uterus, covered with iodoform collodion. Where we find a dead or living child with a gangrenous sac, the proper way to deal with such cases is to get at the cornu of the uterus with clamps or ligature, shut off the blood supply, and remove the sac. I do not believe that it is good practice to leave the placenta to slough out. I do not believe there is a case where such men as Dr. Price would be induced to leave a gangrenous sac. I believe the sac can be removed in many cases with less risk to the patient than in leaving it or the placenta to slough out, or both combined.

Dr. C. A. L. Reed, Cincinnati—My experience has led me to attach particular importance to the symptom of shreddy metrorrhagia as an early manifestation of this condition, and I have not been able to verify the fact that this symptom occurs only after the symptoms of rupture. On the contrary, I have found that it has occurred among the earliest mani-

festations of pregnancy, and no doubt it has occurred when there were no symptoms of pregnancy, and I was prompted on one occasion to make a careful study of a case and a diagnosis before rupture by following the case as suggested by the symptom, and that was one case in my experience in which a diagnosis was made before rupture, was operated upon before rupture had taken place, and the diagnosis subsequently verified by careful microscopic examination of the specimen removed. Therefore we did have in this one instance a confirmation of the fact that a shreddy metrorrhagia may occur prior to the symptoms of rupture.

It has fallen to my experience to observe so few instances, that I hesitate to allude to them, for the reason that their example has led to many errors and many fatal delays; but I have seen a number of cases in which primary rupture had occurred in the broad ligaments, for the reason that there was a definite extension of the tumor downward, and no particular extension of it upward, although its upper margins were definitely outlined. The tumor became stationary and disappeared. This was manifestly a hematocele. You may say that I had no evidence that it was a case of ectopic pregnancy; but if we are justified in saying that given cases upon which we operate were cases of ectopic pregnancy by virtue of the existence and persistence of certain symptoms which lead to the diagnosis and which diagnosis is confirmed by operation, certainly we are justified in interpreting as having similar consequences a similar aggravation of symptoms, and these symptoms did exist in a few cases that I saw. While that is true, I believe it is a dangerous expedient to rely upon absorption. The maximum of safety is upon the side of operation at the earliest practicable moment, and if we have such primary rupture with such limitation of hemorrhage, the safest expedient is to avail ourselves of the quiescent interval and proceed to operate when we can do it without serious complication, and without being forced to deal with an exsanguinated patient.

Dr. James F. Baldwin, Columbus, Ohio—There was one point made by the first essayist which is of prime importance, and that is with reference to educating the general practitioner to suspect the existence of ectopic pregnancy, and thus lead to a thorough examination and to a diagnosis. It has been my fortune within the last few months to have seen seven cases of ectopic pregnancy. Two of these were seen in my own practice, the others in consultation. In five of them the diagnosis was made before rupture and operation performed. The diagnosis was subsequently confirmed, and the five patients are well to-day. Two of these cases occurred in the same patient at an interval of six months. In each I made a presumptive diagnosis of ectopic pregnancy and operated. In two other cases no suspicion had occurred to the attending physician of ectopic pregnancy until I suggested to him that in the five cases mentioned the diagnosis had been made by the general practitioner. This case was one of ectopic pregnancy, the diagnosis confirmed, and the woman operated upon. In two cases the diagnosis was not made until repeated hemorrhages had occurred. The eighth case was one that was sent to the hospital during my absence, and the physician who sent the patient had made a diagnosis of peritonitis. The patient died within

forty-eight hours after admission to the hospital, from peritonitis. A post-mortem was made which revealed a normal uterus and tubes, but an ectopic gestation sac in the cul-de-sac of Douglas which had ruptured, producing a considerable amount of hemorrhage which resulted in peritonitis. This is an exceedingly rare condition, one which is denied by many pathologists.

We have educated the general practitioner to make a diagnosis in a large number of cases of appendicitis, and I think if we impress them in the matter of ectopic pregnancy until they suspect its existence when they have anything abnormal during the early weeks of pregnancy, they will make a diagnosis then or will have a suspicion sufficiently well grounded to send for an expert to make a thorough examination. When the general practitioner is educated up to this point, cases of ectopic pregnancy will be diagnosed much earlier than they are now, and before rupture, and then the operation will be comparatively simple and few deaths will occur.

Dr. A. Vander Veer, Albany—Papers of this kind are lessons in object teaching. They teach the general practitioner regarding the matter of an early diagnosis in these cases.

With reference to general peritonitis, inflammation of the bowel, etc., I have lived long enough to hear papers on idiopathic peritonitis, and in abdominal surgery the comparison or difference between these terms and appendicitis have been and are presented in their true light. The general practitioner has been taught that pelvic hematocele will be absorbed, that it will disappear. Does it disappear? Look at the cases of pelvic abscess—cases where a portion of bone protrudes through the vagina and rectum. Look at the cases of secondary hemorrhage and death which occur before you are fairly in the house. Some of these cases if diagnosed early and operated upon immediately would be saved. So many papers have been presented in the past that they have mystified the general practitioner as to the classification of this condition, as to the true pathologic state present. What is the use in standing before the general practitioner and arguing with him as to the form of ectopic gestation. If you keep it up for twenty minutes your patient is beyond relief. When the clinical symptoms are presented the general practitioner must know that an operation is absolutely necessary, and we have the authority of one man who has perhaps operated more than any other in America in these cases, and he tells us emphatically what ought to be done.

Stress should be laid upon the sympathetic symptoms. The general practitioner should be educated in this matter as much as he is in regard to cases of appendicitis, and in case he does not wish to operate himself, he should call in a specialist to share the responsibility with him. I find that when we teach the general practitioner what to do he is not slow in following our advice.

Dr. F. J. Yager, Campbellsburg, Ky.—I am a general practitioner, but I am firmly convinced that in these cases of ectopic pregnancy as soon as a diagnosis is made we should operate. If the general practitioner feels that he is not sufficiently expert to undertake the operation himself he should call in a specialist. The more we study these cases the more we are convinced that the delay is dangerous.

Dr. Rufus B. Hall, Cincinnati—My experience leads me to believe that a large percentage of these cases have a history of some pelvic trouble. I have known pelvic trouble to precede tubal pregnancy for at least five years in some cases. The cases are few in number in which we do not get a history of long continued pelvic trouble. We have a shorter space of time in which the patient has considered herself not entirely well since her last labor. A number of cases do not have these symptoms, but when we take the large number of cases operated on, a large per cent. of them have pelvic symptoms following some uterine or appendiceal trouble preceding their ectopic pregnancy. I have seen two women die inside of ten hours from ruptured pregnancy, before the third month of tubal gestation, as subsequently proven by autopsy. One patient lived twelve minutes after I reached the house. The time to operate is as soon as the diagnosis is made. In making a diagnosis we should not disregard the possibility of tubal pregnancy occurring in an unmarried woman. I have had two cases, one in a widow, who denied the possibility of pregnancy until after operation.

Dr. J. G. Carpenter, Stanford, Ky.—The model practitioner is a diagnostician the world over. If the general practitioner knows his business he makes a diagnosis and brings his patient to the abdominal surgeon if he does not want to operate himself. If he is the practitioner that he ought to be, he should be prepared to operate on the patient himself, because the best abdominal surgeons are made from the best general practitioners. Early diagnosis is the thing of prime importance, followed by prompt surgical interference. Operate before the patient bleeds to death from hemorrhage, before secondary lesions are set up. The patient is often unaware that she has had long standing uterine trouble. As soon as the diagnosis is made the patient should be promptly operated upon. If this was done a large number of cases that are now lost would be saved.

Dr. Milo B. Ward, Topeka, Kan.—We all agree that it is absolutely essential to resort to early operative interference in cases of ectopic pregnancy, particularly before rupture has taken place, if possible. The general practitioner must be educated to the point that in cases of ectopic pregnancy it is necessary to operate as soon as a diagnosis is made. Operative interference must not be postponed. I would like to report two cases which illustrate the danger of postponing surgical interference, but I will not do so at this time.

Dr. W. G. Macdonald, Albany—Regarding the general practitioner, I will say that in those cases which I have seen the matter of diagnosis or suspicion of ectopic pregnancy by him has been the exception, and not the rule. We must educate the general practitioner that we have in these cases certain definite symptoms.

When we are called in consultation we sometimes give diametrically opposite advice in regard to what is best to be done after the diagnosis has been made, and this puts the general practitioner in trouble. We want to act together in these matters and establish uniformity of opinion.

Dr. Joseph Price, Philadelphia—This subject is not so difficult to understand, and a study of differential diagnosis is rather easy. From a general standpoint, the general practitioner is a very much better diag-

nostician than the specialist. You are in the habit of calling in specialists to do your special work: sometimes after studying your cases two or three days you come to a positive diagnosis by exclusion; and now I am going to rebuke you for permitting the specialist to take the attitude which he commonly does. After studying your case you summon a specialist, he examines your patient, shrugs his shoulders, looks wise, and says he will tell you what the condition is when he opens the abdomen. The general practitioner is as good a diagnostician in a great many cases as a specialist, and when his attention is once called to a subject he recognizes and realizes its importance. I have the greatest respect for the general practitioner, and in ninety-nine times out of one hundred I have found him usually right. If we save these patients, there is no time for the specialist to be called in, because the operation must be done before the specialist arrives. I have said that at least 25 per cent. of the cases die within twenty-four hours. The symptoms are simple, physical characteristics are prominent. There is an absence of one or two menstrual periods, a delayed menstrual period, and along with this we have the characteristic agonizing pain. The attack of pain differs from any pain to which your attention has ever been called. We have the characteristic shreddy *débris* which is nearly always present; a rapid pulse, and the symptoms of concealed hemorrhage. In some cases the pulse may not be bad, and the symptoms are not alarming; but if the case is an acute and typical one, cut down upon the peritoneum only, and it will be found to be black. You have only gone to the peritoneum to make a diagnosis. You will find black blood beneath it in a large number of cases.

