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THE

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THE OLDEST MEDICAL JOURNAL IN THE DOMINION.

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FORMULA

℞ Olei Morrhuæ (opt) ℥vii.
Ferri Phosphat. ʒ ii.
Phosphori gr. i.
Glycerini, etc., q.s., ad. ℥xv.
Sig.—Take as directed by attending physician.

TRADE MARK Ferrol REGISTERED

With Creosote

℞ Olei Morrhuæ (opt.) ℥vii.
Ferri Phosphat. ʒ ii.
Phosphori gr. i.
Creosoti (Beechwood), min. cxii.
Glycerini, etc., q.s., ℥xv.

The Official Organs Pronouncing on "Ferrol" from the Medical Centres of our Dominion.

Ferrol.—In this preparation we have combined in the form of a perfect emulsion, phosphate of iron and cod liver oil, with the addition of a small quantity of phosphorus. The product is smooth and of uniform strength and supplies an excellent tonic food for use in wasting diseases and during convalescence.

Where the indications are such—as in pulmonary affections—that the addition of creosote would often add considerably to its value, Ferrol can be obtained with 112 minims of beechwood creosote added to each fourteen-ounce bottle under the heading of "Ferrol cum creosote." An analysis made by Dr. R. A. Pyne, of Toronto, shows that the product contains the different ingredients in the proportions claimed.

The manufacturers by publishing the exact formula of Ferrol and guaranteeing that no circulars or advertisements are enclosed in their packages, deserve the support of the profession in their efforts at having their business conducted strictly in accordance with medical ethics.—*Montreal Medical.*

FERROL AN IDEAL EMULSION.

Ferrol, an honest emulsion of cod liver oil, has been on the market for some years and given great satisfaction It is a Canadian preparation, made from the purest and best oil procurable. The formula is on every bottle and it deserves the support of the medical profession. The manufacturing of this preparation has lately been taken over by the Ferrol Company of Toronto. It is the intention to push the sale in every legitimate way possible, but always and only through the medical profession and press.—*The Canadian Practitioner.*

Some years ago there was introduced to the medical profession in Canada a pharmaceutical product named Ferrol. The name was indeed a most happy one, as giving its composition at once, that of cod liver oil and iron. For some reasons Ferrol was at that time not pushed. Now, however, fortunately for both physician and patient, it has been revived and taken hold of by a company of strong capitalists who intend pushing it, as it ought to be. Ferrol can be produced either plain, consisting of phosphate of iron, phosphorus in minute quantity, glycerine and cod liver oil, or with creosote, the latter ingredient so combined as to form one of the most palatable products on the market, one which can almost be guaranteed not to cause the usual nausea and after eructations so frequently the case with cod liver oil in any other form but that of Ferrol. The Ferrol Co. of Toronto, Limited, are putting their article before the profession in a strictly ethical manner, advertising it only in the medical press, thus appealing to the profession in the strongest possible manner. We take pleasure in making this preliminary announcement, and add that Ferrol can be procured from any first-class druggist.—*Canadian Journal of Medicine and Surgery.*

There has been on the market for some years, a preparation which was very favorably received by the profession, but owing to changes in management, and some internal difficulties, the supply was irregular. Although all those who prescribed it had formed a high opinion of it, and kept repeating their prescriptions, a regular supply was not obtainable. This was a permanent emulsion of iron and cod liver oil, known as Ferrol. This preparation, as will be seen by our advertising pages, has been taken hold of in a thorough and ethical manner, and now physicians will be able to obtain the article demanded on their prescriptions. We can certainly recommend it to the profession as an emulsion of iron and cod liver oil that they can absolutely depend upon.—*Dominion Med. Monthly.*

We beg to call the attention of the profession to the preparation known as Ferrol—Iron and Cod Liver Oil. It is an excellent preparation, and when combined with creosote most useful in those cases where these products are indicated. The manufacturers are appealing to the profession alone and not to the general public, desiring in the most ethical manner possible to have its merits fully tested and reported upon.—*Medical Review.*

THE FERROL COMPANY OF TORONTO, LIMITED.

The Canada Lancet.

VOL. XXXI.] TORONTO, JULY, 1899. [No. 11.

The following essay was awarded First Prize by the Trinity Alumni Association :

PELVIC DISEASE IN THE FEMALE INSANE--ITS SIGNIFICANCE AND OUR RESPONSIBILITY.

BY ERNEST HALL, VICTORIA, B.C.

In the progressive development of knowledge we from time to time come in contact with new facts and encounter additional problems. There is yet chaos "without bounds illimitable," wherein the patient investigator may discover paths through which some sufferer may pass from pain to peace. In many quarters the dark shadows of despair till enshroud lives once radient with hope. The spirit of the Master appeals to our best selves, that through our feeble efforts mankind may meet, at least, a measure of rest. Then be it ours to contribute what little lies within our ability to lessen humanity's sorrowful burden, "to give beauty for ashes, the oil of joy for mourning and a garment of praise for the spirit of heaviness."

The blights upon our race are many. The yellow scourge claims its thousands, while the 'white plague' its millions of victims, but who can pass through the wards of our insane hospitals without having every sympathetic chord vibrate with compassion not only for those restrained and confined unfortunates, but also for the relatives and friends who have been compelled thus to deal with their sick ones. Is not the loss of reason incomparable in the extremity of its anguish to all other forms of illness, and often considered even worse than death itself?

While many are endeavoring to determine the pathological basis of other obscure manifestations, comparatively few are, apparently focusing their efforts of research in this direction. Although not a fifth has already been accomplished, the field is wide and as promising as it is extensive. Not only to the brain and its coverings must we look but the investigation must include the whole body, so intimately connected are all its parts, and so close is the relation between the physical and the psychical. Dr. Bertel, pathologist to Georgia Asylum, states, "past experience has shown the fact that no constant lesions can be demonstrated in the brains of those dying insane, general pareses excluded. No one will deny the value of neuro—pathology *per se* but alone it will

never prove the path that will lead us on to victory. The prosecution of general pathology and especially that of the circulatory and glandular systems seems a much more promising field in which to delve."

Actuated by a desire to contribute to the relief of this class of sufferers and encouraged by the work of Manton and Boke in the United States and Holmes, Burgess and Hobbs in Canada, the writer was led to enquire as to the alleged frequency and to the influence of pelvic disease in the female insane, and to the results following the removal of such disease.

Not being officially connected with an insane hospital the facilities for such enquiry were necessarily limited. Through the courtesy of Dr. Bodington, medical superintendent of New Westminister asylum, the privilege was afforded of examining a former patient who at that time had been confined in the asylum upwards of two years. The conditions found upon examination warranted surgical procedures, and the results of treatment were such as to encourage further prosecution of the enquiry. As opportunity offered, other cases were examined and submitted to treatment with results as startling as they were interesting entirely corroberating the findings of other investigators. Examinations were also made in cases who presented the milder types of mental abnormality who were cared for at their homes. Also at the request of Dr. Gillis, medical superintendent of Brandon Asylum, Manitoba, thirty-one female inmates were examined as to the condition of their pelvic organs. These were selected from among the most intelligent looking, avoiding all who presented any indication of hereditary or nervous disease.

Series A.

Report of examination of Pelvic Organs of sixteen female insane, who were at the time of examination or had been inmates of New Westminster Asylum.

No.	Age.	Married or single.	Children.	Miscarriages.	Duration of insanity, years.	History of Pelvic Disease.	Nature of Pelvic Disease.
1	35	M	2	....	3	.....	Cystic prolapsed and adherent ovaries.
2	59	M	4	....	1½	Pelvic inflammation for six months ..	Lacerated perineum.
3	47	M	....	....	3	Ovaritis fifteen years ago	Retroversion with dense pelvic adhesions.
4	20	S	....	....	2	.....	No abnormality.
5	44	M	....	....	1½	.....	Undeveloped condition.
7	45	M	9	3	¼	Prolapsus uteri several years ago ...	Enlarged uterus, partial descent.
10	38	M	2	....	4	Inflammation after birth of last child.	Cirrhotic and prolapsed ovaries.
11	50	M	1	....	1¼	Pelvic inflammation	Salpingitic adhesions.

SERIES A.—*Continued.*

No.	Age.	Married or single	Children.	Miscarriages.	Duration of insanity, years.	History of Pelvic Disease.	Nature of Pelvic Disease.
15	50	M	1	1	1	Inflammation following mis-carriage	Lacerated perineum. Retroversion with adhesions.
16	25	M	3	....	2	.....	Lacerated perineum. Enlarged right ovary.
17	59	M	4	....	1	.....	Lacerated perineum, deep.
18	32	M	....	....	6	.....	Cirrhotic ovaries. Salpingitic adhesions.
19	30	M	2	....	2	.....	Lacerated cervix. Retroversion with adhesions.
20	42	M	4	....	4	Pain in side and back	Retroversion, adhesions.
21	32	M	1	....	10	Gonorrhocal inflammation of pelvis .	Perineum lacerated. Cystic and adherent ovaries and tubes.
25	30	M	3	1	10	.....	Lacerated perineum and cervix, enlarged ovary with adhesions.

Of this series fifteen were married and one single. One presented defective development and of the others all but one presented gross pelvic lesions.

Series B.

Report of examination of Pelvic Organs of thirteen female insane not inmates of an Asylum.

No.	Age.	Married or single.	Children.	Miscarr ages.	Duration of insanity, years.	History of Pelvic Disease.	Nature of Pelvic Disease.
6	28	M	3	2	$\frac{1}{4}$	Pelvic pain three years.....	Lacerated perineum. Enlarged and cystic ovaries.
8	25	M	2	1	$\frac{1}{6}$	"Blood poison" following miscarrage	Lacerated cervix. Retroversion. Tubo-ovarian adhesions.
9	46	M	4	....	12	"Inflammation" following child-birth	Lacerated perineum. Tubo-ovarian abscess.
12	39	M	3	4	few weeks.	.....	Deep lacerated cervix.
13	45	M	4	....	few weeks.	.....	Lacerated cervix. Enlargement of uterus, adhesions.
22	35	M	....	3	$\frac{1}{6}$	"Appendicitis" one year ago.....	Tubo-ovarian adhesions.

SERIES B.—*Continued.*

No.	Age.	Married or single.	Children.	Miscarriages.	Duration of insanity, years.	History of Pelvic Disease.	Nature of Pelvic Disease.
23	30	M	3	....	3	.....	Ovaries enlarged and adherent. Retroversion.
24	42	M	6	3	1	.....	Lacerated perineum and cervix. Retroversion and enlarged ovary.
26	18	S	....	....	few weeks.	"Appendicitis" one year ago	Salpingo-ovarian adhesions. Par-ovarian cyst.
27	62	M	7	....	1	"Falling of womb" for several years.	Lacerated perineum, enlarged uterus, cervical polypus.
28	56	M	7	....	2	History of old pelvic inflammation.	Lacerated perineum, bilateral salpingitic adhesions.
29	28	M	4	....	2	.....	Lacerated cervix, enlarged ovaries.

Of this series twelve were married and one single, and all presented distinct pelvic lesions.

Series C.

Report of examination of thirty-one female inmates of Brandon Asylum, Manitoba.

No.	Age.	Married or single.	Children.	Miscarriages.	Duration of insanity, years.	History of Pelvic Disease.	Nature of Pelvic Disease.
30	50	M	2	?	1½	"Tumor of womb" for several years.	Interstitial and also intraligamentous myomata.
31	36	M	4	?	4	.....	Cervical laceration, enlarged ovaries.
32	28	S	....	....	4	.....	Retroversion with adhesions. Cystic ovary.
33	27	M	3	?	4	.....	Deep laceration of cervix.
34	27	M	3	?	3	.....	Cervix and perineum lacerated, cystic ovary.
35	18	S	....	....	2	.....	Conical cervix, pin-hole os, right ovary enlarged.
36	36	M	1	....	7	.....	Lacerated cervix, salpingitic adhesions.
37	28	S	....	....	3	.....	Acute anteflexion, enlarged uterus.
38	25	S	....	....	2	.....	Elongated cervix, enlarged left ovary.
39	58	M	4	4	7	.....	Lacerated cervix and perineum, orosion of os, left salpingo-ovarian adhesions.

SERIES C.—*Continued.*

No.	Age.	Married or single.	Children.	Miscarriages.	Duration of insanity, years.	History of Pelvic Disease.	Nature of Pelvic Disease.
40	30	S	....	....	3	.....	Retroversion with adhesions.
41	28	M	1	....	2	Was very ill after last confinement.	Right ovary enlarged. Lacerated perineum, retroversion, fibroid tumor filling up pelvis.
42	54	M	6	....	8	.....	Lacerated cervix and perineum, retroversion with adhesions.
43	38	S	....	....	3	.....	No abnormality.
44	30	M	?	?	?	.....	Lacerated perineum. Salpingitis adhesions.
45	28	S	....	....	7	.....	Conical cervix, enlarged right ovary.
46	35	M	1	....	2	.....	Laceration of cervix and perineum.
47	45	M	3	....	7	.....	Laceration of cervix and perineum, salpingitic adhesions.
48	28	M	1	....	2	.....	Deep lacerated cervix, salpingo adhesions.
49	29	S	1	....	2	.....	Lacerated cervix, adhesions on left side of uterus.
50	25	M	1	3	one month.	.....	Lacerated cervix and perineum, uterus enlarged and adherent.
51	36		1	?	5	.....	Lacerated perineum and cervix, enlarged uterus.
52	28	M	....	....	2	.....	No abnormality.
53	34	M	2	?	?	.....	Lacerated perineum, broad ligaments thickened.
54	33	S	....	....	6	.....	Uterus drawn to right and fixed.
55	23	S	....	....	one month.	.....	Elongated cervix, adhesions upon left side.
56	32	M	1	....	3	Epileptic	Retroversions with adhesions.
57	36	M	3	....	1¼	.....	Lacerated perineum and cervix, ovary enlarged and adherent.
58	59	M	6	?	2	.....	Lacerated cervix, enlarged uterus.
59	21	S	....	....	5	.....	Left ovary enlarged and cystic.
60	40	M	6	....	3	.....	Lacerated perineum and cervix, enlarged ovary and retroversion.

Of these twenty were married and eleven single, and all but two showed well marked disease of the pelvic organs.

Chloroform anethesia was required in about one-half the examinations, no unfavorable results following. A somewhat hasty general examination was made. It is to be regretted that inability to procure the services of a competent alienist renders the results of examinations of less scientific value than if we had an accurate and detailed statement of the nervous system of each patient.

These tables show :

(1) That out of sixty patients examined, fifty-seven presented gross abnormality of the sexual organs, and excluding one who presented an undeveloped condition fifty-six, or ninety-three per cent., showed actual disease.

(2) That the number of married patients is forty-seven, while the number of unmarried is but thirteen, a ratio of about three and a half to one.

(3) That of those who showed no pelvic abnormality one was married and two unmarried.