With reference to general practitioners making a diagnosis in these cases, I will say that nurses occasionally after listening to discussions in the operating room and taking a record of the case will make a correct diagnosis. I have had nurses who have sat by the bedside of patients for some time tell me that the case looks like one of extrauterine pregnancy.

PSYCHOSES FOLLOWING OPERATIONS.—Jacobs (*La Policlinique*, 1896, No. 4) believes that mental derangements which appear immediately after operation permit a more favorable prognosis than those which develop after a considerable lapse of time. He cites several illustrative cases, viz.:

CASE I.—Acute mania appearing three days after curettage and perineorrhaphy. It disappeared slowly but completely.

CASE II.—Melancholia in a woman, aged thirty-four years, developing six months after vaginal hysterectomy; death occurred four months later.

CASE III.—Erotic mania of a violent type; it appeared the day following vaginal hysterectomy, persisted eight days, and then entirely disappeared.

CASE IV.—Mania began on the second day after vaginal castration, and terminated fatally.

CASE V.—Melancholia developed three weeks after curettage, with insomnia, aphasia, paresis and death.

METrorRHAGIA AFTER THE CLIMACTERIC.—Masse (*Revue internat. de méd. et de chir. prat.*, 1896, No. 6) calls attention to the fact, previously pointed out by Monod, that uterine hemorrhages may occur after the menopause in perfectly healthy women. These have been noted particularly in stout subjects. Hermann and Tournaux describe certain degenerative changes in the senile uterine tissue which would favor bleeding. The muscular substance is flabby, the vessels of the mucosa are dilated and brittle, and the arteries undergo atheromatous changes. The glands disappear, being replaced by fibrous tissue rich in blood-vessels. The treatment consists in applications of liquor ferri or glycerin and carbolic acid, or in curettage.

The writer reports the case of a patient, seventy-six years of age, whose uterus was quite normal. Hot douches and ergotin failed to control the metrorrhagia, which was finally checked by intra-uterine galvanization.

GLYCERIN INJECTIONS IN THE TREATMENT OF UTERINE FIBROIDS.—Chéron (*Ibid.*) speaks highly of intra-uterine injections of sterilized glycerin in cases of fibromyoma. A little over a drachm is slowly injected every two or three days, the vagina being subsequently tamponed with cotton or gauze saturated with poroglyceride.

The effect of the drug is to cause dryness and atrophy of the endometrium, and hence diminution of the tumor. A marked decrease in the flow is observed at the following menstrual period. The writer affirms that the ease and safety of this method of treatment should recommend it in cases in which operative interference is inadvisable, or is refused.

THE DIAGNOSIS OF SMALL OVARIAN TUMORS.—Davenport (*Boston Medical and Surgical Journal*, 1896, No. 15,) concludes an article on this subject with the following propositions: 1. Small intra-pelvic growths give rise to marked symptoms. 2. Pain is usually noted, but does not bear a constant relation to the location or kind of tumor. 3. Menorrhagia or metrorrhagia is frequently present, especially in cases of cystic ovaries adherent to the uterus. 4. When uterine hemorrhage exists in connection with an intra-pelvic tumor, and is not affected by intra-uterine treatment (curettage or electricity), the tumor is probably ovarian rather than uterine. Reflex symptoms are rare with small tumors, at least in the earlier stage of their development.

OBSERVATIONS ON INTRALIGAMENTOUS OVARIAN CYSTS.—Brigidi (*Ann. d'Ostet. e Ginec.*, 1896, No. 3) concludes a clinical report on this subject as follows: Women with intraligamentous cysts are apt to be sterile, because of the frequency with which both ovaries are found in an abnormal position. Under these circumstances both cysts may be of considerable size, or one may be small. Occasionally the opposite ovary is either absent or rudimentary. If the woman has borne children, pregnancy must have occurred before the ectopic ovary became cystic. When there exist supernumerary ovaries, or aberrant portions of ovarian tissue between the broad ligaments, an intraligamentous cyst and one occupying the ordinary position may be found on the same side.

## NERVOUS DISEASES AND ELECTRO-THERAPEUTICS.

IN CHARGE OF

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### STATIC ELECTRICITY IN THE TREATMENT OF NERVOUS AND MENTAL DISEASES.\*

BY DR. H. R. NILES,

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Static electricity, although long known to the medical profession, has received less attention and study than its valuable services in the alleviation of suffering and cure of disease would seem to warrant. Long before, and for some time following, the discoveries of Galvani and Volta, it remained prominent in the field of electro-therapeutics, but it gradually fell into disuse, and was superseded by the galvanic and faradic currents. Notwithstanding its antiquity as a remedial agent, it seems to be but now upon the threshold of its successful introduction to the medical profession. Improvements in the construction of the machine have modified and tempered the irritating qualities of the current to such a degree that, after an application, an expression of satisfaction from the patient is the almost universal reward of the operator. Its pleasant, soothing effect, the gentle stimulation of the circulation—indirectly affecting nutrition—and the readjustment of metabolism, as well as the favorable psychic effects, are desiderata more readily attained in many cases by the static current than any other therapeutic measure.

In many cases beneficial effects are immediately obtained. In others, patient and long-continued application extending over a period of weeks, and sometimes months, is the only means to the end. When galvanism and faradism have been faithfully applied, and fall short of the desired effect, the use of some form of static current will frequently prove of the greatest service, and I should never consider a case as incapable of benefit by electric treatment until static electricity has been thoroughly tested. The application of static insulation is far more agreeable than either general galvanization or faradization. The inconvenience to the patient of having to disrobe almost completely, and the distaste which many naturally feel to having a wet electrode rubbed over the skin from ten to twenty minutes is entirely obviated. However, many cases require galvanism and faradism, and the therapeutic value of these agents will continue to hold for them a prominent place in medicine.

\* Read before the Association of Assistant Physicians for the Insane, Dec. 4th, 1896.

Endowed with high potential, deficient in volume, and possessed of an enormous electro-motive force, static electricity is enabled to affect the entire system in a limited degree. It affects the functional processes, glandular secretions, the circulation, nutrition, sleep and sensation.

In the melancholias, neurasthenia, and kindred neuroses, in which the nutrition of the nerve cell is primarily at fault, a toxic condition is established through the inability of the cells to rid themselves of the results of physiologic activity. The toxicity is responsible for many of the mental and physical manifestations, and the discomfort to which these patients are subject. Our aim in treatment is to prevent undue waste of nervous energy, and to aid in the elimination of self-produced toxic substances. To this end we establish and maintain the highest degree of nutrition possible. To my mind, the single agent of greatest value in this work is the static current. Its use is rational, and there is nothing of the occult about it; nor can its influence in any sense be attributed to hypnotism, or some subtle influence upon the nervous system, for the same effects cannot be produced by such means. The function of all electric treatment is to improve nutrition, and the most efficient of the several manifestations of electric energy is the static current. Deficient nutrition and deficient elimination—aside from heredity—are the two factors which enter with greatest frequency into the etiology of all neuroses. Our need, therefore, in therapeutics is an agent which will promote a more nearly normal metabolism. A high degree of nutrition and cell activity in any organ is indicated by an increased circulation of blood in that organ. The ability of high potential currents to accelerate the circulation and to improve nutrition has been demonstrated in physiologic laboratories and in clinical work.

In all cases where nutrition of the tissues, and especially the nerve structures, are below par from any but an organic cause, it is a tonic of the greatest efficacy. It not only stimulates tissue formation by acceleration of the circulation, but, as Dr. Monell has said, "by a direct mechanical effect upon the protoplasm of the cell, whereby its molecular arrangement is changed and latent energy is liberated."

Aside from the relief of symptoms to which it is especially directed, there has also been observed improvement in remote visceral disturbances, such, for example as indigestion, habitual constipation, vertigo, etc.

The positive static breeze, which in reality is a succession of infinitesimal sparks, which passes into a continuous stream between the insulated patient and the administering electrode, is a soothing application and may be applied to the head, spine, or any part of the body, with little fear of irritating the patient. It is best adapted to the relief of local pain. Neuralgia, nervous headaches, muscular rheumatism, and various other forms of pain will be rapidly controlled by it. So often have I seen severe and obstinate headaches completely relieved by this agent that I now seldom prescribe other remedies. Not always, but frequently, a quiet, natural sleep, continuing from one-half to one and one-half hours, follows the treatment. The patient awakens rested, and with no trace of the headache.

Dr. Curran Pope, in speaking of the treatment of neuralgia, says:



“ Nearly every case needs constitutional treatment, and to secure a powerful tonic sedative I use negative insulation from three to ten minutes, followed by a positive breeze to the painful nerve. The results are often startling. Patients that were before irritable and excessively nervous become quiet, and often drowsy. Where neuralgia is limited to the limbs or trunk, a mild positive direct breeze or spark gives excellent results.”

The static spark, a most energetic form of electrical discharge, is a powerful therapeutic application, but, except in a few cases demanding heroic treatment, will be found too irritating, and will not be cheerfully borne by many patients until tolerance is established. In chronic and deep-seated neuralgias, especially of the sciatic nerve, the application of heavy, indirect sparks will be found to be in the nature of a specific. Dr. Monell has recently reported a series of cases of sciatica treated with the static spark, in which he obtained most favorable results. Short, fine friction sparks, obtained by holding the ball electrode in close proximity to or in contact with the clothing, are indicated in altered peripheral sensations, anæsthesias, myalgias, and cases requiring the effect of a counter-irritant.

The long, thick spark may be called into requisition in restoring tonicity to enfeebled or paralyzed muscle, relaxing contractures, resolving exudations, promoting absorption, and relieving pain in deep-seated organs.

The static induced current, first described by Dr. Morton in the *Medical Record* of January 24, 1891, is similar to all induced currents, and a description of its action and uses would be but a repetition of what might be said of the faradic induced current.

The frequency of application must be governed by the condition of the patient. In cases of serious nervous disturbance—neurasthenias, neuralgias, chronic headaches—daily application will be found most effectual; in less severe cases three applications a week will be productive of good results. For the relief of severe pain, as sciatica or persistent headache, two or more applications may be made daily. The duration of the application will depend upon the form of current used, the susceptibility of the patient, and the end to be attained. In our practice the time has varied from five to twenty minutes. With a nervous, apprehensive patient, taking the first treatment, five minutes in the chair will be as much as she will endure without complaint. As timidity is overcome, and confidence in the treatment established, the time can be gradually lengthened.

Under treatment the pains, the weariness, and the morbid fears gradually become less intense, and finally disappear, but the disappearance is at first only temporary. The changes at first set up are not sufficient to endure for any great length of time, perhaps not more than a few minutes, an hour, or perhaps several hours. More work must be done before nutritional changes are thoroughly established. With each treatment the period of comfort will be prolonged. As improvement takes place, and there is an increase of strength and energy, a patient may be able to pass a period of two or perhaps three days without treatment. Only with experience is it possible to reach definite conclusions as to the man-

ner, length and frequency of applications. Personal idiosyncrasies as well as the manifestations of disease must be considered. No accurate and satisfactory means of measuring the dose has yet been discovered, but it may be regulated in two ways: By the directness of the connection between the patient and the active pole of the battery, and by varying the revolutions of the glass plates. To augment the dose, we make a direct metallic connection between the machine and the patient by placing his foot upon the connecting-rod or chain, or permitting him to hold it in the hand; also by increasing the revolutions. The reverse procedures hold good in diminishing the dose.

Notwithstanding the opinions of many to the contrary, I am a firm believer in the differences of polar action. I have been led to this opinion, not only by my observations in the treatment of patients, but by repeated experiments upon myself. Positive static insulation is invariably an agreeable application, and, as a rule, brings quiet and comfort. Not so with negative insulation. In the majority of cases, restlessness and discomfort supervene. While the positive breeze is a comforting application, bringing ease and relief from the majority of headaches in from ten to twenty minutes, the negative causes a prickling, unpleasant sensation, often accompanied by unexpected sparks, which, in many cases, but aggravate the suffering from which relief is sought. The difference in polarity is still more striking in the static spark, and will best be appreciated when personally experienced. The spark, at best, is not an agreeable application, but the indirect spark, drawn with the positive pole, will be cheerfully endured by the majority when they are aware of the relief it will afford, while the negative is so stinging and painful that its use is, as a rule, impracticable.

"Some six years ago Damian of Paris made a series of observations upon the temperature and pulse and the urine, to determine what, if any, difference there was in the different insulations. The published statement showed that with positive insulation there was a regulation of the temperature and heart's action, and increase of urea and diminution in uric acid, while with the negative insulation these changes were less marked in so far as temperature and pulse were concerned, and that the volume of the urine was increased, but no change occurred in its organic constituents."

Moral effects must not be lost sight of. That in many cases treated with electricity much of the improvement is due to properties of a psychic character is denied but by few. We are all familiar with the value of suggestion and employ it daily in our work upon the wards. We are sometimes at a loss for some effectual means of inspiring hope, and increasing its buoyant influence, so essential to the successful treatment of states of nervous and mental depression. Hope and confidence bridge over many a crises, and faith in the physician and the value of his efforts is a therapeutic power that should never be carelessly shattered. As an agent for inspiring hope and establishing confidence in treatment, we find the use of this static machine of great service.

In conclusion, let me repeat that static electricity is a tonic deep-acting and far-reaching in its effect. As a muscle stimulant it is unsurpassed

as a soporific it will be found useful in many cases; as a reliever of pain it is a most potent agent. However, the possession of a static machine is no sure road to success. Neither is the static current a cure-all. It is not able to restore degenerated nerve cells, or to stimulate to action a dead muscle. Indiscriminately used, it will often prove disappointing, but, with careful selection of cases, a successfully operated machine, a skilful administration, and conservative expectation as to results, static electricity stands the peer of any other single therapeutic agent.

**BLOOD-LETTING FOR PUERPERAL ECLAMPSIA.**—This question has long been discussed, and the procedure is now being highly advocated again in suitable cases—those with full, bounding pulse and flushed face, indicating plethora. Wm. M. Catto, of Decatur, Ill., reports a number of cases blood-letting is practised freely and fearlessly a greater number of recoveries are found than with any other line of treatment for eclampsia. The amount of blood to be drawn is not fixed—bleed until the face becomes pale and the breathing quiet. Venesection is to be followed by cathartics, diaphoresis and diuresis.—*American Gynecological and Obstetrical Journal.*

**THE TREATMENT OF CHOREA.**—Dott. E. De Renzi has made use of eserine, antipyrine, salol, and ether-spray along the vertebral column, but he has confidence in only three remedies: (1) Absolute rest, avoiding any external excitation whatever, and placing the patient in a dark room. (2) The ascending electric current along the spinal cord—the best results with a gentle current, progressively increased. (3) Arsenic in large doses, commencing with twenty drops of Fowler's solution each day for children, and double this amount for adults. When the chorea ceases the medicine should be continued, for the disease returns readily. The nutrition of the patient must be maintained, and good food and gymnastics are useful.—*Gazzetta degli Ospedali et delle Cliniche.*

**MENORRHAGIA IN VIRGINS.**—Dr. Laroyenne distinguishes the majority of cases of profuse menstruation in young girls which require no local treatment from a minority in which the use of the curette is advisable. If, after long attention to hygiene and a course of suitable tonics, menorrhagia persists, interrupted by occasional amenorrhœa, granular or fungous endometritis probably exists. This disease is yet more safely diagnosed when the patient has been perfectly healthy and quite free from anæmia before profuse menorrhagia appeared, and equally free from evidence of diseased appendages after the local symptoms become marked. It is right after dilatation to use the curette when the excessive menstruation causes debility. A single application of cotton wool, soaked in equal parts of water and chloride of zinc, made immediately after the scraping, is sufficient. Repeated cauterizations may readily cause atresia.—*N. Y. Med. Rec.*

## NOSE AND THROAT.

IN CHARGE OF

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## EUCAINE AND COCAINE COMPARED.

BY **J. MURRAY McFARLANE, M.D.,**

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The new anæsthetic, eucaïne, is being highly praised in certain circles, and, as is usually the case with new drugs, has its enthusiastic friends, who make rather extravagant claims for it, asserting that it is much safer than cocaine, and equally good, if not better, as a local anæsthetic.

Dr. Gaetano Vinci first investigated the action of eucaïne, under the direction of Professor Liebrich, who communicated the results to the Huteland Medical Society of Berlin.

At the same time Professor Emile Berger, of Paris, made extensive experiments with it.

Among the names of those who have written favorably of eucaïne we find Dr. Hal Foster, W. Jobson Horne and Macleod Yearsley (see preliminary communication in CANADA LANCET, March, 1897), Dr. A. L. Fuller, Parlaghy of Paris; Keisel Warnekros, and Wolff, of Berlin; the three latter being dental surgeons.

It is used in solutions varying from 2 to 8 per cent., according to the nature of the case, the former for examination purposes.

M. Reclus and M. Pouchet, at the Académie de Médecine, reported by the *Presse Médicale* for February 12th, (*N. Y. Med. Jour.*, March 13th) presented their views, which were not so favorable to the new drug, the latter (M. Pouchet) claiming that it was toxic and more dangerous than cocaine, inasmuch as it suddenly overcame the patient without any preliminary warning, thereby differing from cocaine.

The writer, from a test of eucaïne in twenty cases, agrees with the French observers, and considers that it cannot take the place of the older anæsthetic, which is without danger if used properly and not in too strong solution, as is generally the case, thereby giving a useful drug an entirely undeserved reputation for toxicity. Cocaine should not be used in stronger solution than 2 per cent. for operative and 1 per cent. for examination purposes, and must not be applied by means of a spray if

untoward effects are to be avoided, with certain exceptions. This applies to eye, nose and throat cases.