In one hundred and thirty-six patients examined by Hobbs in the London (Ont.) Asylum, pelvic disease was found in one hundred and twenty-six, a little more than ninety-two per cent. Dr. Manton, of Detroit, reports the examination of one hundred inmates of Eastern Michigan Asylum, giving pelvic disease in eighty-one. In Maryland hospital for the insane, Dr. Kohi found forty patients suffering from pelvic disease in one hundred examined. Dr. Brown, of Central Kentucky Asylum, as far back as 1894, wrote "I am convinced that an examination would show fully twenty-five per cent. of the female population of our state institutions suffering from some form of pelvic disease." The wide discrepancy in the finding of different examiners may be partially accounted for by their individual conception of what constitutes a pathological condition. For instance, a slight cervical tear with dense cicatrix, or rupture of the perineal muscles with the skin intact may easily be passed over or considered non-pathological by one examiner, and by another of sufficient importance to report. My custom is to report only such conditions as in the opinion of the ablest authorities are capable of producing in the sane, local pain, discomfort or general systematic disturbance. Slight lacerations of the cervix without eversion of the mucus membrane do not come within this classification.

Aside from my own statistics ample evidence has been submitted to show that a very close association exists between diseases of the female pelvic organs and mental aberration, whether this is but a casual association, or whether these conditions stand to each other in the relation of cause and effect, or if causation can be predicated of the pelvic condition, we shall attempt to determine.

ITS SIGNIFIGANCE.—It should be made clear that not one of the patients examined presented any distinct indications of degeneracy. Assymetry of features, high-arched palate, irregular ears, defects of speech, deafness, chorea strabismus, wavering eyes or twitching of facial muscles, were conspicuous by their absence. In but two cases was a history of herity

obtained, but as information relative to this matter was not given in case of the Brandon examination this result is incomplete. Meningial tuberculosis was present in one case, although not diagnosed at the time of examination. One case I learned, after the removal of a parovarian cyst with salphingitic adhesions, had always shown an erratic disposition. Another case with undeveloped organs also suffered from epilepsy and chronic nephritis, one that had previously suffered from uterine polypus and prolapsus took influenza followed by acute ethmoid tis, which latter was possibly the exciting cause of a brief insanity through well-known channels of infection between the nares and cranial cavity, while one gave indication of former syphilis. Eliminating these five and to them adding the three in whom I was unable to determine any physical disease, we have remaining fifty-two in whom no lesion was demonstrable other than that of the sexual organs. We do not presume to say that because in these latter none other than pelvic disease was found therefore it did not exist, far from it. Many women who present similar conditions of the pelvis give no indication of abnormal mentality. It is more reasonable to suppose that the pelvic condition is but one of many factors that unite in the production of this result. There may be a hereitary or acquired predisposition, an obscure disease of the circulatory or nervous systems, a septic intoxication from the absorption of the bi-products of faulty digestion, or the deleterious effect upon the higher centres of the imperfect secretion of glands either actually diseased or so altered in their functional activity as to produce abnormal secretions, or a combination of some or all of these causes, the pelvic disease being at times but the last straw to the camel's back. But theorize as we may the fact is before us that actual pelvic disease was found in by far the greater number examined.

It is not within the purpose of this paper to discuss the nature of mind, nor to enter into any purely psychological question. Daily experience is giving additional proof of the truth of the old proverb "mens sana in corpore sano." Prof. Foster tells us that "changes in what we call the body, bring about changes in what we call the mind." Demonstration is unnecessary to show that the sexual system, while in direct sympathetic connection in common with other organs, has also a unique connection with the psychical, nor to trace the relationship between a given psychological state and that of local pelvic congestion, and the channel through which this is made possible, is the same channel through which a local pelvic irritation may produce abnormal cerebral activity with disordered cortical function giving rise to and indicated by abnormal mentality. These influences from peripheral irritations of the sexual organs may at times be inhibited by a strong mentality, but they may, if severe and persistent, eventually overcome the strongest subjective effort. Given a certain environment of a strongly sexual character in a robust person, certain alterations of form and function follow in response to such stimuli in spite of effort of the will to the contrary. To obviate the result the environment, or stimuli, which may be purely psychical, must be removed. Now if such stimuli, not necessarily objective, are sufficient to produce organic change in defiance to the will, so may a local pelvic irritation or

stimulus, acting upon the higher nervous centres cause abnormal psychical action also in defiance to will power, to cease only when the abnormal evironment or peripheral irritation is removed. This was illustrated in the experience of my first case, who after her recovery gave me a somewhat detailed history of parts of her insane life, stating that she experienced and recognized within herself a force totally distinct from herself which impelled her to speak and act directly against her better judgment. This force, formerly called Satanic, is but the unconquerable abnormal psychical reflex from a sensitive and diseased periphery, and the patient vacillates between reason and insanity as this force is subservient to and dominated by the will or becomes the ruling power in the organism.

If the statements made by the authorities quoted and the theories advanced be correct, then we should expect to find that relief, if not complete cure of the mental trouble following, in a certain proportion of cases, the removal of the pelvic disease. If such results follow, we may justly conclude that the pelvic disease was at least a factor of causation, and here we are not dissappointed, for the results in this department are possibly the brightest in the history of surgery, and with physical results that will bear investigation, we have also a large per cent. of mental recoveries. However satisfactory it may be to report recovery after the removal of physical disease, it is not to be compared to that experienced when we also have the restoration of the mental. To remove physical disease and at the same time to "minster to minds diseased" is the highest ideal of surgery.

As to the results of treatment of the insane, I shall give them so far as they can be gathered from recent literature and correspondence.

Name of operator.	Cases operated upon.	Cured mentally.	Improved.	Not improved.	Died from operation.	Too early to report. Operations performed within the last six weeks.
Roke	34	14	5	12	3	.....
Manton	17	4	3	10	.....	.....
Holmes	23	23	.....	.....	.....	.....
Burgess Op. by Gradiner	3	3	.....	.....	.....	.....
Hobbs	131	47	27	46	3	.....
E. Hall	22	4	7	3	1	7

To compared these results with recoveries under ordinary asylum management would be unfair as many of these had spent years in the asylum and *were considered hopeless cases* by the medical superintendent.

OUR RESPONSIBILITY.—We have seen that insanity is to be investigated according to well-known methods of pathological research, that we have arrived at one of the underlying causative conditions, which in a certain proportion of cases, is diseased pelvic organs, and that such

disease lies within the compass of therapeutic measures. With this conception of insanity comes a new responsibility, especially to those who had formerly considered its development the limits of their medical jurisdiction. We must now consider insanity but the indication of a serious physical lesion, demanding the utmost care and skill upon the part of the attendant to determine and treat such lesion. At times such disease may be easily found but frequently and unfortunately it will elude his grasp. To consign to the asylum before giving the patient the benefit of modern therapeutics is unjust to the patient, and cruel to the friends. To be sick may be unfortunate but it is not necessarily a disgrace, neither should the occurrence of insanity in one member of a family be the instance of cashing reflection, but so long as such erroneous conceptions exists in the public mind we cannot be too careful in this matter. To those in whose family this affection has fallen and who live in perpetual dread lest through some mysterious visitation that they also may become victims, we can bring hope, assuring them that the conception of "mental disease" as distinct from physical lesion has passed away, that insanity is not the result of some vague demoniacal influence nor the indication of disfavor upon the part of an offended Deity, but the direct result of physical disease, and only follows where physical degeneracy leads. And to our female patients who, under the burden of life duties and oppressed by its sorrows, harassed by the customs of society and irritated by disease, whose mentality at times indicates the result of constant peripheral irritation, whose reflexes refuse to submit to subjective guidance and become temporarily dominant, and who reasonably look to us for relief, what shall we say? Is asylum life with its unpleasant associations, its stone walls, iron bars, and uniformed keepers, the atmosphere calculated to restore jaded nerves, to recuperate a wearied body and remove local disease. On the contrary admitting the utmost kindness upon the part of those in charge, is not such an environment comparatively as irritating to a sensitive nature as her local disease is abnormal? Only after all methods have been exhausted and not until then, should we permit our patients to be removed to the care of the state. Let us look at this matter fairly and if necessary in the concrete. In view of what has been accomplished in the modern treatment of insanity, and in view of the true conception of insanity how would you or I act with regard to one who is closest to us in ties of affection? Let us consider such symptoms as formerly but finger-posts pointing to the asylum as indications for the necessity of closer examination and more skilful treatment, remembering that every case committed is a painful admission upon our part of inability to locate or remove the physical disease. If such care were habitually exercised, the asylum commitments would be appreciably less.

From our responsibility as physicians we may merely glance at the wider scope of citizenship which also entails its duties and responsibilities. The economic aspect of this question is not to be overlooked. The economy of public funds and the diminution of public expenditure are matters of no small import in relation to this question, but I leave others to elaborate this department.

With reference to the treatment of these cases the day of Churchill's tincture of iodine has gone and with it the role of useless pelvic calisthenics that we were taught to play. Lacerations, strictures, adhesions and neoplasms require more effective measures than sound and swab. The established principles of operative gynecology apply to the insane as to the sane, viz: if possible to restore the parts to their natural condition, if not to remove the deceased structures We do not presume to state that in the pelvic is found the source of all female ills, but we do insist that an insane women should be given relief from physical suffering as well as her sane sister. Why should she suffer from prolapsus ovarian-cyst pyosalpinx or other unnecessary physical disease when recognized methods of cure are at our disposal? Surely her mental distress is sufficiently great without the addition of bodily discomfort. Clifford Allbut says "pelvic disease in the insane should be made the subject of treatment" and what intelligent practitioner can raise a dissenting voice?

In conclusion the writer expresses a hope that the attention of the profession be directed to the frequency of the Association of pelvic disease in the female with insanity, the frequent causative relation of such disease and the possibility of mental restoration following its removal.

ONTARIO MEDICAL ASSOCIATION.

The nineteenth annual meeting of the Ontario Medical Association was held in the Normal School Building, Toronto, June 13th and 14th, Dr. W. J. Gibson, Belleville, presiding.

The following gentlemen were introduced to the Association: Dr. Wilding, delegate from the New York State Medical Society; Dr. Christian Fenger, Chicago; Dr. V. V. Bowditch, Boston; Dr. J. C. Wilson, Philadelphia and Dr. D. W. Montgomery, Los Angeles, Cal.

Dr. J. F. W. Ross presented the report of the Committee on Papers and Business, which was approved. In the absence of Dr. J. A. Temple, Dr. William Oldright presented the report of the Committee on Arrangements; also approved.

A Case of Muscular Dystrophy.—Dr. Ingersoll Olmsted, Hamilton, Ont. The subject of this case was a young married man twenty-five years of age who had come to the Doctor complaining of wasting of muscles and inability to work. His family history showed that other members thereof (though not in either parent) had been afflicted with the same trouble. The patient was presented to and examined by the members of the Association, the peculiarity of his gait and movements noted, especially interesting being his manner of assuming the erect posture from a prone position. Wasting was most marked in the region of the scapulæ, deltoids, biceps, fore-arm and thigh muscles, whilst those of the calves and hands were moderately well developed. Winging of the scapulæ was especially well marked.

Dr. McPhedran stated he had examined the case with very much interest. It was an orthodox case of this kind but presented one or two phases of unusual character, especially the preservation of the trunk muscles. He thought there must be some degeneration of nerve fibres present in these cases.

Dr. Geikie thinks that as we come to know more and more of this disease that destructive changes will be found existing in the nerve centres.

Dr. Olmsted. With regard to what Dr. Geikie has said, thought there was no question that extensive atrophy takes place without any involvement of the central nervous system.

Relapse in Typhoid Fever.—Dr. J. C. Wilson, Philadelphia, read a very interesting and able paper on this subject. He exhibited a number of temperature charts and said that special attention should be paid to the condition of the gall bladder as a causative factor in producing these relapses. He took this as his "working hypothesis," and proceeded to demonstrate the concomitaneous occurence of a relapse with the renewed physical movements of the patient, the beginning of the administration of the more solid forms of food, the consequent peristalisis thus produced in the gall bladder and the consequent discharge of the accumulated contents of this cyst, containing large quantities of the bacillus typhosis

into the intestine, thus producing the reinfection and the relapse. This he thought, must be due to intrinsic and not extrinsic infection. Dr. Wilson then spoke for some time on immunity and concluded in this way: "thus we have a 'working hypothesis' to explain relapse, which may be set forth in these terms; intrinsic reinfection from the gall bladder at a time when the intestines are stimulated by larger meals of a different character, an immunity not yet complete and reinfection at once without a period of incubation." He perfectly understands that the change in the blood serum which underlies the Widal test is not a process of immunity but a process due to the infection. He closed his admirable paper as follows: "That the histological changes taking place in the solids and fluids of the body bringing about immunity are also gradual and if the 'working hypothesis' stands at all, it demands that complete immunity shall be established in the primary attack, otherwise intrinsic reinfection which gives rise to the relapse, could not possibly occur.

Dr. McPhedran thought Dr. Wilson's definition of relapse a good one, and that he drew a very clear picture of it. We know that some of the cases of typhoid may be an abortive attack and he saw no reason why relapses also should not be abortive. The question of the gall bladder as being the source of the infection of these relapses, is a very important one, because of the suddenness of the outbreaks of symptoms. He thought it might be due more directly to the toxines in the bile.

Dr. J. L. Davison quoted Fagge who refers to cases in Guy's hospital that had died from the sequelæ of typhoid, weeks and weeks after convalescence had been established, and on post mortem examination, Peyer's patches were found still infected or still in a condition which showed evidences of the bacillus. In many cases the disease smoulders along for weeks and while Dr. Wilson's hypothesis of the gall bladder is a reasonable one, it hardly explains why we should have cases of relapse after thirty days and later, and therefore, Dr. Davison thinks there must be other store-houses for the retention of the specific germs than that. The question of the number of relapses is a very interesting one. While Dr. Wilson stated he had seen as many as seven in a six-months' illness, the largest number he had seen in any one case was three. He instanced a case of recovery after perforation. The question of immunity was an interesting one in typhoid fever. From recent researches it appears that there are two immunity substances, one which produces an antitoxin and destroys the action of the toxin in the body and thus serves to keep the patient alive; and the other which is bactericidal in its action It appears that we must have both of these in order that a patient may recover from the disease. It is this bactericidal element which has a laage part to play in the destruction of the germ itself.

Dr. Thistle asked why go to the gall bladder when the bacilli are in the intestinal contents.

Dr Wilson in reply stated, the infection comes from the gall bladder, because the toxine is accumulated in a great mass in a hollow viscus, which under physiological conditions of the low diet may remain there;

but when you begin to feed the patient at longer intervals with solid foods, the gall bladder is suddenly stimulated to empty itself. Dr. Wilson did not exclude the intestine if the gall bladder is quiescent. Under the condition of feeding small amounts of fluid alone the gall bladder is not stimulated to push out its contents.

Tuesday, 2.30 p. m.

The Hon. G. W. Ross delivered an address of welcome to the Association. He expressed his pleasure at meeting the medical gentlemen of Ontario. "We look on the medical men of the Province as belonging to a class of progressive educationists who are of assistance to the Department of Education in maintaining the proper scientific spirit in the country." He spoke on the subject of tuberculosis and said if the Medical Association of this Province can throw out some hints whereby that disease can be banished, they will have conferred a great boon upon the people of this country. There is no profession to which the Province owes more than it does to the medical profession. In this instance he referred to the extent in which that profession had guarded all of us from contagious diseases, and improved sanitary conditions everywhere and made hospitals habitable. Speaking of the standards of education, he was in favor of keeping these up and emphasized having a good general English education before entering upon professional studies and after four or five years of professional study, no one could say that the medical profession was not an educated body. The doctor is one of the most influential members of the community. Health in the public schools next engaged his attention and he exhorted the profession all over the province to interest themselves in this most important object. Physical training and exercise should go hand in hand with mental development. He referred to the unhygienic condition of public schools in regard to fresh-air-space per pupil, lighting, heating, ventilation, etc. Improvements all along this line would tend to develop a good strong, sturdy, Canadian stock. Home lessons should not be imposed upon the children so far as the Department of Education is concerned. Examinations at too early an age were injurious and harmful. The country must produce men, strong in mind and body, men with nerves that will endure the strain of public life.