The great majority of medical men are in the habit of using much stronger solutions, and will perhaps consider 2 per cent. as a maximum strength as being too weak; yet in five years the writer has not used a higher percentage, has not had a patient complain of toxic effect, and is fully satisfied with the anæsthesia obtained.

It must be borne in mind, firstly, that certain parts of the nose and throat are difficult to anæsthetise, especially the middle turbinate bone and vault of the pharynx; and it is in operations on these parts that unfortunate symptoms most frequently arise, owing to efforts made to saturate the parts with strong cocaine solution. Secondly, that more or less pain will always be felt in operations of a crushing or tearing nature, involving adnoid tissue or bone, especially the latter, the anæsthetic having its action only on the mucous membrane, which can be thoroughly obtunded by a 1 or 2 per cent. solution without any reaction.

In operations on the tonsils it is best to inject a few drops of a one-half of 1 per cent. solution into the tonsillar tissue, followed by a few local applications of 2 per cent. to the surface of the gland by means of a cotton carrier, which may be repeated a couple of times.

One reason of the superiority of weak cocaine solutions lies in the fact that the first application of the strong solution causes such sudden and complete contraction of the blood-vessels that the power of further absorption is soon lost, and further applications do no good, and passing over a broader expanse of surface than is to be operated upon frequently cause alarming symptoms of collapse.

The above observations upon the action of cocaine are to show that the element of safety in favor of eucaïne is not so great as observers would have us believe. In fact, M. Pouchet, after sixty experiments upon animals, says that the toxicity of the latter is nearly as great as cocaine and gave no premonitory warning, which must be carefully considered by any desirous of experimenting with the new local anæsthetic.

A careful examination of the twenty cases where the writer of this article used cocaine and eucaïne justifies in his mind the following conclusions:

1st. *In the eye* (three cases of foreign bodies in the cornea, one tenotomy and one iridectomy).

Eucaïne in 2 to 4 per cent. solution caused considerable smarting and conjunctival injection; the onset of anæsthesia was delayed longer than where the cocaine was used. The period of insensibility was shorter and followed by itching and irritation of a disagreeable nature, while, owing to the fact that eucaïne is a vaso-motor dilator, the field of operation was covered by blood to a much greater extent than was the case in similar operations (tenotomy and iridectomy) where cocaine had been used.

2nd. *In the nose* (three operations on cartilaginous growths and seven cauterizations of the inferior turbinate bone).

In the nasal cavity eucaïne falls far short of its rival, owing to the fact that it causes little if any contraction of the soft tissues, which is

so desirable where we wish to operate in a narrow space; for the same reason it is useless where we wish to diagnosticate the condition of the deeper parts. The anæsthesia, while apparently rather thorough, is no better than that obtained by cocaine, and, owing to the dilatation of the capillary vessels, any cutting or sawing operations are rendered very difficult on account of the profuse loss of blood, constant swabbing of the parts with cotton being a *sine qua non*. As to Jobson Horne's and Yearsley's claim that the inferior turbinate bone became insensitive throughout its whole length upon the application of eucaine to its anterior portion, further evidence is necessary, the writer not being satisfied that such is the case, except as the result of suggestion, it being a well-known fact that boracic acid solution has acted as a local anæsthetic where the patient believed that cocaine was used. The claim also put forward that there is less danger of secondary hemorrhage after eucaine is of little weight one way or another, as, in cases where a tendency to such exists, neither eucaine nor cocaine has much effect in causing or preventing its occurrence.

3rd. *On the throat* (one tonsillotomy and four cautery operations upon the tonsils).

In the throat, as in the nose, the anæsthesia produced by eucaine in 4 to 8 per cent. solution was marked, although not any better than where cocaine was used, while the fact that the use of the former was followed by an increase of mucous or saliva militates greatly in favor of the latter, which has the opposite effect, of lessening the salivary secretion, thereby greatly facilitating work on the tonsillar tissue, as any man knows who has experience in the treatment of throat diseases. The writer, therefore, comes to the conclusion that as far as eye, nose and throat work are concerned cocaine will hold its own; the great objection to its use as being toxic not being tenable if used cautiously and in proper strength, while its power of dilating the pupil, of causing contraction of the turbinate tissues, furthering diagnosis, and facilitating operation by rendering it less bloody and of lessening the salivary secretion, place it far ahead of eucaine as a local anæsthetic.

One statement may be added, that a solution containing 1 per cent. of cocaine and 2 per cent. of eucaine gave thorough satisfaction as far as anæsthesia and shrinkage of the soft tissues were concerned in two cases of cautery operations on the inferior turbinate body, and if eucaine be used at all, the addition of a small quantity of cocaine will greatly enhance its value by overcoming some of its drawbacks.

THE EVILS OF WILDE'S INCISION.—Chipault and Demoulin (*Ann. of Ophth. and Otol.*, iv, 4; also *Ann. des mal. de l'oreille et du larynx*) think that Wilde's incision has no advantages, and causes the loss of valuable time. If there is really pus in the mastoid cells, the external incision does little good. It is only useful in cases of simple periostitis. In cases of purulent mastoiditis the incision is not reasonable, because it does not attack the seat of the trouble, but merely relieves the one symptom of pain.

## ELECTROLYSIS FOR THE REDUCTION OF SPURS OF THE NASAL SEPTUM.

BY W. E. CASSELBERRY, M.D., CHICAGO.

Electrolysis is a process of chemic disintegration of tissue under the influence of a galvanic electric current, and is not to be confounded with galvano-cauterization. The current strength necessary is from 15 to 40 milliamperes, and 8 to 20 volts, which may be supplied by a 20-cell battery; but the author has adapted the Edison electric light circuit to the purpose by means of lamp resistance and the McIntosh current controller. The duration should be from six to eight minutes.

The chief difficulty in the reduction of cartilaginous spurs is to determine exactly when sufficient destruction has been effected, and care, guided by experience, is necessary to prevent perforation of the septum.

A simple deviation or bending of the septum cannot be corrected or straightened by electrolysis, and its use in such a case can only result in perforation. If, in addition to the deviation, there is excrescence, the thickening may be reduced or removed by electrolysis, but the deviation will remain.

The pain is trifling, but the sensation tends to cause syncope.

The bipolar method, by which two needles, one representing each pole, are inserted into the spur, is preferable. The author's needles, devised for the purpose, are of irido-platinum, fixed to a convenient handle; but ordinary heavy steel sewing needles may be used.

Sixteen cases are reported, classed in three types, according to the composition and location of the spur, and the degree of success attained, from which it is concluded:

While effective in many instances, its scope of application should be limited in accordance with the following principles:

1. Strictly cartilaginous spurs can be thoroughly removed by electrolysis, one, two, or even three operative sittings being required. It is more tedious and less brilliant than the surgical method, but is not accompanied by liability to hemorrhage. It is not to be indorsed as a universal substitute for the surgical method in even this limited class, but it is a serviceable measure for exceptional individuals of both this type and of type 2, *e. g.*:

(a) For cases of minor degree, small spurs of cartilage, or of cartilage and bone, and thickened areas, which seem scarcely deserving of surgical treatment, but which one would like to see resolved for the sake of the additional nasal space and better drainage which would thereby accrue to the patient.

(b) For patients of delicate physique and those of highly sensitive and uncontrollable nervous organizations.

(c) For "bleeders."

(d) For those who decline surgical interference.

2. As demonstrated by the cases reported under type 2, it will not thoroughly remove spurs which belong to that large class of mixed car-

tilaginous and bony substance, but it will reduce them in size. The majority of such cases would, therefore, better be treated surgically as being the more thorough method; but instances will arise, as above indicated, in which, the surgical method being expedient, benefit may accrue from the use of electrolysis.

3. As demonstrated by the cases reported under type 3, large spurs, composed mostly of hard bone, cannot be successfully treated by electrolysis, for the reason that needles cannot penetrate properly, and, further, it is doubtful if the process is adequate, even if the needles should penetrate, to the resolution of hard and dense bone, *en masse*.

4. Spurs or excrescence, and not deviation of the septum, is the subject of this paper. Electrolysis is powerless to correct deviated septa of any form.—*The Laryngoscope*.

THE BRACELIN TREATMENT FOR DIPHTHERIA.—In a letter to the editor of the *Journal of the American Medical Association* (July 4, 1896), Dr. P. M. Bracelin gives a description of the remedy for diphtheria which bears his name.

In January, 1893, he discovered this remedy, which he claims meets all the requirements of the ideal remedy. He has been experimenting with, testing clinically and improving on the original idea, until now he believes it to be as near a specific for diphtheria as it is possible for a remedy to be in any disease. Since that time he has treated a large number of diphtheria cases in all stages of the disease, and has lost only about one per cent.: and he believes that he has verified his theory that if chlorine gas, corrected, should prove to be a safe bactericide for diphtheria, it would also be an effective remedy for all diseases of the respiratory organs of a microbial origin.

The remedy consists essentially of chlorin, deprived of its suffocating, irritating qualities by an emollient corrective. Two liquids are used, No. 1 and No. 2, the second being added to the first in proportion of one to five parts slightly warmed, and the vapor inhaled as directed. Some diseases, such as diphtheria and pneumonia, require its use once every hour, others but four or five times a day. The formulas are as follows:

SOLUTION. NO. 1.

Solution zinc chlorid . . . . .	20 parts.
Solution arsenic chlorid . . . . .	30 parts.
Hydrochloric acid . . . . .	1 part.
Water . . . . .	49 parts.

SOLUTION NO. 2.

Solution chlorinated soda, standardized to 2.6 per cent., available.	
Chlorin . . . . .	70 parts.
Corrective . . . . .	30 parts.

NOTE.—The corrective consists of menthol, camphor, eucalyptol and salicylate of menthol, dissolved in alcohol and water (the proportions are not stated).—*Laryngoscope*.



## PAEDIATRICS.

IN CHARGE OF

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## EUNUCHS IN CHINA.

In China the Emperor and certain members of the royal family are alone entitled to keep eunuchs. His Majesty maintains at least 3,000, but no prince of the blood or imperial princess has a right to more than thirty. Theoretically the palace eunuchs are furnished by governors of provinces, each of whom has to supply eight every five years, receiving in return 250 taels per eunuch. It was found, however, that the number thus obtained was totally insufficient, so a recruiting office was established at Peking for the direct enrollment of candidates. In the production of Chinese eunuchs four chief factors prevail, viz., greed, predilection, poverty, and laziness. Many parents sell their male children to the mutilators, or themselves castrate them in the hope of eventually sharing their earnings.

Young men of from twenty-five to thirty years of age, some of them having wives and families, often accept emasculation, being allured by the prospects of emolument. Poor wretches destitute of means and threatened with starvation agree to become eunuchs in order to gain a living. Finally, a certain number of lazy, good-for-nothing vagabonds sacrifice their manhood to secure a life of indolence. The operation is performed in a building situated close to one of the palace gates, but the operator, although his office is recognized and is a hereditary one, having been for many years in the same family, receives no regular wages, being entitled to a fee of six taels for each individual operated on. In the case of destitute candidates he exacts a lien on their prospective earnings. Doctor Matignon's description of the operation is as follows:

"The subject, with his abdomen and thighs tightly bandaged, is placed supine on a low bed, one assistant tightly grasping him around the waist, while two more keep his legs widely separated. The operator, as a rule, uses a curved implement resembling a pruning knife, but occasionally he substitutes for it a long pair of scissors. With his left hand he seizes the parts, squeezing and twisting them to diminish the supply of blood: but before cutting he inquires for the last time whether or not the patient is a consenting party. Adults, of course, answer for themselves, no anæsthetic being used, but in the case of children the parents' word is accepted. The reply being in the affirmative, a single sweep of the hand

serves to remove both penis and scrotum, the blade of the instrument passing as close as possible to the pubis. A small piece of wood or pewter, shaped like a nail, is then inserted into the urethra; the wound is washed two or three times with pepper and water, and, several sheets of paper having been applied to the raw surface, the parts are carefully and tightly bandaged. The subsequent treatment is remarkable. Immediately after the bandaging the unfortunate patient is seized by the assistants and made to walk up and down the room at a rapid rate, not being permitted to lie down for three hours. For three days he is not allowed to drink anything, and not only does he suffer the pangs of thirst, but also has to endure the agonies of retention, owing to the plug in the urethra. On the fourth day the bandages are removed and the wretched creature is allowed to pass urine if he can. If the urine flows he is looked upon as cured, but should the over-strained bladder refuse to act he is left to die, the virtues of catheterization being apparently unknown to the Chinese. The amputation leaves a large triangular wound, with the apex downward, which takes on an average about one hundred days to granulate."

Notwithstanding the primitive mode of procedure, the operation is usually successful, and fatal cases do not amount to more than three or four per cent. The most frequent complication is the incontinence of urine, but if this unpleasant symptom continues beyond a reasonable period the patient is condemned to flagellation, a mode of treatment which is said to yield most excellent results.—*The Lancet* (London).

#### INDICATIONS FOR OPERATIVE INTERFERENCE IN CROUP.

(Variot, *Journal de Clin. et de Thérap. Infantiles*. Vol. iv., No. 39.) By using steam inhalations as an adjuvant to serum-therapy in croup, Variot has found it possible to reduce the number of cases requiring intubation or tracheotomy to fourteen per cent. Sevestre has arrived at the same conclusion, advising late operation, thus giving the serum time to loosen the laryngo-tracheal membranes and quiet the spasm of the glottis. Whenever possible, it is far preferable to cure croup without other treatment than serum injections, for even intubation, while preferable to tracheotomy in children under two, has its very serious inconveniences which can only be obviated by constant watchfulness. Tracheotomy places the patient in danger of immediate accidents (surgical), and of early or late broncho-pneumonia.

However, the question of intervention in croup must be controlled by a precise knowledge of the physiological mechanism of laryngeal obstruction and asphyxia. It is not the quantity of the membrane present which prevents the entrance of air into the respiratory passages—that is, the most membranous diphtheria cases are not always the most suffocating or spasmodic. It is undoubtedly the spasm of the glottis, associated with laryngeal diphtheria, which constitutes the great danger of asphyxia in croup, and here the intubation tube may act as a dilator as well as an air passage. Infants under two seem to be subject to more

severe spasm of this kind than older children, while rachitic and nervous children are also affected by a more severe type. Croup, complicating a pre-existing broncho-pneumonia, requires interference almost invariably.

However, it is rare to have a first attack of suffocation so severe as to make intubation indispensable, and it should only be resorted to when the attacks are very frequent and the patient remains livid and with dyspnoea in the intervals.

Every case of diphtheria with laryngeal symptoms should be carefully watched, and the instruments for intubation or tracheotomy should be kept ready for immediate use if required. Naturally, where close observation is not possible (in the country), it is better to operate prematurely than to find the patient dead at the next visit.

### HYSTERIA IN CHILDREN.

JOLLY (*Archiv für Kinderheilkunde, 1896, xix, 556.*) All the local manifestations of hysteria, the seizure as well as the real disturbances of the mind, are observed in children as well as in adults. We often see local disturbances and intractable pains confined to one region of the body (e. g., so-called neurosis of the joints) with which spastic conditions, such as paralysis and tremor, are frequently combined. Particularly are hysterical contractures and palsies observed in convalescence from acute and chronic diseases, when after a long period spent in bed the patient is urged to leave his bed and move about. Sometimes marked stuttering or muteism, either of short or long duration, is observed. In hysterical seizures highly increased emotional expressions are indulged in, spasms of screaming alternate with spasms of crying or laughing, and jactitation of the extremities occur.

*Etiology.*—Hysteria does not originate in the uterus, its manifestations make their appearance long before puberty, in the boy as well as in the girl. There is no doubt that genital excitation (particularly onanism) does sometimes play a rôle in its production, but the main etiological factor is always an inherited neuropathic disposition, and this together with debilitating diseases, poor nourishment, anemia and an immoral education may lead to hysteria.—*Pediatrics.*

### THE BICYCLE.

We all have our hobbies and we do not like to hear them attacked, but of all the hobbyists those who ride the double wheel are perhaps the most intolerant of criticism of their favorite exercise. Nevertheless, at the risk of offence to these "techy" enthusiasts, medical men ought to insist upon the need of moderation in the use of the bicycle by children. We do not refer here to the alleged danger of spreading the pelvis of young girls, for we fail to see that there is any such danger when a properly constructed saddle is used, but to that of permanent heart injury. Children, boys especially, are always tempted to rival their older play-

mates in feats of strength and endurance, and in no sport is this temptation more irresistible than in wheeling, and in none are the consequences of yielding to it more baneful. In ordinary games, even if the child taxes himself beyond its strength, the strain is of short duration and the heart readily recovers itself when the task is accomplished; but not so with bicycling, for here the strain is kept up perhaps for hours, and the injury done to the heart in a single afternoon may be beyond even the recuperative powers of youth to undo. We believe in the wheel, we believe that this form of exercise is a capital one, but we believe also that there is a great and ever present danger of overdoing it, and that the results of such overdoing are lamentable. The evil of excess in adults, especially in elderly adults, is greater than it is in children, but adults, when once warned, must look out for themselves: children, however, must be protected against themselves. It is the duty of the physician to warn the natural protectors of these children. Let them wheel by all means, it will do them good, but let it be seen to that they do so in moderation.—*Pediatrics*, Jan. 15, 1897.

TREATMENT ON STOMATITIS.

STOMATITIS APHTHOSA.—The ulcers must be frequently touched with a cotton swab dipped in one of the following solutions:

- ℞ Sod. saliel..... 20.0  
Aqua distill.....100.0
- or,
- ℞ Sod. borici..... 3.0  
Sod. salicyl ..... 5.0  
Tinct. myrrhæ..... 4.0  
Aqua distill..... 30.0
- or,
- ℞ Sol. chloric ..... 6.0  
Aqua laurocer..... 15.0  
Syr. althea..... 25.0  
Decoct. papav.....200.0

The patient must drink only boiled or sterilized milk.—*Pediatrics*.

A SIMPLE MEANS OF THROAT EXAMINATION.—J. D. Milligan says that it is well known that many children have a dread of the doctor's visit—especially should the visit be made because of throat disease. The fears are increased if a spoon or tongue depressor is thrust down into the throat without ceremony. All of this may be overcome by a method used by him for the past twenty years, which can be successfully practised in nearly every patient over three years of age. It consists in simply teaching the child to use the index finger of either hand, thrust back along the tongue as near the base as possible, with the injunction to open the mouth wide and press down the tongue. In this way can

be secured, after one or two attempts, a perfect view of the tonsils and in many instances even of the epiglottis and the adjacent folds.