President's Address. Dr. W. J. Gibson, Belleville, Ont., expressed his thanks at the honor conferred on him at having been made president of the Association. In regard to serum therapy, it was a matter of congratulation to the profession to know that so many able workers are in the field He instanced tuberculosis and stated that the whole world was on the alert to discover a cure for this disease. More attention should be given to personal hygiene and cleanliness. It would be difficult to estimate what good purpose it would be to report all the cases of tuberculosis to the health officers. It would be a difficult matter, however, to make isolation in all cases compulsory. He spoke of the number of diseases now treated with anti-toxins. No doubt investigators were

on the threshold of important discoveries. Every member of the profession should investigate the causes of diseases more carefully, Dominion registration under Dr. Roddick bids fair to become an accomplished fact. It is to be hoped some feasible plan could be adopted whereby the student may be spared the examinations and the expense of being licensed in another province. In regard to over-pressure in the schools, he was glad to know that the Toronto School Board had done away with final examinations. The combining of mental and manual work or Technical schools is desirable. He spoke of the improvement in medical teaching in regard to there being more clinical instruction than didactic lectures and the importance of laboratory work was emphasized. The public is indebted to the medical profession for the lives saved, suffering reduced and the calamities averted in civilized countries. Physicians stand in the front rank of the benefactors of mankind.

Dr. Bruce Smith moved, seconded by Dr. Harrison, that the president be tendered a hearty vote of thanks for his admirable address; carried.

SYMPOSIUM ON TUBERCULOSIS.

Sanitarium Treatment of Pulmonary Tuberculosis.

Dr. Vincent Y. Bowditch, Sharon Sanitarium, Boston, stated it was gratifying to notice the marked change of opinion in regard to the treatment of tuberculosis in institutions devoted to that work. Massachusetts had been the first State in America to establish sanitaria. He gave a short history of the Rutland and Sharon Sanitaria. It was important to keep this class of hospitals for the incipient disease. He spoke of the educational influence of the hygienic methods employed in these Sanitaria. Open windows even in cold weather was to be insisted on as a special treatment of the disease. Patients have returned to these Sanitaria begging to be taken back because they could not breathe in their own houses. He thought much more could be done for the patients by having them treated nearer home. Much more can be accomplished by treating consumptives in these Sanitaria than by treating them in their own homes. Thirty per cent have been discharged at Sharon as arrested cases. Dr. Bowditch has never used the term "cure," believing that the term is unjustifiable until after a lapse of years and no symptoms returned.

The causes of death in these cases:

a. Advanced condition of the disease on entrance.

b. Intercurrence of some other disease.

c. Too early departure from the Sanitarium and return home to the unhygienic conditions.

As to treatment, experiments were made with the so-called specifics. Oil of peppermint proved at times beneficial. Creasote was found to be beneficial as an aid to digestion. Antiphisin proved negative. Had refrained from the use of the serum treatment. Abundance of fresh air, judicious exercise, pulmonary gymnastics and calisthenics form the base of all treatment. Results at Sharon mean that Sanitaria should be near

all the large cities and towns. He congratulated the profession in Ontario upon the establishment of the Sanitarium at Gravenhurst and spoke also of the necessity of having hospitals for the hopelessly sick. We take away the principal source of infection when we remove these from their homes.

Pathology of Tuberculosis. **Dr. W. T. Connell,** Kingston, who was to read this paper was unavoidably absent.

Earliest Diagnosis and Selection of cases for Sanitarium Treatment. **Dr. N. A. Powell** stated that for ten years he had practiced in a part of the Province where phthysis is practically unknown. The diagnosis of early phthysis calls for what we understand by incipient or early phthysis —the pre-tuberculous stage. In this regard our views have changed materially within recent years. Up to the time of the demonstration of the bacillus, a case was considered early unless there were large growths within the lung, and until gross constitutional symptoms had shown. There is an inherent tendency towards recovery in phthysis when recognized early. This leads to the question, how often is phthysis recognized in an early stage, in a stage before physical signs are manifest in the chest and before expectoration has commenced. A very slight proportion of such cases are recognized. Why? The teaching of the students in diagnosis is exceedingly efficient. Why are mistakes made outside, and disease of the lungs not recognized until serious inroad has been made into the health of the patient? A part of it comes from the earnest belief that the physician's education has been complete though crowded. Medical students crowd the course in surgery and gynaecology but neglect physical diagnosis. He believes early diagnosis will depend upon close study and family and personal history. There are certain aids to the examination, such as the use of the fluorscope and the tuberculin test. In regard to the state of the family history and the personal make-up of the patient, in the careful examination, it is important to estimate weight and height together before you can arrive at anything of importance. The symptoms of early phthysis are uncertain. None of them upon which you can rely. A man who is in apparently excellent health, may have serious pulmonary disease. It is sometimes important to notice any scars of the neck. As to cough and early haemorrhage—distinct haemorrhage which comes with comparative earliness—are two symptoms of importance. The patient should be made to cough in the presence of the physician and any sputum thus gained should be examined. In regard to physical diagnosis, if you wish to estimate the value of a stethoscope, take a watch and place it on the table, then with the back of the hand on the watch place the bell of the stethoscope in the palm of the hand and listen to the tick of the watch in this way. In examining a patient, the stethoscope should always be used whose accuracy is above suspicion. The evening temperature running up $\frac{2}{5}$, $\frac{3}{5}$ or one degree associated with morning pallor is one of the most important elements in early diagnosis, Dr. Powell spoke of the physical examination and said the patient should always be stripped to the skin and examined

in a quiet room. If you can get association of relative dulness in the spinous fossae with the slightest accentuation and conveyance of the whispered voice or any prolonged expiration, it is safer to treat such a patient as being probably tubercular. In a case presenting progressive loss of weight and loss of physical energy, if one gets a little wavy or cog-wheeled respiration near the lung, it is safest to treat such a patient as being probably tubercular. Personally, without having much basis to go on, he said that he was afraid to use tuberculin as a test for the fear of lighting up tuberculosis. In a case of prolonged expiration and evening fever, he was very unwilling to try the tuberculin test. As to the fluorscope, Dr. Williams, of Boston, has done perhaps the best work upon this subject. With this instrument, it is perfectly easy to recognize excursions upwards and downwards of the diaphragm during respiration, the average excursion in the adult male being about two and one-half inches. If it is notably lessened on one side, it would raise strong suspicion of the presence of tubercle. Dr. J E. Graham took the position some years ago that there might be considerable advance in the condition without being recognized by even a trained observer. The apparatus of Roentgen is of a positive value when a trained observer recognizes the movements of the diaphragm, and a man of expertness may recognize degrees of shading which will be of benefit in diagnosis.

Home Treatment and Prevention of Tuberculosis.

Dr. T. F. MacMahon, Toronto, read this paper and first spoke of how we should treat the patient in his own home and what means we shall take to cure the disease and stay its ravages. Without a specific germ, there could be no tuberculosis. The main source of infection is the sputum and then infected food. Prompt destruction of the sputum would go far towards the removal of the disease. The public generally and the patients generally must be educated to this fact. Instruct your patients never to spit on the floor or into a handkerchief. Sputum should be received into proper spit-cups. That the danger from handkerchiefs is a real one is borne out by the facts that washerwomen in health resorts have contracted the disease through washing these handkerchiefs. Very fine drops of saliva may be a source of infection. Intimate association with coughing consumptives is dangerous to nurses in the rooms. Another important instruction is that rooms should be dusted with damp cloths using a disinfectant solution. Government and Health Boards must take the question up in earnest. Without education of the public, all our efforts will be in vain. Of course newspaper propaganda should be carried on. Premises occupied by consumptives and vacated, should be made fit for occupation by the Health Board. Bacteriological examination is quite as important. Association of consumptives with other patients in public hospitals is injurious and scandalous. Consumptives should not be treated in the ordinary hospitals. There should be systematic inspection of dairies and food supplies. There is also danger of infection from domestic pets, cats, dogs, birds &c. The germ of tuberculosis is always with us. Patients should have as much open-air exercise as it is possible to acquire.

Individuals especially pre-disposed should receive special attention. If the family physician would make it his duty to watch out for badly formed chests, he could do much. Prompt attention should be paid to anæmic and dyspeptic young women. Every precaution should be taken against "cold-catching." The patient should not choose a sedentary occupation. Much out-door life is especially desirable. Cure is altogether a question of instruction. There should be no cough mixtures. The nearer we approach the methods of the Sanitaria, the better our results will be. The only method is the open-air treatment. The patient should occupy the room when in the house with the most sunshine. Nothing should be allowed to interfere with the fresh-air treatment. Rest in the open air will improve the digestion. Excellent results have been obtained from this treatment in the Sanitaria. Cod Liver Oil where it agrees is undoubtedly useful. The best results follow the administration of Creasote—not too large doses.

Care and Prevention. Dr. Charles Sheard spoke of the open-air treatment as the ideal treatment from the tubercular standpoint. In every case where we find the bacillus present, we have a case of tuberculosis to deal with. If several examinations at various times fail to show any evidences, he thinks we have not got a case of tuberculosis to deal with. This is not the only disease which fresh air benefits. Many cases of bronchitis and bronchiectasis are also benefited thereby. The Sanitarium is anxious to do cures in tuberculosis. There are a great many cases with cavities in the lungs and we have to care for those cases as well. We have all seen these cases very recently put side by side in the same ward with a patient with chronic bronchitis, with another with pleurisy and with another case with obscure chest trouble; yet there ought to be better places for the care of these cases. There ought to be separate buildings in connection with our hospitals for those cases which the Sanitaria will not admit. The profession ought to stand united for the attainment of this object. He spoke of the benefit of the open-air treatment and thought there should be glass houses and glass sheds so as to protect them from the changes in the weather. Much can be hoped for if patients are kept constantly in the open air. As regards the danger of getting tuberculosis from animals, Dr. Sheard quoted Clifford Allbutt who fed his own family with the meat of tuberculous cattle and yet none of them contracted the disease. The tuberculin test applied to cattle is a very crucial one. In one cow which responded to the tuberculin test, tuberculosis was limited to one gland alone Generally we agree that tuberculous milk is dangerous according to the stage of the tuberculosis in the animal How far are we prepared to go in enforcing laws re infection of this disease in animals and in man? He thinks the practitioners should report this to the Health Board. We must understand that we have got a vastly different disease to deal with than the acute infectious diseases which run their course in a few weeks. How much separation from the general public are we prepared to enforce on a consumptive or whether we are right in doing even this. It is very questionable if we are prepared to enforce segregation in these cases and it is doubtful if the

public is ready for this just now. In the meantime steps should be taken to notify hotels and lodging houses of cleansing rooms occupied by consumptives.

Dr. Beeman, Newburgh, Ont, spoke of the bacteriological work done in the laboratory and thought that more should be done by the general practitioner. He thought he better secured the confidence of the patient by having this apparatus in his own office to give this gross diagnosis.

Dr. P. H. Bryce dealt with the establishment of Sanitaria from the governmental standpoint and quoted statistics showing the widespread prevalence of tuberculosis in the Province.

Dr. McConnell, New Mexico. told of three years experience in the far South West. He stated that more patients were now sent out there in whom as yet the bacillus has not been demonstrated, i. e., in the pre-tuberculous stage.

Dr. John Hunter said every physician should examine the chest of every one of his patients, no matter what disease he came to be treated for.

Dr. Wm. Oldright.—Notification of the disease should be given in all cases. Disinfection after habitation by a consumptive should be carried out; also sleeping-cars after carrying a patient to a health resort. He thought we ought to have Sanitaria near the city.

Dr. Playter spoke of the use of ozonised air in the treatment.

Dr. Coventry, Windsor Ont, thought la grippe was responsible for laying the foundation for many of these cases.

Dr. Price Brown, Toronto.—The lungs are only part of the respiratory apparatus. Every medical man should be able to use the Laryngoscope and the Rhinoscope. By treating the nose and throat, you can sometimes prevent the disease; and do not forget that you may have tuberculosis without cough or expectoration.

The annual banquet of the Association was held in the evening at McConkey's restaurant, Dr. W. J. Gibson presiding. A very enjoyable evening was spent by all present.

Wednesday, June 14th.

SURGICAL SECTION.

Dr. Wishart, London, Ontario, was elected chairman of this section

Inguinal Hernia. Dr. Wm. Oldright presented four patients, in all of whom he had performed the radical cure very recently. He quoted the indications for and against operating in these cases as set forth by Dr. W. B. Coley in Sajous' Annual. He thought Halsted's modification of the Bassini method was not an improvement.

Treatment of Hernia.—Dr. A. McKay, Ingersoll, Ont., estimated that something like twenty per cent. of the population was ruptured. He exhibited a new truss which he had contrived after a year's experimenting, and stated that in making trials of its efficiency, he had selected men

who were lifting all sorts of heavy loads, and found that it would give the greatest satisfaction. The idea of the truss is to allow of the body motion, a constant wavering of the pad over the ring.

Dr. W. J. Gibson spoke of the difficulty of supplying patients with proper trusses. Dr. McKay's truss is devised to prevent the excoriation of the skin.

A Peculiar Gynæcological Case. Dr. Harrison. Selkirk, Ont.—The subject of this case was a woman of considerable family. Having become pregnant again—two and one-half months—she was advised by a neighbor to produce an abortion, as it was a very easy thing to do and no trouble arose other than from an ordinary monthly sickness. A glass stylet penholder was passed blunt end foremost which slipped from the woman's grasp and was lost to her touch. On examination the Doctor could find no rent or tear of any kind either in the vaginal walls or in the walls of the uterus Even after putting the woman under chloroform the stylet could not be found. The woman was most positive that it was there and that it had been passed blunt end foremost. An exploratory abdominal operation was performed, and the stylet was found in the region of the spleen with the point almost impinging upon the diaphragm where the heart lies on that muscle. The woman recovered with nothing worse than a stitch abscess.

Dr. Powell cited a similar case where a knuckle of intestine was found protruding through a rent in the anterior wall of the uterus. The woman died, however, in that case.

Dr. Roe, Georgetown, Ont., asked if the woman had aborted.

Dr. Harrison thought so.

Dr. J. F. W. Ross spoke regarding perforations of the uterus that give rise to practically no symptoms. He instanced three cases seen recently in practice in which with well-marked rupture of the uterus, there were no symptoms of collapse.

Dr. E. E. King thought that the stylet in Dr. Harrison's case had never gone into the uterus at all.

Dr. Harrison throught that the pen had passed through the fornix, but he could see no rent whatever in the vaginal wall.

The Seminal Vesicles in Health and Disease.

Dr. E. E. King, Toronto, described this condition as a pyo-salpinx masculinus. He exhibited a number of sections and specimens and said that this was a store-house as well as a secreting organ. He further described the normal condition and relation of the organs, and also their condition in enlarged prostate and in a previous gonorrhœa. He stated he had examined during the last week in the asylum, ten cases of chronic masturbators and in only one of these were the vesicles found exceedingly enlarged, The prostate was only found enlarged perceptibly in one case.