The reason why this is preferred is based on, first, the fact that a child, or even an adult, does not fear any injury from his own finger; second, his own effort will not provoke emesis or straining, as a trial will convince the reader; third, there is no danger of contamination by a dirty spoon or depressor, and no possibility of auto-infection, and finally, the fingers are always at hand. This plan of course is impracticable in the moribund and in infants, but at least ninety-five per cent. of all instances of acute and chronic disease of throat or of foreign bodies can be more successfully examined by it than by any other method. The purport of this note is particularly directed to the busy every-day doctor and not to the specialist.—*Med. Rec.* 1896 *l*, 765.

CREOSOTE IN THE TREATMENT OF CHILDREN.—(Hock, *Wein Med. Blatter*; *Med. News*, 1897, Vol. lxx., No. 6.) The author has had brilliant results from the use of creosote in treatment of children, not only in phthisis, but in the sequelæ of whooping cough and the catarrh which so often follows measles. These two conditions, as is well known, furnish a favorable opportunity for tuberculous infection. The usual treatment with expectorants is too often without result. Most diseases of childhood are accompanied by disturbances of digestion, and these are the symptoms which are first relieved by the use of creosote. The appetite improves, the abdominal pain disappears, and weight increases. Later the pulmonary condition improves. It goes without saying that the creosote must be given in such a manner as not to upset the stomach, and large doses in a concentrated form are, therefore, to be avoided, the drug being given in small doses with meals. Pills, though cheap, are objectionable, especially for very young children. Hock tried in a number of instances to administer fluid creosote with tincture of gentian, but in almost every case the stomach refused the medicine after a few days. He was most successful with one or two per cent. solution of creosote in cod-liver oil, to which one-twentieth of one per cent. of sugar was added. The dose of this mixture is from one-half a dram to one-half an ounce, three times daily, according to the age of the patient.

A COD-LIVER OIL EMULSION.—Dr. J. W. Moore recommends the following cod-liver oil for delicate children, and also for older persons:

℞ Ol. Morrhuæ . . . . .	℥ ij;
Liq. calcis sacch . . . . .	℥ ss;
Essentia cinnamome . . . . .	℥ ss;
Glycerini . . . . .	℥ jss;
Aq. ad . . . . .	℥ vj.

M. Ft. emulsio. Sig. A teaspoonful to a tablespoonful thrice daily after food, the bottle having first been shaken.—*Practitioner*.

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### Various Neuroses of the Larynx

In a "Note on Codeine," in the *Lancet*, Dr. James Braithwaite, of Leeds, says: "Codeine seems to have a special action upon the nerves of the larynx; hence it relieves a tickling cough better than any ordinary form of opium. One-half of a grain may be given half an hour before bedtime. It was in my own case that I first began to use codeine. For more than twenty years, usually once every winter, I have been seized with a spasmodic cough just before going to sleep, which becomes so severe that I am compelled to get up and sit by the fire. After an hour or two I return to bed and am free from the cough till the next winter. In other respects I enjoy good health. Many years ago I found that one-half grain of codeine, taken about two hours before bedtime, absolutely stops the attack and leaves no unpleasant effect the next morning. In cases of vomiting from almost any cause, one-quarter grain doses of codeine usually answer exceedingly well. In the milder forms of diarrhœa one-half to one grain of the drug usually answers most satisfactorily, and there are no unpleasant after-effects."

We find, however, that where there is great pain, the analgesic effect of codeine may not be sufficient, and a combination with anti-

kamnia is required. It is best given in the form of a tablet, the proportions being  $4\frac{3}{4}$  grains antikamnia and  $\frac{1}{4}$  grain codeine. Sometimes chronic neuroses may be cured by breaking the continuity of the pain, for which purpose we have found this combination peculiarly suited.

Clinical reports in great numbers are being received from many sections of this country, which, while verifying Dr. Braithwaite's observations as to the value of codeine, place even a more exalted value upon the advisability of always combining it with antikamnia in treatment of any neuroses of the larynx, coughs, bronchial affections, excessive vomiting, milder forms of diarrhœa, as well as chronic neuroses; the therapeutical value of both being enhanced by combination. The tablets of "Antikamnia and Codeine," containing  $4\frac{3}{4}$  grains antikamnia and  $\frac{1}{4}$  grain codeine, meet the indications almost universally.—*The Laryngoscope*.

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—*Buffalo Med. and Surg. Jour.*



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## Editorial.

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### OUR AMERICAN BRETHERN AND THE BRITISH MEDICAL ASSOCIATION.

We have heard with regret, and some little surprise, that our remarks anent visiting brethren at the next meeting of the British Medical Association have been construed by some across the border as indicating our joy at their being thus debarred. Our information is that a leading New York physician, occupying a prominent position in a hospital there, expresses himself as believing that "THE LANCET," meaning THE CANADA LANCET, "was glad that Americans could not take part in discussions," etc.

Of course the wishes or desires of the editor of this journal can have but little effect upon the sensibilities of American practitioners; but it seems this journal is taken as voicing the desires of the Canadian profession. So we hasten to state that *we exceedingly regret*, and are assured that Canadian doctors, as a whole, regret the fact, that under existing circumstances Americans will not be allowed to take part in discussions.

The paragraph alluded to appeared in our January issue, and reads as follows:

"With reference to the presence of American practitioners at the meeting of the Montreal Branch, the branch finds itself in a position of some little delicacy. Members would very willingly invite practitioners across the border to become members of the Association, but, unfortunately, there is a recent by-law to the effect that none but British subjects can gain membership. The hope to have the by-law amended is destroyed by the occurrence this year of the International Medical Congress at Moscow. To amend the by-law would throw the Association open to the charge of attempting to promote a rival international meeting. It is to be understood that, in the present condition of politics, it would be a grave mistake for the Association to throw itself open to this charge. It has, however, been the custom in previous years to invite a series of guests

to the meetings, and, acting on this precedent, the leading American authorities in the various branches of medicine will undoubtedly be asked to attend at Montreal."

The above statements seem clear enough to give offence to no one. Certainly we thought the explanation as to why the by-law, which, with all due deference, we think a narrow one, could not be changed simple enough and the reasons sufficiently weighty.

We may not be at one with our American friends on the question of lumber, seal fishing, alien labor, the Eagle's scream, and one or two other minor points, but we go heartily for the most free and complete reciprocity in matters of medical knowledge.

It is to be hoped that many, very many of the prominent members of the profession in the United States may receive invitations to be present at the meeting, and avail themselves of them.

### MEDICAL SCHOOL JOURNALS.

Our esteemed contemporary, the *Medical Review*, has apparently borrowed from its correspondent, Dr. Sangster, the term "School Journal." The term may suit Dr. Sangster, with whose literary flux we have, God wot, nothing to do; but that our "Independent" friend should so readily adopt the expression "School Journals" is, to those who know a little, only a very little, and very insignificant at that—medical history, extremely ludicrous.

*Tempora mutantur et nos in illis mutamur.*

We did endorse the petition of the Council to the Legislature. In our opinion, the principles underlying the petition are correct. The time for presenting it, however, was inopportune. This will answer as to the "why." We have always striven to be fair to the Medical Council, believing it to be a useful and necessary body: not immaculate, often wrong, sometimes even stupid. It has had rings, cliques and heelers within its sacred body, but, taken for all in all, has been a good body and a useful body. While we say we have supported it, we never gave it a factious support, nor were we ever interested financially in its rise or fall to the value of one cent. If we made a mistake in supporting it we were never paid, either directly or indirectly, for so doing.

We must object to the the term "School Journal" as applied to us. True, the editor and a number of the associate editors are members of Trinity, but no one can show that this journal has ever used its columns or allowed them to be used except for fair play—factitious journalism being, in our opinion, low in the scale of professions.

Rampant partyism, which so many people now affect, has always been, to say the least, extremely offensive to us. It seems to be a necessity—more's the pity.

We have rather discouraged effusions from correspondents. We find that such correspondents are either afflicted with the *cacæthes scribendi*, or else have an axe to grind. Our journal is, we hope, more scientific than polemic, and such we hope it may be while it exists.

## THE LIABILITIES OF HOSPITAL TRUSTEES.

Dr. Ryerson has introduced into the Legislature a Bill respecting the liabilities of hospital trustees, which is deserving of the cordial support of the profession. In substance this Bill proposes that actions for malpractice shall lie against the trustees of an endowed hospital in the first instance, and not against the attending surgeon. It does not take from the trustees the right to bring action to recover damages from a negligent or unskilful medical attendant or medical officer of the hospital should it be clear that such employee is a member of the resident or non-resident staff. But actions for malpractice are almost invariably speculative suits, and it has rarely, if ever, been proved that the patient has either been neglected or maltreated. Such suits are fraught with much annoyance, mental distress and financial loss to medical men, for even should the suit be unsuccessful the defendant must in almost all cases pay the costs, because the party bringing the suit is financially worthless. It does not seem to be generally known that the law looks to the man who has the money to pay the costs, whether he be mulcted in them or not. Hospital trustees avoid the liability by claiming that they have no power to use their trust or other funds for this purpose. Dr. Ryerson's Bill gives them this power. It seems to us to be a gross injustice to the attending staff that they should be liable, while giving their time and services gratuitously to hospital in or out patients, to speculative suits, on account of which the trustees disclaim any financial obligation. Some think that the Bill should make it a condition of acceptance of charity attendance that right to suit should thereby be invalidated. The law, however, will not permit of the withdrawal of the right to suit on the part of any citizen; therefore, such an Act is impossible. We would urge our readers to write their representatives in the Legislature to support Dr. Ryerson's Bill. The Bill does not apply to unendowed hospitals.

## COLD AIR IN INCIPIENT PHTHISIS.

The paper presented by Dr. Playter at the last meeting of the Canada Medical Association, on Cold Air in the Treatment of Incipient Phthisis, was published by the *American Medical and Surgical Bulletin*, and has been issued in pamphlet form. Dr. Playter contends that the cold air meets the two principal indications: "(1) lessens the virulency and activity of the bacilli, and (2) purifies, invigorates and fortifies the body better than any other known remedy. The colder the air the more oxygen it contains, bulk for bulk; the more it acts as an antiseptic; the more it expands when it has been inspired, and in expanding dilates the air-cells or chambers of the lungs; and the more it must tend to cool the overheated lung tissues, rendering them less favorable for the multiplication of bacilli. The pure, cold air quiets the cough, lowers the fever, arrests the night-sweats, restores the appetite, and retards the course of the disease."

But besides the cold air, Dr. Playter, while endeavoring to specially suit the diet—quality and quantity of food—to the *assimilative* powers of each individual case, has special attention given to the skin, for aiding and relieving the respiratory function. For this, the rain bath, in which the water has a drop of at least 40 or 50 feet, tempered as to suit each case, has been found highly valuable, producing a sort of skin-massage. In debilitated and feverish cases, he enjoins almost absolute rest and muscle-massage. Dr. Playter is organizing a company, consisting largely of the leading physicians of Ottawa (and in this, it appears, he is meeting with excellent success) for building a sanatorium in the Gatineau Hills, a few miles from Ottawa, for high-class, well-to-do patients, early in the coming spring. Meantime he is prepared to treat patients, as above indicated, at Sydenham House, Ottawa, where he has all the facilities for the treatment.

### HOLIDAYS.

It is one of the fashions of the times to assert that holidays are more necessary now than they were not so many years ago. The reason usually alleged is that, owing to the high pressure and hurry of the present day, the human brain requires longer and more frequent rests than formerly, and that competition is so great that a larger number of "days off" are absolutely necessary to repair the waste of grey matter used up in the inevitable struggle. We are inclined to think, however, that the holiday craze is going too far. The best mode of giving the brain-tissue its required rest is not to indulge in furious "biking," nor yet to drowse away a week or a month in a sleepy hollow. The brain does not need, when healthy, even a week's rest: a good night's sleep is much more to the purpose. Still better is a hobby, and especially one which calls for some mental effort different from that required in the daily work. Any professional man who has no interests beyond his profession, or no chance of varying his daily duties, has our sincerest pity. To take the case of medical men themselves, the day's work is far more fitly ended by mental exercises of some difficulty rather than by desultory reading. In the first instance, the brain works in another groove to the benefit of all its functions; in the second, it may be said not to work at all, in the proper sense of the word, most of that which is read never reaching the higher centres. To turn again to the more general aspects of the case, how many business men now require their afternoon off, and their Saturday's and, it may be, their Sunday's stay in the country as well? For the benefit of the family, also, a house is taken in the country for two to four months, where the children learn to idle, and the breadwinner journeys long distances several times a week to town to do his work. The common-sense expediency of this is not always obvious. We are not at all sure that holidays of more than ten days or a fortnight at a time are good for anyone who is in health and has work to do. For those who never do any real work, all time is practically a holiday, and it is immaterial where it is spent. The return after a long holiday is usually signaled by restlessness, inability to concentrate the mind to the de-

tails of work, and, though this may appear paradoxical, by a proneness to attacks of disease. It would be quite worth while for someone to investigate the statistics bearing on this point. We ourselves have often noticed that more visits have to be paid in October and November, shortly after the holiday season, than in any other time of the year, except the end of February and the whole of March. Some may be disposed to ascribe this to increased liability to infection from insanitary houses or convalescent fever patients. But it is not fever cases to which we refer—they increase, indeed, at that time, owing to the opening of the schools—but to the ordinary complaints of the respiratory and nervous systems. These are probably caused by recklessness with regard to rain and damp, innocuous in the country from the more active habits, and by the greater and sudden confinement to the house for a large part of the day. Short holidays two or three times a year are probably of more use than one long one, while, if the week-ends are often spent out of town, less than that is enough. The constant wish to get away from work, which is so characteristic of the present day, indicates little love for it, and that little love betokens degeneracy. Turning again to the medical side, those whose practice lies in the richer parts of a city, often find now-a-days that the majority of their patients have flown to pastures new on the advent of summer. In some of the more residential districts, such is the passion at present for prolonged holidays that families rent a country house for four months, and the doctor finds little to do. It is a fact that in one town, with a favorite watering-place within an hour's journey by train, a fashionable physician finds it worth his while to go down in summer within easy distance of the pleasure resort, visit those of his patients who are living there, while he comes up to town daily to continue his ordinary work. It is a question whether the doctors who live in the west end of cities will not soon have to copy the habits of the British practitioners in the Riviera, and practise in the favorite watering-places of their patients in the summer months, returning to town at the close of the season. So extensive is the efflux of the monied classes from some cities that their physicians can only count on seven or eight months annually in which to make their bread and butter.

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MARBIED.—At Toronto, April 1st, 1897, P. G. GOLDSMITH, M.D., of Belleville, to ALICE DAVIS, granddaughter of the Hon. Geo. A. Cox.

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We have in our midst a most comfortable Home, which is, perhaps, not so well known to the general public as many of our other institutions. Hillcrest is delightfully situated on Wells' Hill, with an experienced nurse in charge, and the perfect rest and quiet to be obtained there is very refreshing to those worn out by illness, or only requiring change of air. The rooms are bright and airy, and the views from the verandahs over the city and across the lake varied and extensive. The house is within easy walking distance of the terminus of the Bathurst Street cars, directly north of the C.P.R. track.

MAYDI, K.: INCLUSIO FŒTALIS ABDOMINALIS. (*Wiener Klinische Rundschau*, x., No. 17, p. 295, 1896. *Arch. of Pæd.*)

In a well-developed but very anæmic man, nineteen years of age, a tumor was found occupying the greater part of the pelvic cavity. Laparotomy was performed, when the mass was found to be situated between the two folds of the root of the mesentery; it consisted of a well-formed trunk and limbs. The head was entirely absent, and in its place a tuft of hair, fifty cms. long, was inserted upon the trunk. The fœtus was enclosed in a firm amniotic sac which contained some oily fluid. A thick-artery, showed histologically the structure of the placenta. An umbilical cord was entirely wanting; and the nutrition must have been accomplished through broad and narrow adhesions situated between the amnion and the fœtus.

CLEANLINESS IN CATARRH.—Dr. Edwin Pynchon, in an article in the *Annals of Ophthalmology and Otology*—(*Atlantic Med. Weekly*)—calls attention to the widely varying formulæ of Dobell's Solution given by different authors, and incidentally mentions what is a really practical question in the treatment of naso-pharyngeal catarrh.

Numerous preparations are widely advertised as adapted for cleansing purposes in the nasal cavity, and are possibly of real merit, but the price asked for the product is so exorbitant, that to people of moderate means the expense is a serious factor, while to the poor it is beyond their purse, and in each case, after the prescription has, perhaps, been filled once, they cease its use, and go back to the home remedy of salt and water of varying strength, and usually with disastrous results.

The Seiler's tablets, made by different manufacturers, also vary in strength and composition, and our experience has taught us that several of those on the market can not be used without causing great smarting, and even pain.

The fluid used in cleansing the nasal cavities in both atrophic and hypertrophic rhinitis should be of about the specific gravity of the serum of the blood, and this is acquired in the solution advised by Dr. Pynchon, which is as follows:

R	Sodæ Bicarb. . . . .	2	ounces.
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One ounce of this formula added to a pint of water yields a bland and pleasant alkaline solution with a specific gravity of 1.015.

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**SCABIES.**—A Paris doctor affirms that the simple friction with tincture of benzoin is a specific for the disagreeable but very common affection among a certain class of people—the itch. The old classical treatment has been superseded in the last two or three years, much to the advantage of the patient, by Peruvian balsam, which, when rubbed in crudely or mixed with lanoline, as in children, produces the desired effect with satisfactory rapidity. According to the *confrère* in question, the common tincture of benzoin answers all intents and purposes. He made the discovery accidentally when he was called to prescribe for two sisters who were affected with scabies. Seeing a bottle of the tincture on the chimney, he suggested that they should try it. They rubbed it in night and morning, and on the third day the affection had entirely disappeared.