Dr. Primrose and Dr. McConnell discussed the paper.

A Note on Kocher's Method of Radical Cure of Hernia.

Femoral and Inguinal.—Dr. Primrose gave a very lucid black-board description of this operation and showed clearly how the inguinal pouches in the peritoneum were obliterated. As a guide in performing this operation, it was best to introduce a finger into the canal and cut upon the finger. Kocher recommends the silk suture in both operations.

Dr. Ferguson, London, Ont., discussed this paper.

Fibrinous Rhinitis. Dr. D. J. Gibb Wishart stated that several cases of this had occurred last summer in his own practice. In the text-books published this year, Lennox Brown and Walsham both state that it is a distinct disease from diphtheria, and that these cases need not be isolated.

Dr. Price Brown, L. L. Palmer, and Ingersoll Olmsted discussed at some length Dr. Wishart's interesting paper, Dr. Palmer instancing an outbreak of diphtheria following one of these cases, in a public institution.

Electrolysis and Cataphoresis in the Treatment of Inoperable and Recurrent Malignant Diseases. Dr. R. N. Frazer, Thamesville, Ont., read a highly interesting report of a case and its treatment. He said in this connection that he wished to report the history of a case in which apparently a favorable result has been secured after repeated failures He was not aware that any case had heretofore been reported in Canada in which a similar plan of treatment had been adopted, and went on to give the detailed history of the case and its treatment. It was a case of malignant disease of the right testicle, occurring in a married man, aged 40 years, with the history of a previous orchitis following ordinary mumps. After a prolonged bicycle ride, the testicle had become very much enlarged and the pain almost constant though not very severe. Aspiration had been performed several times and septic inflammation followed. A section of the tumor was sent to Dr. Caven, Toronto, who pronounced the case one of cystic sarcoma. The growth was removed. It was about the size of a walnut. Dr. Anderson, Toronto, said it was carcino-sarcoma. Dr. Frazer described at some length the manner of the treatment of the case.

On Some Points in the Diagnosis of Eye Affections.

Dr. R. A. Reeve read a very interesting paper with this title. He said this was important for the general practitioner as patients were continually consulting them with regard to defective sight, or stenopia or for actual disease of the eye. It was necessary in the first place for the general practitioner to know whether there was any disease present As to trauma, whether any existed and to what extent was the eye-ball damaged. Was it in the fundus or the orbit itself. If a large magnet be brought close to the eye, pain is experienced owing to the fact that the foreign body is attracted to the magnet and injures the tissues. Then in some cases we have to determine whether there is a rupture of the

eye-ball itself posteriorly. He spoke of rupture by *contre coup* and also of luxation. For foreign objects, we should carefully scrutinize the anterior eye and the conjunctiva. He thought the time had come when the general practitioner should have a fair knowledge of the eye and be able to apply it. He should be able to fit the eyes with the proper glasses when required. Patients who can read 20/20 will bring ordinary print close to the eye. Here we should suspect astigmatism. Then there is a clue to be got by testing the tension of the eye. This will give you a clue to the presence of glaucoma. Another point that should be attended to is the testing of the field of vision, by closing one eye with the hand or using a watch glass. Diseases of the cornea and conjunctiva are to a large extent now capable of division bacteriologically. Be on the *qui vive* for tobacco amplyopia in case of cataract; and it is important to urge gentlemen over fifty to reduce the quantity of their tobacco.

Medical Section.

Dr. J. Russell, Hamilton, Ont., was elected chairman of this section.

Ophthalmology and the General Profession.

Dr. G. H. Burnham read this paper, the object of which was to bring forward some of the diseases of the eye and also some disturbances associated therewith, which required early recognition in order to be successfully treated. He instanced acute glaucon a, chronic glaucoma, tobacco poisoning causing dimness of sight. In regard to the subsequent changes produced by an attack of iritis, he did not for these perform iridectomy, but instead of an operation gave his combined form of treatment, viz., mercury and the iodide of potassium internally, and pilocarpine hypodermically. He said his results were in this way much better than by an operation. In regard to diseases of the tear passage, he strongly recommended early treatment. He does not favor the employment of the largest probes and does not probe frequently, as good if not better results can be obtained without the additional suffering, which frequent probing is always associated with. He also spoke of eye strain causing so many nervous disorders, as headache, constipation and St. Vitus' dance, and of the great importance of having the sight tested by an oculist and not by those so-called "doctors of refraction."

Dr. G. S. Ryerson thought that the paper fully met the requirements of the subject. Ophthalmia neonatorum was however omitted. A large per cent. of eyes was lost from this cause. Medical men should take great care in cleansing the maternal parts before delivery and the eyes of infants later. Credé's method greatly reduces the percentage of this disease. One or two drops of a one per cent. solution of nitrate of silver could be dropped into the eyes. This is not too strong. In regard to the question of refraction; "doctors of refraction" or "doctors of ophthamology" was very misleading. He had tried to legislate against these men in the legislature and had approached the Government re these titles being used

unlawfully. The giving of glasses by laymen to the public has been long done; but these titles are very misleading to the public. The question of refraction was a most difficult and complex one, and how can these men on a few month's training undertake such work and treat such cases.

Dr. R. A. Reeve said that in the preventive treatment of ophthalmia neonatorum, bacteriological examination of any natural discharge is of great help. He also upheld the application of nitrate of silver or perchloride of mercury to eyes after birth. He also recommended protargol —2 per cent. to 4 per cent—as being painless and affective. The Provincial Board of Health should give instructions to doctors and maternities that Credé's or some method be used regularly. He referred to the question of refraction and the difficulty in dealing with it.

Dr. Burnham.—Only some points can be referred to in a short paper. He agreed with Dr. Ryerson and Dr. Reeve in regard to refraction, and thought the general profession negligent in the majority of cases.

The Insanity Plea in Medical Jurisprudence.

Dr. J. Russell, Hamilton, Ont., read a carefully prepared paper on this subject. He thought the public were beginning to doubt that the law was being properly administered in these cases. The question was of interest to the general practitioner as well as to the psychologist. It became every physician to acquire such a general and even special knowledge of the subject so as to be able to acquit himself creditably in the witness box, without bringing personal discredit upon himself or the profession.

Dr. T. F. MacMahon upheld Dr. Russell with regard to forming a competent commission to deal with insanity cases in law.

Notes of a Case of Torticollis.

Dr. D. C. Meyers, Toronto, presented a patient, a married woman, aged 39. The trouble came on at the age of 25 years, just after the birth of her last child. At that time she was very sensitive as to people looking at her. About three years ago first noticed head would turn voluntarily to the left shoulder, slight at first, in any position but the recumbent one. She is obliged to keep her hand to her chin to keep the head in position. The right sterno mastoid is prominent and much hypertrophied. Her neurasthenic symptoms have gradually disappeared. The treatment consisted in separation of the patient from her friends, Sweedish movements gradually increased, galvanism and the internal administration of the iodide of potash and salicylate of soda.

Acute Diabetes.

Dr. A F. McKenzie, Monckton, Ont., reported a very interesting case of this condition. It occurred in a young man of 21 years, a cheesemaker. He was passing about four times the normal quantity of urine,

of a sp gr. 1032. Continued slow pulse and sub-normal temperature were noted. The termination of the disease was fatal, through an intercurrent attack of influenza.

Treatment of Eczema.—Dr. Graham Chambers read a creditable paper on this subject. He thought the first step towards the successful management of a case of eczema is to make a thorough examination of the patient with the object of determining the etiology and the course of the disease. Bacteria no doubt take an important part in the etiology, There is one principle in the treatment of acute eczema, i.e., to give rest to the skin as completely as possible. Repeated washings with water are contra-indicated. Dr. Chambers uses externally a mild antiseptic sedative astringent lotion, a combination of black wash and calamine lotion, and recommends it very highly. The internal treatment is equally important. In the majority of cases there is some systematic disturbance. Rest of mind and body are sedative to the skin and should be secured. Confinement to bed is sometimes a great aid. Wine of antimony is a valuable remedy in subduing the inflammation of the skin.

Dr. Coventry upheld the internal treatment with mercuric chloride—1/64 of a gr. and calomel at times, dry, locally.

The Present Status of Ergot in Obstetric Practice.

Dr. K. McIlwraith, Toronto. read a paper with this title. Administration during pregnancy where there has been *post partum* hæmorrhage at previous labors. Given in small doses, t. i. d. in combination with strychnine, it delays the onset of labor and prevents the *post partum* hæmorrhage. In the first stage it is never given now. In the second stage to hasten lingering labor. Its advocates limit its usefulness to cases in which there is absolutely no impediment to delivery. even in the passage or in the size or position of the child. It must never be given in a primipara. These conditions exclude its use in most cases. It should not be used in p.p.h. in view of the trouble it causes with the secundines. Its routine administration throughout the puerperium retards involution instead of hastening it, and it diminishes milk secretion.

Dr. Roe.—The use of ergot has changed very much during the last 20 years. He used to give it when the head was on the perineum, and he never had any bad results.

Dr. Machell. Dr. McIlwraith has put the question very fairly. He has given both sides of the question. For the first stage ergot is never given now. In *post partum* hæmorrhage it is of very little use. For some years now, Dr. Machell had given no ergot at all. He thought that pressure on the fundus was the best.

Dr. G. Gordon. There is a tendency to go to extremes in this matter. If all was clear in the second stage and pains slow, he would not hesitate to give ergot.

Drs. Hunter, C. J. O. Hastings and Cruikshank further discussed the cases in which the drug is or is not indicated.

GENERAL SESSION.

A case of Coccidial Infection.

2. p. m.

Dr. D. W. Montgomery, Los Angeles, Cal, gave a clear description of this case. First there were general symptoms of the lungs simulating tuberculosis. The process went on for some little time—a few weeks—and then he got a disease of the skin which was well shown in the photos the doctor exhibited. The disease of the skin consisted of large tubercles which at first appeared as little maculae, then grew to be small tubercles, then large tubercles. These tubercles ulcerated and were covered with crusts, and when you would grasp one and squeeze it between the fingers, you could see that the inside was granular-looking like a fig. We examined some of his sputum but there was no tubercle bacillus to be found in it. The doctor took a piece out of one of the crusts and the first thing he struck was the small round bodies as shown under the microscope. These have a clear double contoured membrane and granular contents. Just exactly what these organisms are we do not know. Previous to this case two other cases have been reported. As far as the diagnosis of the disease is concerned from the symptoms alone, would be rather difficult. He came to the conclusion that it could not be iodide of potash poisoning—for these tubercles looked very much like the iodide rash—because the man had not been taking iodide of potash. We exclude the mycosis fungoides from the fact that there was no preceding erythematous stage nor such lesions on the body. He here exhibited a photo showing a case or mycosis fungoides. In this you can get an idea of the eczema of the hands and arms, and the tomato-like masses were well shown. There was no history of syphilitic disease. In one of Rexford's cases, the disease started in the lungs to later break out on the integument. What we call this micro-organism, we do not know. Rexford's cases were submitted to the best experts we have on these micro-organisms. We expect the disease will be fatal in this case. The disease occurs in a young German of twenty-one years, who came to California at three years of age.

Discussion in Surgery. Diseases of the Kidney Amenable to Surgical Treatment.—Dr. Christian Fenger, Chicago, read this paper. The subject was a large one, he stated at the outset. The origin of the surgery of the kidney was in 1869—thirty years ago. This new field of surgery developed rapidly as is well seen from a review of the literature, for instance from 1889 to 1899, what he called the third decade, no less than 800 papers have been published on this one subject. Within the last five years came the surgery of the ureter. It is represented in the literature for the last ten years by about ninety papers. We can divide the surgery of the kidney into two periods. The first ten years we can term the period of nephrectomy. During this term the loss of one kidney was not considered so much as a cure of the patient. This period did not terminate after this ten years but the dawn of the second period or the period of conservatism commenced; instead of nephrectomy, a

less radical operation to locate the disease, without sacrificing the tissue of the kidney at its beginning. In 1881 Hahn made a nephorraphy for floating kidney. But by far the most important step and one whose consequences have been most far reaching, covering the entire field of surgery, we owe to Henry Morris of London, who on Feb. 11th, 1880, had the courage to open up the healthy kidney tissue and remove an oxalate of lime stone from the healthy kidney by an incision through the renal parenchyma. No operator had had the courage to do this before, but from suppurating and distended kidneys which did not bleed when we cut through them. From Morris' important operation dates the possibility of the development of conservatism, which is pressing forward fighting its way, toward the goal of renal surgery, which is not the cure of the patient, but it is the preservation for the patient of the tissue that is valuable for secretion. Morris' operation has made it possible to save the kidney from the destroying influence of stone, to operate on the healthy kidney with a stone in it. In the third decade, the latest step forward in conservatism is the surgery of the ureter. It is a somewhat limited field. With the exception of ureterectomy for tuberculous infection which is only a small part of it, the whole of the field of the surgery of the ureter, has for its aim absolutely nothing but conservatism of the kidney. It is a matter of vital necessity for any one who operates on the kidneys to examine the urine for the quantity of urea before any operating is done. There is compensatory hypertrophy of a healthy kidney when its fellow has been removed or destroyed by disease. The urine must be withdrawn and collected in sterilized test tubes. Examination of the urine must be made without delay, because urine changes rapidly by decomposition. There should be a chemical examination for albumen, blood and sugar. There should be a quantitative examination of the urine. We have got to know the quantity of the urea for twenty-four hours. The life of the patient depends upon that. Dr. Fenger spoke of the use of the cystoscope and the most important step in diagnosis, the last step, the step that gives us the final answer to the question, what the matter is, i. e., direct examination of the kidney through an incision in the lumbar region or the peritioneal incision. The lumbar method permits of much more direct examination of the kidney than the abdominal one. The peritoneal is seldom resorted to whilst the lumbar incision is the one in daily use. The essayist then spoke of the manner of controlling renal haemorrhage by compression either with the fingers or the clamp. If that does not stop the haemorrhage, it is sutured. Failing this we have to pack the opening of the kidney into the pelvis and trust to the compression of the gauze. Dr. Fenger next took up the different diseases of the kidney for which we operate and in a classical manner described each and the indications for and against operation. In concluding his very able and exhaustive paper, Dr. Fenger returned his sincerest thanks to the Association for the opportunity that had been extended to him to meet the medical gentlemen of the Province of Ontario.

Drs. R. B. Nevitt, I. H. Cameron and J. F. W. Ross discussed the paper and congratulated Dr. Fenger upon his highly classical deliverance.

GENERAL SESSION.

8.30 p. m.

Election of Officers:—

President, J. E. Graham; First Vice President, A. H. Wright, Toronto; Second Vice President, M. I. Breeman, Newburg, Ont.; Third Vice President, R. J. Trimble, Queenston, Ont.; Fourth Vice President, A. F. McKenzie, Monckton, Ont.; General Secretary, Harold C. Parsons, Toronto; Assistant Secretary, E.H. Stafford, Toronto; Treasurer, George H. Carveth, Toronto.

Dr. Wm. Britton presented the report of the Committee *re* Health Public and High School children.

In connection with this report it was recommended:

1. That the number of subjects of study prescribed by the Education Department, be lessened.

2. That home work be curtailed.

3. That less exacting examinations be imposed on the pupils.

4. That more time during school hours be devoted to physical culture.

5. That trustees should confer with members of the medical profession, as to lighting, ventilation and capacity of school rooms.

6. That the curriculum generally should be framed with full consideration of the paramount necessity for preserving the physicial health of the rising generation.

The report was adopted.

Re Hospital Abuse.

Dr. W. J. Wilson read the report of the Committee appointed for this purpose. Your Committee find on investigation as follows:—

1. The general tax paid by the public for medical and surgical attendance is dwindling and the willingness of the public to be pauperized increasing.

This is due mainly to the mode of management of the hospitals and the operation of "The Charities' and Public Health Acts," under which $110,000.00 is expended in a per capita rate on the hospital alone. Successive changes in the law tend towards the socializing of the profession and the curtailing of the domain of the private practitioner.

3. Particular instances of the evil are as follows:

(*a*) Out-patient departments so far as we can find out with only one exception are in the habit of handing prescriptions to the patients who carry them away and frequently hand them around among their friends.

(*b*) The Emergency Hospital of Toronto is being utilised at practically no expense to the patients, for daily accidents of all kinds which, till this hospital began operations invariably went to private practitioners.

This we find to be a direct violation of our Code of Ethics, Art. V Sec. 8.

Therefore your Committee begs leave to suggest:

1. That the Committee on Legislation be requested to present to this Association at its next meeting a review of the operation of "The Charities' and Public Health Acts," and their effects upon the status and emoluments of the profession.

2. That the Committee has confidence in both the ability and the willingness of the various hospital boards to remedy the evil complained of, particularly after attention has been directed to specific instances of what your Commiltee humbly believe to be wrong.

3. Your Committee recommend that it be made a rule in all hospitals that no patients be entitled to free treatment whose hospital maintenance is provided for, (including society patients paid for by lodges) except as an act of charity.

4. That all prescriptions in the out-door department of our hospitals and of the various dispensaries be kept on file and not taken away by the patients.

5. That emergency hospitals should simply render "first aid" and relieve the patient until his family physician or substitute arrives when the further care of the case is handed over to him unless it be a case which will receive a municipal order when it is to be treated by the usual hospital staff.

6. That the sending of accident cases by wealthy corporations and especially when there is an accident insurance carried on employees be carefully looked into and any abuses remedied.

This report was unanimously adopted.

Dr. E. J. Barrick presented the report of the Committee dealing with the consumptive poor which was adopted.

Dr. William Oldright presented the report of the Public Health Committee in regard to the treatment of inebriates which was adopted.

The Treasurer and Secretary presented their reports.

Motion for adoption; carried.

Dr. G. B. Smith presented the report of the Committee on Necrology: Drs. Patullo and H. H. Wright, Toronto; H. P. Wright, Ottawa; J. H. Mullin, Hamilton; William Younker, Belleville.

The usual *honoraria* and votes of thanks were then passed and the meeting adjourned to meet in Toronto in June 1900.

HYPNOTIC SUGGESTION AS A PRACTICAL AID TO MEDICINE.*

BY J. MADISON TAYLOR, A.B., M D., PHILADELPHIA.

It may be time to claim that hypnotic suggestion, in its lesser degrees, is earning a modest place as an auxiliary to practical medicine. How high this may reach in the esteem of reputable physicians depends largely on who shall experiment with it and how fairly they report their findings. When once the subject shall be purged of the atmosphere of humbug, which has been so liberally and so easily thrown around it by sensation-mongers, be they commercial, scientific, or dilettante, then good men, honest physicians, and sincere petitioners for accurate conclusions can proceed to give it sanction or make proper use of the impressionable states thus induced.

The province of hypnotic suggestion is to reawaken or develop latent or deadened powers already existent in the consciousness.

When the dangers of hypnotism are referred to, which is indeed the first question usually asked, I reply that there is a serious one which makes me pause, and that is the obvious peril to the operator of being branded as a charlatan. There are others, too, though careful observers find few, and those easily foreseen and forefended and not to be expected in the hands of reputable physicians, to whom alone the matter belongs, excepting, of course, skilled psychologists, but they were safer to have a medical colleague in their work. The second question which usually arises is whether the artificial induction of states of suggestibility does or does not impair the will or disturb volitional control? This is answered in the negative by the experiences of recent and temperate writers. Most instances quoted of morbid susceptibility to suggestion and perturbation of the normal power of control are probably only where the subjects are of defective or unstable nervous equilibrium, and who are, therefore, over-readily susceptible to silly or evil suggestions, however or by whosoever offered, of which the ranks of society supply so many pitiable instances. Upon an individual with inherently foolish or criminal tendencies it is distinctly possible that unwholesome suggestions can be made to develop into overmastering impulses, through which may ensue serious consequences. There is little, happily, on record to show that this possibility is formidable, and it is certainly not frequently operative in this connection one whit more than, if as much as, along with other remedial measures. Nothing can be worse than blundering, ineffectual medical measures repeated in dismal routine on those who are of the material of which cranks and hypochondriacs are made. Undoubtedly acts of folly may be suggested by many agencies and associations, and these can be finally performed; but it remains to be proven that hypnotic states, in the hands of reputable physicians, accentuate this or afford special direction. These foolish finalities are not necessarily of evil repute judged alone or at first sight.

* Read before the County Medical Society, February 22, 1899.

My own experience in the use of hypnotic suggestion is confined entirely to efforts at relieving morbid states where other measures faithfully tried have either failed or effected little or required too much of time and money to be employed. Long, isolated rest in comfortable surroundings and the constant wise admonitions of the neurologist offering the combination of object-lessons, relaxation, nutritive forcing, and constant direct suggestion will most assuredly work large miracles, as those of us brought up in the influence of the Orthopedic Hospital know of our own knowledge and experience. Too often these conditions cannot be secured. Hypnotic suggestions in my hands have often done what has not been done after these measures have been amply tried.

Why one man is permitted to succeed with this form of suggestion where others have failed I do not know; but so it is, as is true, indeed, of other forms of remedial measures. I have been able to accomplish with this agency what others had not, and doubtless yet others may succeed with my failures if only they are sufficiently patient and persistent. Half-hearted attempts lead to little. It is much easier to write a prescription and turn a troublesome case over to isolation and a nurse, masseur, and "the great healer, time."

I have never seen professionals and exhibitors in this art, and only a few physicians, who taught me little other than the fact that thoroughness and tact can be made to effect great things This paper is founded on my own clinical experience, which I hope to have amplified as I learn more of the psychologic side of this most interesting subject.

A great stumbling-block to accepting the results of hypnotic endeavors is the fact that such simple and diverse methods bring about such potent findings. When this is reconciled and explained I for one can feel encouraged to go ahead with fuller confidence.

My method is the simple one of securing the full consent of the patient after ample explanation of the object to be obtained, then to state that several attempts may be necessary to induce the complete quiet and relaxation of mind and body in which the suggestions for betterment are to be planted. I then fix the attention in some way, continuing the suggestions as to the stages of quiet to be expected, and finally close the eyes by a touch of the hands, repeating the suggestions and any special ones needed, and finally begging for co-operation. Of course difficult cases require more time and patience and often some bizarre display. I have consumed six weeks, a half hour or more each day, to get a hysterical spasm relaxed. Boundless patience is often required, much more than many operators seem willing to give.

Why, then, is a person influenced more powerfully under hypnotism than in the normal state of attention? It is to be hoped this question shall be answered by psychologists in such fashion that the physician can comprehend and use it. My own impression is that whereas in the every-day state of a person who seeks medical advice and who avowedly listens to our counsel, many factors enter into and impair the attitude of attention and acquiescence they vouchsafe both as to degree and kind.

The human ear is presumably devised as an avenue of information and conviction to the brain and consciousness, but too often it seems only to fulfil the purpose of listening for a pause in the flow of admonition, so that the tongue of the petitioner may secure an opportunity to give itself voice for reply. The normal state of consciousness is complicated by many disturbing factors, some normal, such as are caused by many varying phases in the life of relation; some abnormal, such as outgrow from vicious mental habits (which invariably exist in all prolonged instances of ill-health); some are due to the inherent faults of our symmetrical powers and development in the higher intellectual planes. If this foggy atmosphere can be removed, allowing of a direct relationship, rapport, between the subject and suggester, a more perfect impress can be made upon the receptive faculties, the latent powers of thought, action or control can be awakened, strengthened or guided. Willingness is to be assumed (this is again of varying degree), but co-operation must be secured and to the point of active impulse and power for sustained action. Faith in the operator is most helpful also.

Frequently a masterful denomination is sufficient to effect miraculous results. Many successful physicians employ this forceful suggestion with glowing success. Too often it fails for a variety of reasons, the chief of which is inadequate will-power in the subject and disinclination to change the state of indolent hypochondriacism usually present.

Before realizing the utility of hypnotism I, too, wrought a few miracles (among many failures), of which the following instance is a type: An elderly spinster, living at ease in the house of relatives dependent upon her income for support, became gradually paralyzed and had been for years bedridden. She presented a cheerfull well-nourished appearance, and I could find no evidence of serious derangement. My time was limited by train intervals, so after assuring her she was able to walk I cleared the large room of furniture to the farther end, seized her portly person in my arms, and, accoutred as she was, carried her to the remotest corner and propped her up there on her legs. I then ordered her to walk back to her much-esteemed and comfortable bed. Of course there were tears and "winged words," then an ineffectual effort, then a fall of the easy, sink-down sort common to hysteric cases. Next prayers for mercy, finally dignified rage, and a final and spectacular rush across to the desired haven. Again I placed her, this time struggling bravely, in the same place. Language high and fierce followed, but a second and better race was run. My third attempt nearly met with defeat; the lioness was roused, but ultimately success complete and permanent met my efforts.

This is direct and dominant suggestion, not always, of course, feasible or diplomatic, however efficacious. It shades off too many graduations and is in common use and wide repute.

The mysterious modifications in mind of mortal man wrought by artificially inducing drowsy states offer, apparently, the best means of reaching far back into the recesses of the consciousness and readjusting

the machinery through which thought and action is initiated and carried on. Where the processes have suffered disabling derangements (providing the structural damage is not too great as well) most gratifying and surprising repair can oftentimes be accomplished. If, by the same token, evil direction can be given to wholesome but entangled forces, so much the more is it necessary to confine such spiritual control in the hands of responsible and skilful guides.

The possibilities of relief through hynotic suggestion may be enumerated to consist in the restoration of disturbed or depraved function; the removal of false impressions upon the conscience (themselves constituting grave disabilities, or again these may complicate disordered structures); the correction of bad appetites or tendencies; the restoration of self-control and the relief of painful states. It is also valuable as a means of differential diagnosis. This is perhaps its largest field.

Who are those most readily influenced by hypnotic suggestion? The impression has gone abroad that hysterical folk of unstable nervous balance are more susceptible. This is not my experience. A fundamental requisite in securing hypnotic drowsiness is a capability to obey and to fix the attention. Nevertheless, it is among those of unstable nervous equilibrium that loss of functional control is most common; hence clinically our experience is likely to lie chiefly among these. Wherever there is long-protracted ill health there comes impairment in other organs besides those directly affected, and these often suffer serious derangment. It is a matter of practical importance to bear in mind, when estimating how much of good can be expected in a given case, that even though there is a basis of structural damage so much of relief can be secured by eliminating these complicating physical factors that results will amply justify our best endeavors. For instance, I had a case of torticollis which, along with domestic troubles, ovarian disease, and the dismal array of invalid habits, wrought a miserable picture. The case was referred to me by the gynecologist who removed the diseased ovaries, and I was able in time to dissipate the neurotic symptoms, leaving a moderate and endurable wry-neck and a fairly healthy and happy woman.

I do not believe so much could have been accomplished without repeated hypnotizations. Certainly, ten years of opportunity had been employed by eighteen prominent physicians of this city and elsewhare to little purpose.

Again, insomnia frequently adds distress to the victims of depleted health due to grave conditions. The lever of hynotic suggestion, coupled with compulsory sleep and the direct admonition to sleep constantly for eight hours, has frequently, in my hands, put away the source of suffering and impediment to gain in nervous vigor. Oftentimes the lack of sleep is not realized to be the chief source of exhaustion among more obvious ills. When this is cured, as can be done better by this means than by drugs, one opportunity of gain is immediately opened. Other restorations of function are thus secured. Hysterical paralyses, only too common, are repeatedly overlooked by the best, at least the most prominent,

neurologists. To relate my experience in this direction is not expedient, in print at any rate. It is quite true these hysterical paralyses, like other disabilities due to the protean malady, are prone to relapses. They are worth striving with, however. If by this means a breadwinner is restored to his family it is certainly something gained. Such has been my privilege several times. One case required daily séances of half an hour or more for six weeks before it yielded, but the success was complete at last.

In the removal of false impressions upon the consciousness the field of hypnotic suggestion is enormous, and needs only a reference. Fixed ideas, morbid impulses, and inertness of initiative are only too common in the practise of most physicians, and will not down at their bidding, and the wise men often fail to correct these, though they rarely mention the fact. Then the patient is liable to go from hand to hand seeking relief.

Protracted ill-health inevitably produces misconception of self and its needs, duties and privileges. The springs of action from frequent interferences discharge irregularly, and central agencies, volition and normal inhibition become palsied or dead, and from them arise a wide array of morbid fears, impulses or apathetic states.

Again, a most potent adversary to the well intentioned physician is the malignant damage wrought upon the volition of the patient by previous half-hearted, ill-judged, or, at any rate, unsuccessful efforts at repair on the part of physicians. Each failure furnishes the patiant with a lot of rubbishy half-knowledge, which is misappropriated and misapplied to his own case, breeding suspicion and blinding him to the value of the fundamental principles of medicine. To urge upon such sufierers "to use their own will-power," unless accompanied by the nicest explanations and boundless sympathetic help, usually ends in frantic strains and helpless agitation, and results in worse than failure. Here, to wipe out all these irritating mists by rendering the mind blank for an hour or two a day, and in these receptive silent periods to succinctly and clearly define what must be done, is not only an intense relief, but a great economy of time and strength. And it is the element of economy served by hypnotism rather than by direct suggestion which I beg to keep in mind. Other measures may serve, but at much greater length of time and suffering.

The correction of bad habits, vitiated appetites and evil tendencies is likewise a large field and peculiarly the province of hypnotic suggestion. Instances of these defects, which have resisted all rational measures and ample, well directed persuasion, will sometimes succumb to the hypnotic influence. While it is true that there may be those able to hold the attention and sway the impulses directly, many instances are to be found where individual co-operation is too weak or other causes prevent, and these are vastly more amenable to this agency. Who, for instance, can by the subtlest argument and tenderest sympathy induce a spasmodic tic to cease? Under hypnotism this is often accomplished, though on confirmed old cases it is not so easy. Stammering is occasionally amenable to this

treatment in cases free from mechanical or mental defects. A friend of mine, himself a professor of psychology, was thus cured by Dr. Osgood of this exasperating speech defect.

Exaggerated appetites, as for alcohol, tobacco, opium, or other narcotic drugs, are thus frequently controlled. To those who sneer at the value claimed for hypnotic suggestion I would reply that if no other one thing were capable of accomplishment through hypnotism, but this one thing, if only a fair proportion of drunkenness, controllable in no other way, could be thus redeemed, it should be joyfully extolled. And much evidence is growing that great results are possible and infinitely more can be done in this department. I enjoy the greatest satisfaction in contemplating certain cases of valued friends thus rescued from alcohol and morphine, comforting me in many and varied defeats. Alcoholics are particularly susceptible to hypnotic influence and usually more than will-to co-operate.