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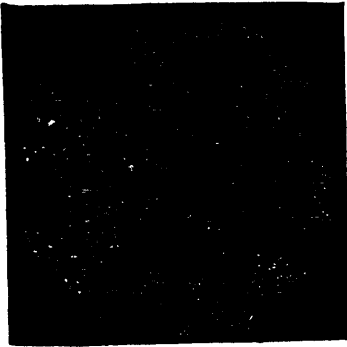
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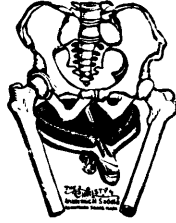
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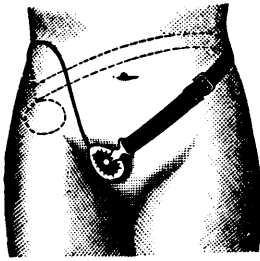
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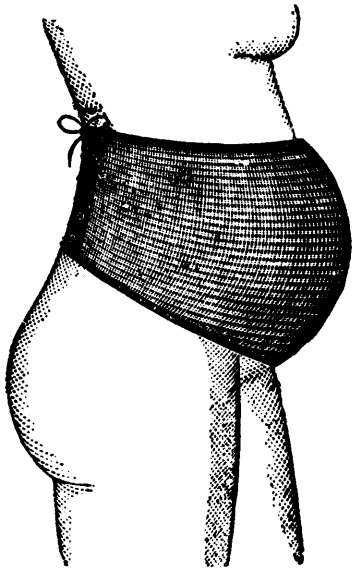
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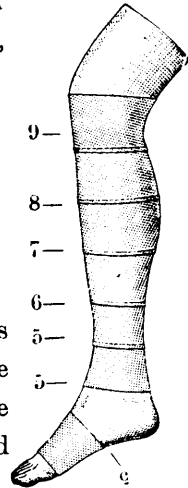
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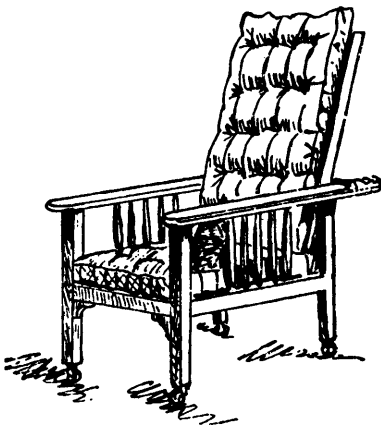
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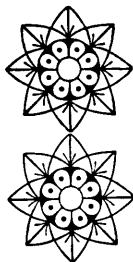
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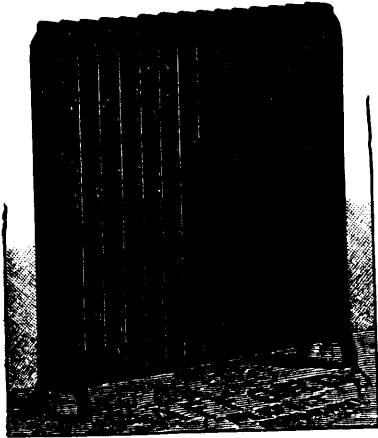
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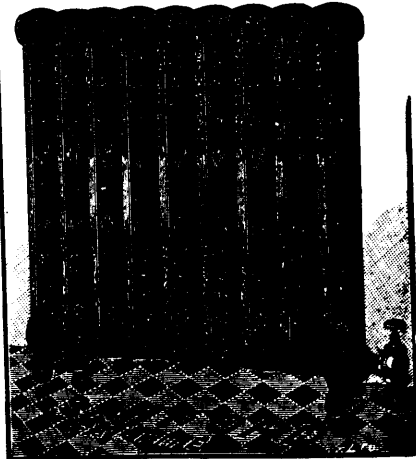
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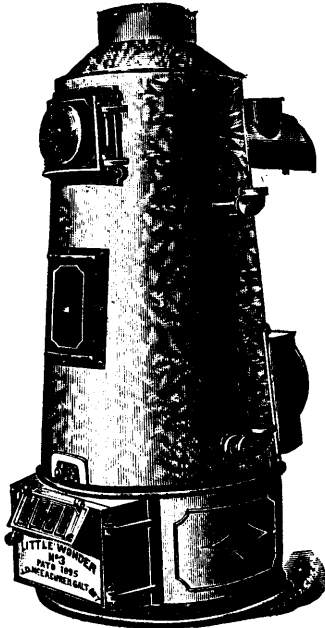


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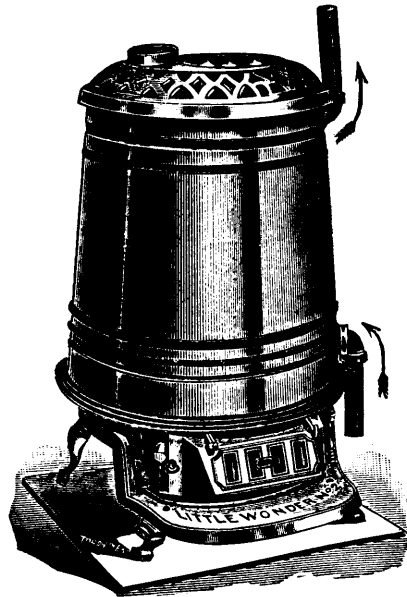
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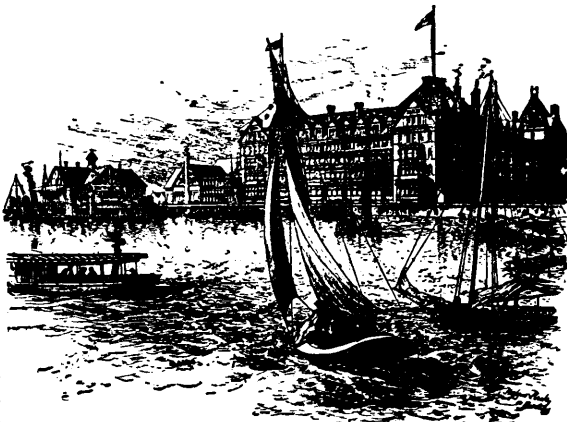
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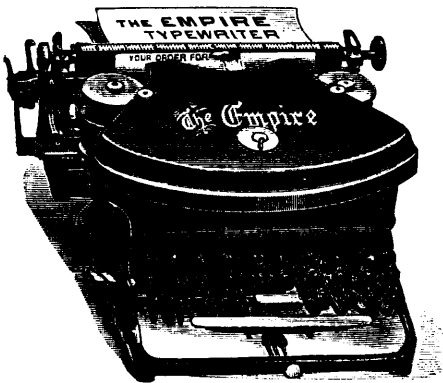
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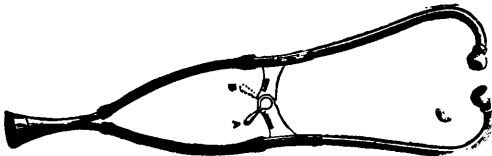
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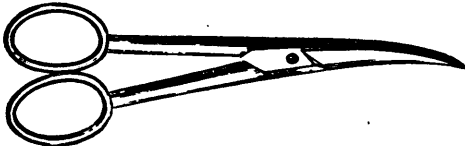


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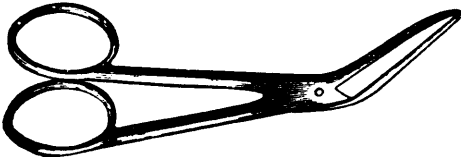
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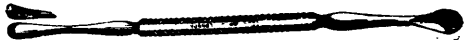
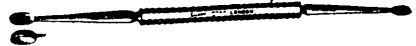
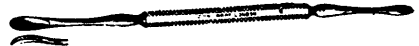


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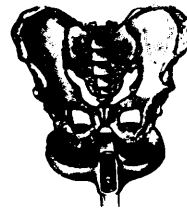


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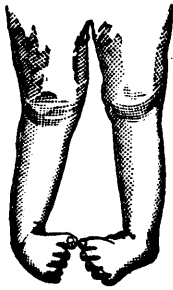
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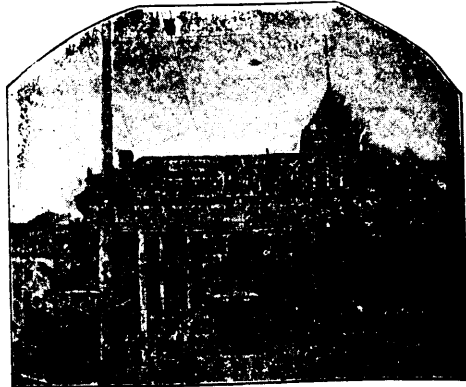
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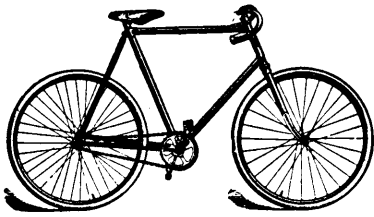
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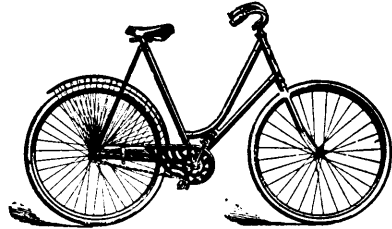
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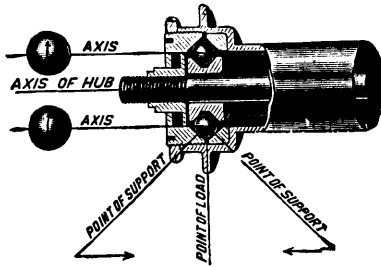


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