The mental depression, the disgust with themselves, or it may be the apathy or discouragement, and, above all, the thirst for drink, pass quickly in my experience and that of a number of reputable observers. These states usually return in varying degree, but generally in lessened persistence and force. True dipsomania, or an inherited drink habit, is, of course, a far more discouraging matter. Relapses will occur, often serious ones, and the subject needs to be kept under patient observation for lengthening periods, perhaps always. My cases usually do so voluntarily, and the matter is too important to omit any reasonable precaution.

For the relief of many painful states, headache most commonly, neuralgia of various lesser sorts, even for the results of injuries at times, it is a matter of common knowledge that normal suggestion does much if judiciously applied. This failing and before drugs are used, especially the hurtful ones, and a few are altogether free from this possibility, hypnotic suggestion is curiously effective. It is frequently possible to so deaden sensibility that minor operations can be painlessly performed, notably by dentists, and also the process of parturition rendered more comfortable.

In brief, it may be claimed that is any physician will scan his clientèle he will find some, it may be many, folk who suffer from various disturbances of a most distressing kind, which have resisted excellent care and treatment, and have become a despair to himself and them. A far proportion of these can be relieved or cured by hypnotic suggestion.—*Univ. Med. Magazine.*

AUTHOR'S ABSTRACT ON THE PREVENTION AND TREATMENT OF CANCER OF THE UTERUS*

BY A. LAPTHORN SMITH, B.A. M.D. M.R.C.S. ENGLAND.

Fellow of the American and British Gynecological Societies; Professor of Clinical Gynecology Bishop's University, Montreal; Gynecologist Dispensary; Surgeon in Chief of the Samaritan Free Hospital for Women; Surgeon to the Western General Hospital.

In the author's opinion cancer of the uterus is not a hereditary disease because in more than half of his cases the family history was absolutely free from it for three generations back. This may shock those who have been brought up to believe in the tradition of its heredity, just as it did those who believed in the heredity of consumption when they were told that it was a contagious disease as every one now admits it to be. Cancer of the uterus has been proved by numerous experiments to be a contagious disease probably due to a microbe which does not flourish on healthy tissues but which luxuriates on tissues of low vitality, such as cicatrious, or on women whose whole vitality is below par.

ITS PREVENTION.—The author has noticed that it is frequent and increasing in countries were little or no attention it said to laceration of the cervix while it is becoming quite rare in countries where these lacerations are promptly repaired. The author makes it a practice at his clinics and hospitals to repair every lacerated cervix that comes before him with the result that out of over five thousand cases of which he has a complete history, there are at present less than twenty-five with a marked laceration unrepaired. If we believe as Ferrett has conclusively proved, that cancer of the cervix almost always begins in the cicatricial tissue in the angle of the wound, then by removing the cicatricial tissue and repairing the laceration we would put a stop to this dreadful disease. Moreover if it is contagious, as it must be if due to a microbe, physicians and nurses shonld take greater precaution to disinfect their hands after touching a cancerous patient. The author knows of three cases of cancer occuring in nurses attending patients who died of cancer and there was no trace of cancer in the family history of any of these three. When its contagiousness is more fully recognized it may yet be possible to stamp it out by isolation of the patients.

ITS TREATMENT.—If the disease were always detected early while still limited to the angle of the tear or to the mucous membrane of the uterustetal extirpation would in most cases be followed by cure. Unfortunately the majority of these women do not consult their family physician during the early stage; while in the cases in which he is consulted in good time he often fails to recognize the disease or else he fails to do the right thing promptly, viz. to send her to a specialist for vaginal hysterectomy. If the hundred thousand physicians on this continent would each make one hundred and fifty mothers understand that irregular hemorrhages at the change of life are not natural but on the contrary constitutes one of the earliest and strongest symptoms of cancer, then

* Read before the American Medical Association at Columbus, Ohio, 6th June, 1899.

vaginal hysterectomy would be performed much earlier and the results would improve in proportion. Provided that the organ is freely movable, even if the disease has invaded the whole of it, vaginal hysterectomy with ligatures giving good results. If less movable the clamp method is more feasible. If firmly fixed and the disease has extended to the broad ligaments the author prefers to make a thorough curetting and apply pure carbolic acid freely to the mucous membrane and then to perform Schroecer's amputation of the cervix. Before closing up the flaps it is well to sear them lightly with the cautery to destroy the microbes. This has in the author's experience prolonged life from two to five years. In all cases care should be taken to disinfect all out surfaces.

THE BACTERIOLOGY OF INFANTILE PNEUMONIA.

In a recent number of the *British Medical Journal*, Dr. James Carmichael in an article upon pneumonia speaks particularly of its etiology, and summarizes in an admirable way our knowledge of its bacteriology. He believes with other modern authorities that acute pneumonia, whether in the adult or child, properly belongs to the group of infective diseases, and that it may be produced by a variety of infections is proved beyond dispute. The various micro-organisms during their growth and development give rise to toxæmia, as evidenced by well-marked pyrexial symptoms, which have a more or less sudden onset and termination by crisis or more or less rapid lysis. Not infrequently the constitutional symptoms are out of all proportion to the local lesion in the lung.

The bacteriology of acute pneumonia is especially referred to as disclosed by recent investigations. Valuable information is afforded from the researches of Netter, Durck, Mosny, Meunier, Darier, Grancher, and others, which demonstrate that a number of micro-organisms are met with in this disease. These micro-organisms may be single or multiple whether in the primary or secondary pneumonias. In the primary pneumonias of the fibrinous variety, Friedlaender's coccus or pneumo-bacillus, or Fraenkel's capsuled coccus, are the predominating organisms; the streptococcus or staphylococcus being also found in a minority of cases. In primary catarrhal pneumonias one or other variety of pneumococcus may be found alone, or streptococcus alone, or these two organisms combined.

In the secondary pneumonias of measles, diphtheria, influenza, pertussis, tuberculosis, in addition to the organisms peculiar to these diseases, the streptococcus is frequently met with, more rarely the pneumococcus. Bacteriology thus shows that acute pneumonia is in no sense a specific disease as produced by any special organism.

The author concludes by quoting the words of Grancher, who, in his recent treatise, says, "The bacteriology of broncho-pneumonia is very complex . . . depending on numerous pathogenous organisms, for whereas fibrinous pneumonia is associated almost invariably with the pneumococcus, catarrhal pneumonia is produced by a variety of infections."

TORONTO CLINICAL SOCIETY.

The fifty third regular meeting of the above society was held in St. George's Hall, Elm St., on Wednesday evening the 13th inst, at eight-thirty p. m.

The president, Dr. Grasett, occupied the chair.

Fellows present: Davison, W. H. B. Aikins, J. O. Orr. Badgerow, Parsons, Lennan, W. J. McCollum, Hillman, Spencer, Chambers, E E. King, Budolf, Boyd, Chas. Temple, Small, Pepler, H. B. Anderson, Silverthorn, Bruce. Peters, Nevitt, Trow, Macdonald, Greig, Wm. Oldright, Bingham, Thistle, Primrose, George Elliott.

Visitors: J. F. Uren, W. J. Wilson, H. H. Oldright, King Smith.

Nominations for fellowship: Drs. J. F. Uren and King Smith, by H. A. Bruce, W. H. B. Aikins and H. A. Bruce and G. W. Badgerow, respectively.

Nomination of Officers for 1899-1900.

President, Dr. George A. Bingham; Vice-pres., Dr. W. H. B. Aikins; Cor. Sec'y., Dr. G. Boyd; Rec. Sec'y., Dr. George Elliott; Treasurer, Dr. W. H. Pepler: Executive Committee: (Five to be elected.) Drs. A. B. Anderson, George A. Peters, E. E. King, H. A. Bruce, G. Silverthorn, J. T. Fotheringham, A. Primrose, A. A. Macdonald, W. B. Thistle, B. Spencer and Geo. W. Badgerow.

Cryptorchid. Dr. Jno. L. Davison read short notes of this condition, and presented the patient, a boy aged 17 years, for examination by the fellows present. He said the literature was rather meagre on the subject with the exception of Heath's Dictionary of Surgery. In the first place, regarding the question of super-numerary testicle, that they did exist was a fact, though some authorities say that a third testicle had never been actually proven. When such cases exist, there are also other marked sexual deformities.

The penis was decidedly infantile; the epididymis may be found in the scrotum, though partly developed and the rest of the testicle represented by a small mass like a pea without any particular structure. In these cases the vas deferens may be absent; the secretion cannot reach the urethra. It may be due to delayed descent if the testicle is not found in the scrotum at birth. It sometimes comes down and makes its appearance at puberty, and then there is always a hernia. It may be a question whether the case is one of complete absence of the testicle, an anorchism, or one of cryptorchism.

Dr. E. E King in discussing the case, though it one of undeveloped testicle, and was satisfied he could feel the chord on both sides. On the right side he could make out a mass the size of a small bean. He thinks as the patient grows older the organs will develop.

Dr. Davison further stated in cases of this kind where the testicle is in the inguinal canal or in the abdomen, if it is pressed upon for any length of time, it is very liable to take on malignant disease.

Dermatitis Herpetiformis. Dr. Graham Chambers presented a patient with this condition, a woman between thirty and forty years of age. The name Dermatitis Herpetiformis, he stated, was first applied to the disease by Duhring in 1884. It is a very chronic disease and in fact almost incurable. Itchiness is very pronounced: and the lesions are always grouped and have an herpetic appearance, being irregular in form. Occasionally you get one case with one kind of lesion and sometimes you get all the lesions together. The disease in this case first made its appearance about fifteen years ago. Previously she had been very nervous, so marked at times that she was unable to walk without assistance. Lesions were on the scalp and on all parts of the body. The patient states the legions are smaller at the present time than at the commencement of the disease. The lesions are frequently found in groups on the face, neck, trunk and upper extremity, and there is no tendency to symmetrical arrangement. The vesicles increase rapidly in size but rarely become bullae They rupture and moist mucous surfaces form, increase in size and small vesicles form around the pariphery. Pustules seldom form. The angular outline to the vesicles is similar to Herpes Zoster. When the lesions heal, erythematous patches remain and some of these show cicatrices. Itching, burning and pricking sensations are nearly always present and the patient frequently feels these sensations in parts unaffected by the disease. She can tell the outbreak of a new lesion by pain in the region of the liver. In answer to Dr. Pepler as to his treatment in this case, Dr. Chambers said he had only had one case before this one. That case got better but he was not so sure that she did not suffer a relapse. A form of the disease sometimes occurs in pregnancy. As a rule the disease is not fatal but so far as he knew very few cases have been completely cured. The treatment employed in this case has not improved the patient to any great extent. Morris speaks of antimony. Wine of antimony was being used in this case and it was proving very beneficial. In papular eczema you will find that wine of antimony acts very beneficially. You may use any drug that will relieve the itching but of course it would be only palliative. Locally in this case he had used 2% sulphur ointment. The disease is undoubtedly a neurosis and the treatment should be constitutional.

Dr. Chambers also presented two patients with Favus, in one of whom the disease had existed for eight years and in the other three. The mousey odor was not very well marked in either case.

Multiple Angioma. Dr. H. B. Anderson presented a boy in this condition, aged fifteen years. In regard to family history, his mother had a few moles on her face; and his grandmother had worts about her neck and face. The patient is strong and robust with a heavy facial expression and brownish birthmarks on the head and nose, not raised. At about nine months a small tumor appeared in the right lumbar region and has gradually enlarged, and other small tumors on different parts of the body. About six years ago, brownish mottling of the skin appeared, and also on the chest. At times they become red. The surface of the larger

ones is covered with fine hair. One on the shoulder has an uneven surface, easily indented. All have wide bases; and there are many nodules felt, invisible to the eye. The left breast is diffusely enlarged. The lower ribs prominent and bulged outwards and a deep depression is seen in the lower sternal region. The condition appears to correspond more to moluscum fibrosum with brownish pigment moles and enlarged sebaceous glands, some of them being vascular enough to suggest an angiomatous condition. Microscopically, Dr. Anderson thinks the tumors would show fibrous tissue with dilated blood spaces. Some authorities say they really rise in the connective tissue of the nerve sheaths. That is the view generally held at the present time. In some cases there have been as many as three or four thousand covering all parts of the body. Others classify these under fibrous tumors, but Senn says they are infective. They are as a rule congenital, being present at birth but continue to grow afterwards for a considerable length of time. As to prognosis, they undergo involution in some cases. Most frequently after attaining a certain size the tumors become stationary. In some cases they may take on a sarcomatous condition and grow very rapidly. Defective mental development is usually found present, and there is also a tendency to deformities in different parts of the body. Dr. Anderson thought the neurotic origin was shown.

Vesical Calculi.—Dr. Grasett exhibited two vesical calculi, one of which was of a peculiar elongated shape slightly curved and about two inches in length. The first was from a man of twenty-five or thirty years. There was no previous history of any renal attacks. The patient stated that last spring without any of the ordinary causes that might produce cystitis, he was attacked with that disease. When first seen by Dr. Grasett he had an acute exacerbation with temperature elevated to 102 degrees. After the subsidance of the fever he was sounded and a stone immediately found without any difficulty. His physician in Japan had never sounded, although he had been under his care in the hospital for some time. In the patient who had the stone of peculiar shape, prostatic abscess had been at first diagnosed. Dr. Grasett stated he had tried lithotrity in this case, but could not crush on account of not being able to get the stone into the instrument. He described further how the stone had been removed by the lateral operation. It was partially encysted and occurred in a young man of some seventeen years.

Double Amputation of Both Arms at the Elbow Joint.—Dr. George A. Peters showed three specimens in which injuries to the fore-arms and hands necessitated amputation at the elbow joint. Two of the specimens were from one patient, a young man nineteen years of age, the result of a railway injury, in which both arms were crushed by the wheels. The right arm was removed soon after the injury. The patient begged very strongly to have the other saved and the surgeon promised not to do an amputation that night until his friends arrived. The right arm shows double fracture of the radius and ulna, the ulna being comminuted. The radius was broken at the junction of the lower and middle third of the bone. The apiphysis is completely separated from the

shaft; and there is also compound dislocation of the wrist joint. In regard to the right arm the skin was torn very badly. The surgeon was able in this case to amputate below the elbow, near to the joint and get a very good flap of skin and it healed by first intention. On the other arm the fracture was evidently not nearly so severe. The only injury to the skin were two openings. The point he wished to make with regard to the degrees of injury to the skin, is this, that in the left arm where the injury to the skin was less than in the other, the skin had been torn away from the muscles to a much higher level. The skin was dragged away from the muscles beneath, and was separated to a point above the elbow. In this arm he could not amputate below the elbow joint. He tried first, but found he had to remove it at the elbow joint. Even after that a portion of the skin sloughed and has since healed by granulation, so that he has a fairly good stump on that side now. The rule in regard to the amputation of such cases has been very forcibly exaggerated by Mr. Cheyne, of Edinburg. He says that in these cases of crush from heavy machinery, the rule should be to amputate above the part that you think will recover The circulation in the left arm was excellent, with all the degrees of fracture and tearing of the muscles, tendons, etc., and the nerves were intact and the patient could feel all over that hand There was no coldness and you could feel the pulse at the wrist: and yet under anæsthesia, the surgeon found, the skin was entirely separated and there was a great degree of laceration of the muscles. Is the circulation all right? Can the hand survive? Are the nerves all right? In both, these were present. It is quite possible the hand might have lived, but it would have been useless. The hand would have been stiff and a club on the end of his arm, and would have been useless. Another thing: During the process of recovery, provided one made an attempt to save the arm, one runs a great danger of sepsis and risk to life. The left arm, Dr. Peters amputated the next morning after the condition was found under anæsthesia.

The other cases exhibited by Dr. Peters, was the removal of the arm below the elbow joint in an electrical machine. Thinking the current was turned off, the electrician had passed his hand into the box or cylinder to perform some adjustment, when the piston came down and cut his arm off cleanly. It was as evenly cut as the end of a cuff. The skin had retracted some when seen by the surgeon. In this case Dr. Peters amputated high up and just saved the elbow joint. He first stitched the skin over the end of the stump in several directions and then proceeded to do a circular amputation and in that way he was able to go close to the elbow joint.

In regard to efforts to save the elbow joint, it is important to save the attachments of the muscles which pass down from the arm to the forearm, viz, the Triceps, Biceps, Anconeus and Brachialis Anticus.

Injury of the Fore-arm.—Dr. Nevitt showed a patient, a man about forty-five to fifty years of age, who had sustained an injury to the forearm with a considerable degree of laceration, and yet with good circulation through the vessels in the hand. The injury was a machine accident

and consisted of a compound dislocation at the elbow joint, and a double or a multiple compound fracture of both bones of the fore-arm. At first sight nobody would have said a word but that the arm must come off. When the elbow was reduced it looked very presentable, and finding the circulation good, Dr. Nevitt determined to try to save it. The injury to bones of the arm was very considerable, and the injury to the muscles. Exactly what the injury was, he was not prepared to say. The patient was here presented to the Fellows, and Dr. Nevitt said the condition of the hand and arm is there to show for itself, and the question is whether that is as good as an artificial arm.

Dr. Bruce, who had charge of the case during the illness of Dr. Nevitt, supplementing the data already given, said, four weeks after this accident was received, Dr. Nevitt had asked him to look after the case. At that time there was a sequestrum found, although it was present at the time of the accident. This sequestrum was about 1¾ ins. in length and was pressing between the ends of the bones The upper fragment of the ulna was bent over towards the lower fragment of the radius, and if united in that way there would be no movement in the arm; everything would unite in a mass. Dr. Bruce took a small section out of the radius and wired the bones into position so that the two fragments of the radius would be in contact with each other—and the fracture was oblique. At the time of making the incision, a mass almost the size of one's fist, issued out through the incision, and this seemed to be pulpified muscle with some old organized blood clot. When that occurred, the anterior surface of the radius appeared. At least three-quarters of the flexor muscles of the fore-arm were entirely destroyed. There were no muscles to act upon the tendons lower down. The tendons could be seen at the lower part with no muscles attached above. The sequestrum was a piece of bone broken off at the accident and not a piece which had sloughed off.

Drs. Wm. Oldright, E. E. King, A. Primrose, President Grasett, A. A. Macdonald, Thos. Millman and George A. Bingham participated in a very animated and interesting discussion of the cases

Replying to the criticisms, Dr. Peters said, in reference to the left arm, no one would deny that the skin would slough. The bones are gone and all the extensor tendons are gone. Some of the flexors are left. The tendons are there but the muscles are crushed, while the veins remain patent throughout, through the sloughing area; and in the meantime the man's life is in danger every moment. The mortality is much greater where amputation is not performed. Dr. Peters had no doubt in his own mind that the hand would have become gangrenous in the course of a few days, although the circulation was so good at the time. When swelling occurred, the inflammatory exudate would have choked the veins, and in a very short space of time the arm would have been gangrenous.

The discussion was adjourned until the next meeting in May.

The usual refreshments.

GEORGE ELLIOTT,
Recording Secretary.

THE USE OF MORPHIA IN BRIGHT'S DISEASE.

Few opinions are more firmly held or more dogmatically taught than that opium must not be given to patients with albuminuria or Bright's disease. The more extreme upholders of this doctrine teach that the presence of albumin in the urine, even when the kidneys are not diseased, as in cases of fever, prohibits the use of opium. Many years of careful investigation of this subject convince me that this opinion is wrong. I avail myself of this opportunity to again draw attention to this subject. Several writers in America and England have recorded their experiences that opium either by the mouth or hypodermically may be administered, not only without danger but with great advantage, to some patients with uremia. Dr. Loomis ("Diseases of Respiratory Organs, Heart and Kidneys," 1875) states that he has employed morphia hypodermically in puerperal eclampsia with marked success. He says that morphia may be given hypodermically to some, if not all, patients with acute uremia without endangering life. He states the almost uniform effect of morphia so administered is 1, to arrest muscular spasms by counteracting the effect of the uremic poison on the nerve centers; 2, to establish profuse perspiration ; 3, to facilitate the action of cathartics and diuretics. He has given half a grain of morphia hypodermically to patients completely comatose, with uremia, with benefit. Austin Flint ("Clinical Lecture," *New York Medical Journal*, reported in *Medical Times*, April, 1880) states that uremic convulsions in connection with hard contracted kidneys are well treated with hypodmeric injection of morphia. There is no question in his mind, he says, that the administration of morphia in pretty full doses is of considerable service in quite a number of cases of uremic poisoning with nausea, tremor, impaired vision, etc. Roberts Bartholow ("Treatment of Diseases by the Hypodermic Method") asserts that in the treatment of uremic convulsions considerable doses of morphia are demanded; to an adult half a grain may be administered at once, and repeated so that as much as two grains may be injected within a few hours in severe cases. Stephen Mackenzie (*Lancet*, Aug. 3, 1889) reports some cases of uremia treated with hypodermic injections of morphia. One patient with paroxysmal dyspnea, with weak heart was relieved by one-sixth of a grain of morphia. Another case with breathlessness, irregular action of the heart and headache was greatly relieved by the same treatment, the patient obtaining refreshing sleep the first time for a long period. He has benefitted patients with renal asthma by hypodermic injections, also removed headache. He refers to two cases reported in the *British Medical Journal*, March 16, 1888, suffering from uremic convulsions, both of whom recovered after the hypodermic use of one grain of morphia. Robert Park (*Practitioner*, Vol. xxiv, 1880) recommends this treatment in uremic insomnia and orthopnea. Powell (*British Medical Journal*, 1885) injected one-twelfth grain of morphia into a child 6 years old suffering from uremic convulsions, due to acute nephritis, following scarlet fever. The convulsions subsided, there was no recurrence and the child recovered.

Osler writes concerning uremia, "for the restlessness and delirium morphia is indispensable. Since its recommendation by Stephen Mackenzie in uremic states, some years ago, I have used this remedy extensively and can speak of its great value in these cases. I have never seen ill effects or any tendency to coma follow." My observations entirely confirm these statements, and yet the use of morphia in Bright's disease is denounced with little less than horror by most practitioners, though they all confess that they have never tried it, that, indeed, they dare not do so Morphia hypodermically employed is of conspicuous benefit in the shortness of breath of uremia. This may be due to different causes. With some patients the compensatory hypertrophy gives way and they suffer from cardiac dyspnea, in all respects similar to that from valvular defects with insufficient compensations, notably, sleep in aortic regurgitation. The paroxysmal shortness of breath prevents sleep; on falling asleep they are soon wakened by distress of breathing. The patient is compelled to start up in bed, often throws his legs out of the side of the bed panting for air, or the sleep may be distressed and harassed by Cheyne-Stokes breathing. This distressing condition, whether due to deficient compensation, in Bright's disease or to valvular defects, is almost invariably relieved by hypodermic injection of morphia and several hours' refreshing sleep are secured, to the great relief and comfort of the patient, who on the following day is refreshed, takes and digests and assimilates his food better. Morphia can scarcely be too highly commended in such a condition, and although it does not cure, it delays the end and greatly lessens the distress of the declining days of life.

Uremic asthma, again, yields promptly to hypodermic injection of morphia. On the other hand, persistent distress of breathing may be due to dropsy, the lung being hampered by an abundant serous effusion into the cavity of the chest. I need hardly say that such a condition is not improved by the use of morphia.

The headache and sleeplessness occurring in uremic patients can generally be removed by the hypodermic injection of morphia. I have not given this treatment in uremic convulsions or coma, but I have largely used it in many cases of uremia with other troubles, and am sure that morphia may be given to such patients with every prospect of benefit and no risk of harm.

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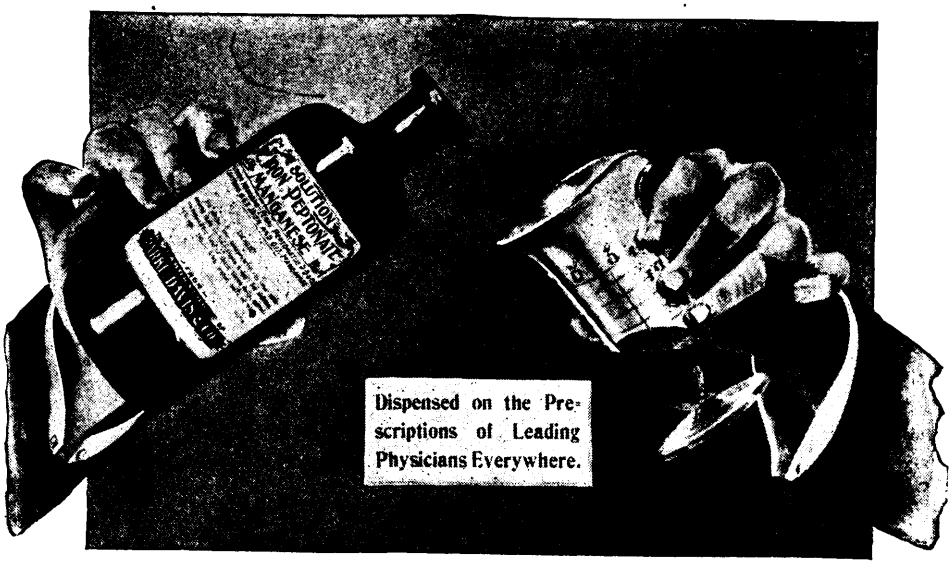

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EDITORIAL.

GREEN DIARRHŒA IN CHILDREN.

The heated term is again upon us, and we think a few words on the green diorrhœa of children may be timely.

No doubt every practitioner of experience has his own ideas of the disease, and of the best methods of treatment. There is much in the various works on the subject that is perplexing, and treatment varies within very wide limits.

The scientific classification of diseases of the intestine in children is, as we have said, perplexing; but each doctor has a mental concept of a disease, common in hot weather, but perhaps more frequently met with when the cold evenings of September come in.

The child runs down, has a capricious appetite and muddy complexion. The bowels are irregular, the number of motions varying from three or four to ten or twelve daily. The characteristic color is greenish or even bright green, though sometimes they are clayey. The musty odor is nearly always present, and the they contain considerable mucus, and even frequently streaked with blood.

There is more or less abdominal pain and straining at stool.

The patient from a firm, round-limbed child grows flabby, the muscles lose tone, the eyes are darker and lustreless, the breath heavy and offensive.

Sleep is restless, the disposition becomes very trying, and altogether though the patient usually gets well in time, both parents and physician are greatly exercised as to the result.

The plans of treatment suggested for the cure of the condition so widely outlined above are legion. Many of them we think are irrational and misleading.

And first as to diet. This is important, but we think undue stress is laid upon what may be called the stirilizing plan.

WHAT IS NECESSARY.—Pure milk, that is commercially pure milk, needs no stirilizing for healthy children, and we do not quite see the reason why it should need the process for those who happen to be ill. Plain, pure food, in small quantity is all that will be necessary in the great majority of cases. We shall say no more on the point as it is the treatment by drugs that principally concerns us at present.

All will agree that the alimentary canal should be thoroughly cleaned by a purgative, and for the purpose we still adhere to the old fashioned castor oil.

Now what shall we do to disinfect the intestines? The number of disinfectants for this purpose is large, including salol, salicylate of bismuth, beta naphthol, calomel (?) *et al ad infinition.*

The idea that Calomel is not antiseptic at all, till either part or the whole of it is changed into the bichloride, by the action of the hydrochloric acid in the stomach, seems to be correct. No doubt the action of Calomel upon the lines is due really to the action of the strong salt, which if experiments may be relied upon, alone possesses the chologogue action, so long ascribed to the mild one.

Now we know that gray powder has been considered one of the most useful of medicines in the treatment of intestinal troubles of children. Here again doubtless the whole curative action is one to the bichloride formed in the stomach. Looking at these points, we hinted at in this article, we came to the conclusion some years ago, that the bichloride pure and simple would be the best drug to use, for the reason, that with a disturbed condition of the stomach and its secretions, the amount of hydrochloric acid found there at different times would vary greatly, and consequently the amount of bichloride produced would also vary so that our medication with the milder preparation of mercury would be very uncertain.

Our experience fully justifies the statement, that no medicine with which we are acquainted can compare if efficacy with corrosive sublimate in the treatment of this form of intestinal trouble.

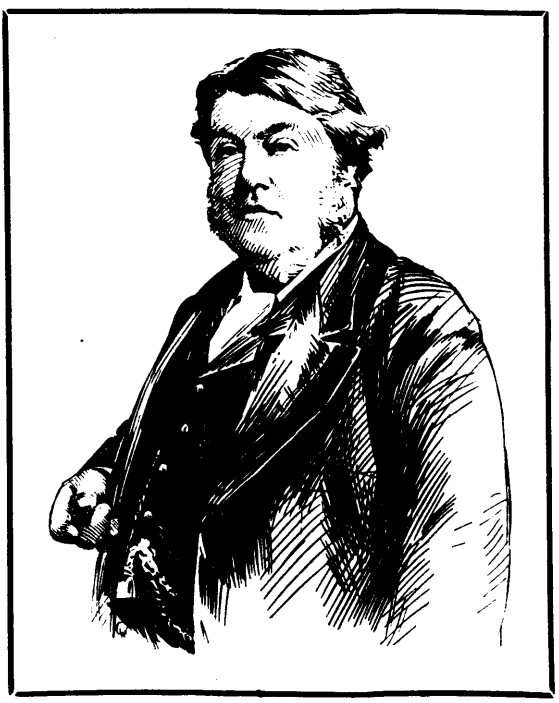
It is perhaps best prescribed as Liq. *Hydrarg Bichlor* from three to ten drops four times a day.

Change of air, fresh air, warm flannel clothing for the abdomen and extremities etc., are all useful adjuncts in the treatment, but the *sine qua non* is the bichloride.

OBITUARY.

MR. LAWSON TAIT, F.R.C.S.

With the death of Mr. Lawson Tait, Great Britain has been deprived of the most original surgeon she has produced in the last quarter of a century, and the whole world of surgery has to deplore the loss of one of the most gifted masters of the art. His was one of those exceptional



LAWSON TAIT, F.R.C.S.

minds that mark an epoch in the history of any science or art in which they occur. They are altogether out of the common, and for this very reason are often incapable of being understood by men of ordinary, or even above the ordinary, mental calibre. It is not in the light of what we designate clever and able minds that we regard such. We are forced to recognise in them gifts and powers entirely apart from those that are acquired by education, training, and experience. It is not with these that the "infinite capacity for taking pains" explains the brilliancy and

originality of their work, though it may enable them to develop and place it on a substantial basis. It is rather that subtle quality of brain in which conception and imagination play the greater part, and which, when allied to that other quality, audacity, which has been taken as another reading for genius, give to the world and humanity their greatest gains. Lawson Tait combined in varying degree all these qualities. Laborious and painstaking in his work, strikingly original in the ideas which gave it shape, characteristically audacious in carrying these ideas into operation and impressing them upon a too reluctant and unbelieving profession, he could not, and never did, expect to escape the jealous carpings, the unworthy criticisms, and the specious inuendoes which contemporaries, with no claim to his powers as a surgeon, or to his manipulative resources as an operator, were wont to aim at him. He has passed away, still a comparatively young man, at the age of fifty-four, having been born in Edinburgh in the year 1845. He was the son of Archibald Campbell Tait, a Guild brother of Heriot's Hospital, to which school Lawson Tait was admitted at the age of seven, remaining there until, gaining a scholarship, he entered Edinburgh University. From 1860 to 1866 he was engaged in his professional studies, and was under the guidance of an able surgeon, McKenzie Edwards, a favourite pupil of Sir William Fergusson. Here also he came under the influence and teaching of Sir James Simpson, and determined to pursue the branch of surgery that he afterwards adorned, which might be said then to have been in its infancy. In 1870 he became a Fellow of the College of Surgeons in Edinburgh, and a year later he took the Fellowship of the College of Surgeons of England. After a short time spent at Wakefield as house surgeon, he went to Birmingham, selecting this town as an appropriate field for the practice of that department of surgery which he had determined to follow. At Birmingham he took an active part in the origination of the Women's Hospital, in conjunction with Dr. Savage, in which institution he afterwards achieved many of his most brilliant successes. Here he did not confine himself to the pursuit of his profession alone, for he joined the staff of the *Birmingham Morning News*, then edited by Mr. George Dawson, and was appointed lecturer on Physiology and General Biology to the Midland Institute in 1871. Tait was but twenty-five years of age when he went to Birmingham, and three years before he had performed his first abdominal section. He was only twenty-eight when he obtained the Hastings Gold Medal of the British Medical Association, which was then given to him by Sir William Fergusson who made exceptionally complimentary remarks to the young surgeon on the unusual brilliancy and originality of his essay on "Diseases of the Ovaries," an essay which, written at a time when the pathology of the uterine adnexa had made but little advance, immediately drew attention to Tait and established his reputation as a pelvic surgeon.

It is not possible in such a notice as this to refer even to the most important of the advance in gynæcology in which Lawson Tait took so prominent and active a part. During the latter part of the seventies his fame had still further enchanced the reputation of the Birmingham

School. His writings on the physiology and pathology of the ovaries and Fallopian Tubes, on the intra-preitoneal method in ovariotomy, on tubal fœtation, and on the treatment of extra-peritoneal management of the pedicle by clamp added to his marvellous successes in ovariotomy, and abdominal surgery generally, had given him a world-wide fame. Not in pelvic surgery alone did his originality manifest itself. In 1879 his paper on "Cholecystotomy" was read before the Medico-Chirurgical Society, and appeared in its "Transactions." Various other original feats in abdominal surgery followed, and from different schools in America and on the Continent distinguished surgeons came to see his work and methods of operating. There was but one opinion as to his manipulative dexterity and deftness of hand, celerity, boldness, and completeness were the characteristics of Tait's operations. There has been, from time to time, doubt thrown on his statistics, but there is no ground that we know of whatever for questioning the accuracy of these. Some years since, during a painful episode of his life, when those of the Women's Hospital at Birmingham were impeached, he took immediate and unanswerable steps to verify them before the profession, and most satisfactorily did so. In his earlier cases of hysterectomy, when his mortality was very high, the disastrous results were published frankly and above board.

Tait's fame, however, most specially rests on his boldness in the treatment of diseased conditions of the adnexa by operation. Undeterred by attacks, and uninfluenced by hostile criticisms, he established the operation of oophorectomy as the surgical precedure for suppurative conditions of the ovaries and tubes in given cases of bleeding fibroma, and proved the necessity for immediate operation in ruptured tubal gestation—advances in gynæcology which were not achieved without much obloquy and unjust aspersion. He lived, however, to see the range of gynæcological surgery in these directions, and in justifiable operative procedures, pass far beyond the limits which he, in the earlier days of his advocacy, conceived that they would. With many other matters of pelvic surgery his name is associated. As, for instance, the treatment of pelvic abcess by abdominal section and drainage, and his operation for ruptured perineum. Lawson Tait was not what can be called in the modern sense an aseptic surgeon, and he held with characteristic obstinacy of mind to older methods of operation. He ignored Listerism, and refused to be a disciple of the great English teacher of antiseptic and aseptic methods. Here, as in his advocacy of the anti-vivisectionist movement, we believe that he was mistaken, and we cannot but feel that his results, brilliant as they undoubtedly were, would have been still more so had he adopted, as is now universally done, Listerian methods. By ordinary precautions of cleanliness, in conjunction with his great dexterity, Tait's results may be explained. We do not know how far those statistics might be modified by those of *all* operations he performed in private practice, but this has to be remembered, that if he lost at any time directly through the neglect of aseptic precautions, the price was a dear one to pay for his rejection of Listerism. His last communication (but a few weeks ago) to THE MEDICAL PRESS AND CIRCULAR, to which he has been a constant contributor

for many years, and to which lately he has addressed nearly all his original communications, shows how determined and honest was his opposition to vivisection. "Some day," he said, "I shall have a tombstone put over me, and an inscription upon it. I want only one thing recorded on it, and that to the effect '*he laboured to divert his profession from the blundering that has resulted from the performance of experiments on the sub human group of animal-life, in the hopes that they would shed light on the aberrant physiology of the human groups.*'" Alas! all too soon has the ruthless hand of death brought to an end a career which, at the time this was written, no one dreamed was so near to its conclusion.

Lawson Tait was an Honorary Graduate of several universities. In politics he was a staunch Liberal, and at one time thought of entering Parliament, but was defeated at the 1886 election for the Bordesley Division of Birmingham by Mr. Jesse Collings. Of late years he relinquished much of his practice, building for himself a residence at Llandudno facing the Conway estuary and the Penmaenmawr mountains, taking an active interest in the development of Llandudno, and only last month buying the Old Telegraph Inn, on the highest point of the Great Orme's Head, with a view of converting it into a sanatorium for consumptives.

Much more could be written and said of Lawson Tait, for his history has been also the history of British gynæcology for the last twenty-five years. We have aught to say to certain personal attributes which brought him many and relentless enemies. His best friends—and he had hosts of ardent admirers—would have often wished that in debate and in medical literature his attitude in scientific discussion were other than it was. This tendency doubtless cost him the loss of the highest professional and social distinctions, but he could always feel the internal conviction that the name of Lawson Tait would pass down on the roll of the great British surgeons who by their researches and work have been the milestones which mark for us and those to come the evolution and progress of British surgery. His death came rather suddenly after previous indisposition, at his residence, St. Petroks, Llandudno. The remains were cremated at Liverpool, and the ashes have been deposited, in accordance with his own special request, in a cave in his private grounds.

ETIOLOGY AND DIAGNOSIS OF CEREBRO SPINAL FEVER.

BY WILLIAM OSLER, M.D, F.R.S., F.R.C.P.,
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In practice we sometimes meet with a meningitis which is not a sequel to pneumonia or ulcerative endocarditis, to ear disease or of injury, and which does not mark the terminal stage of a chronic malady. As the meninges of brain and cord are both inflamed the condition is labelled cerebro-spinal meningitis. When there are many cases we speak of epidemic cerebro spinal meningitis. Until recently my experience did not extend beyond the sporadic form of the disease. However, the recurrence of a small outbreak in Baltimore during the past year has enabled me to study certain points in this most interesting affection, and has thus determined my choice of a subject upon which to addre s you.

Of the special features of epidemic cerebro-spinal fever I shall speak but briefly.

First, it is one of the most fatal of all acute diseases, but fortunately takes a low position among destructive epidemics. It spreads slowly and attacks only a few individuals so that the general mortality may be but slightly increased. On the other hand, scarcely any known fever kills so large a proportion of those attacked. During the recent Boston epidemic, out of 111 hospital cases no less than 76 died.

Secondly, the outbreaks occur in epidemic waves, of which the fourth in the present century is now prevailing in the United States. For some years there have been local outbreaks in widely-separated regions, but in 1896, 1897, and 1898. a slight epidemic occurred in Boston, and in 1898 cases appeared in Baltimore and other towns. From a recent report by Surgeon-General Wyman we find that cerebro-spinal fever has prevailed during the past year in twenty-seven States.

Thirdly, among specific diseases cerebro-spinal fever comes closest to pneumonia. Sporadic cases of both occur during epidemic periods, although more commonly so in pneumonia, while both are most frequent in barracks, gaols, and asylums. Even when not epidemic there may be remarkable house outbreaks of cerebro-spinal fever. The seasonal relations are the same in both, and the two diseases may prevail together. Other points of resemblance are found in the abrupt onset, the herpes, the almost identical character of the fibrino-purulent exudate, as pointed out by Netter, and the frequent complication of pneumonia by meningitis, and of the latter by pneumonia. The degree of contagion is about the same in both diseases, and it has been claimed that the organism described in cerebro-spinal fever is only a degenerate variety of the pneumococcus.

On the other hand, Leichtensten urges against the view that pneumococcus is the cause of epidemic cerebro-spinal meningitis the facts that pneumonia is of universal distribution, whereas the other condition is very rare, and in some countries still unknown. Croupous pneumonia

attacks every age, and somewhat more so with increasing age, while epidemic meningitis chiefly affects children and young persons. Pneumonia has a typical course and crisis: epidemic meningitis has no crisis. The complications also differ.

THE BACTERIOLOGY OF CEREBRO-SPINAL FEVER.—More than twelve years ago Weichelsbaum described a diplococcus with special cultural peculiarities, which he claimed to be the specific organism of the disease. In 1895 his observation was confirmed by Jaeger. No mention, however, was made of the fact in Allbut's System, published in 1806, or in Lowne's and Thompson's System in 1897. Weichelsbaum has been confirmed by Heubner, Councilman, Mallory and Wright, and the organism, known as the meningo-coccus, or the diplococcus intracellularis meningites, is now regarded as the specific cause of the malady. The subject is fully discused by Netter in Vol. XVI of the "Twentieth Century Practice." My own cases have been carefully investi ated by my colleagues, Drs. Gwyn, Harris, and Welch. The meningococcus in coverslips from the exudate is usually a diplococcus lying within the polynuclear leucocytes; hence the term intracellularis. It may also occur free. It is stained with the ordinary reagents, and is discoloured by Gram's method. It grows best on Loeffler's blood serum, on which it forms round, whitish, shining, viscid-looking colonies, with smooth, sharply defined outlines, which contain a diameter of 1 to 1½ millimetres in twenty-four hours. It is found in the cerebro-spinal exudates, and has has been rarely isolated from the blood, pus from joints, pneumonia areas in the lungs, and nasal mucus.

Our clinical and pathological experience with the organism is as follows:—In twenty-one cases which I have seen lumbar puncture was made in sixteen. In three cases seen in consultation the diagnosis was so clear that puncture was not made. In Cases 1 and 2, both mild, the puncture was made, one on the sixth and the other on the seventh day, but no organisms were found. In Cases 3 and 4, admitted late in the disease, it was not thought necessary to perform it. Of the remaining fourteen cases, in thirteen the diplococcus intracellularis was present on coverslips and in cultures. In the fourteenth case its presence was doubtful on the coverslips, but the staphylococcus was found in culture. Of the five autopsies the diplococcus intracellularis was present, and in two had been found during life. In one the streptococcus and in another the staphylococcus was isolated.

MICROBIC ASSOCIATION IN CEREBRO-SPINAL FEVER.—It is interesting to note that the diplococcus intracellularis is often found to be not in pure culture. In the Boston epidemic other organisms were often found, particularly in lumbar punctures taken in the course of the disease. In a large number of Netter's cases the pneumococcus was present. In our own series it was found only once in the fluid obtained by lumbar puncture. Another point in diagnosis is that after five or six weeks or longer the diplococcus intracellularis often disappears. The chief organisms found in association are the pyogenic organisms, the pneumococcus, and rarely, the tubercle bacillus.

On the whole, then, our observations support those of Weichelsbaum Jaeger, Councilman, and others, that in epidemic cerebro-spinal fever there is an organism with special cultured peculiarities which may reasonably be regarded as the exciting cause of the disease. Among recent observers, Netter alone appears to doubt this, and says that he found the diplococcus intracellularis in 16 only out of 39 cases, and in ten of these the pneumococcus was present at the same time.

Netter's position is illogical and confusing. In his article in the "Twentieth Century Practice" he assumes that cerebro-spinal fever may be caused by either the pneumococcus or the diplococcus intracellularis. That a cerebro-spinal meningitis may be due to the pneumococcus is everywhere acknowledged; but it is unlikely that so specific an affection as cerebro-spinal fever should be caused by two different organisms. Towards the close of the article the inconsistency of this view seems to impress him, for he says, "certain peculiarities prevent us from concluding that the two diseases are absolutely identical."

THE DIAGNOSIS.—In cerebro spinal fever the disclosures of the post-mortem room are just as mortifying as in pericarditis. Who has not in enteric fever or pneumonia made an absolute diagnosis of meningitis, only to illustrate the dictum of Stokes that there is no single nerve symptom which does not and may not occur independently of any lesion of brain, nerve, or spinal cord? It it is very doubtful if either tuberculous or pyogenic organisms cause an acute primary cerebro-spinal lepto-meningitis.

The onset of the disease is peculiar. As a rule it is more abrupt than that of any other known disease, with the possible exception of pneumonia. The patient may be seized when at work or during sleep, he has rigors or chill. This onset is very different from that of the tuberculous form. In sporadic cases of cerebro spinal attacks there may be no fever at first. (Various charts illustrating the peculiarites of temperature were here shown on a lantern screen.) In two cases there was no elevation of temperature for three or four days, then the curve ran up suddenly to 104 degs. or 105 degr. Another chart showed extreme fluctuations from about normal to 106 degs. and 108 degs. (the latter preceding death). In another less common type the fever was continuous, resembling the third week or recovery stage of enteric fever. In one case regarded as typhoid the diagnosis of cerebro-spinal fever was established by lumbar puncture. One protracted case showed extreme irregularity, and at one time an inverse type of temperature—that is to say, a morning record higher than that of the evening. In some the fever is of a remarkably intermittent nature. It differs, however, from the paroxysms of intermittent fever in extending over twenty-four hours, whereas the intermittent periodicity occurs every twelve hours.

KERNIG'S SIGN.—This interesting sign, first described by a Russian physician, has been present in all our cases in which it has been looked for. It is an old observation that in protracted meningitis the patients lie with the thighs flexed upon the abdomen and the legs partly flexed on the thighs. To test for Kernig's sign the patient should be propped up

in bed in the sitting position, then, on attempting to extend the leg on the thigh there is contraction of the flexors which prevents the full straightening of the leg. On the other hand, in the recumbent posture the leg can be fully extended. Many patients with meningitis cannot sit up, but the test can be equally well applied by flexing the thigh on the abdomen, when, on attempting to extend the leg if meningities be present, the limb cannot be fully extended. Frics found the sign in fifty-three out of sixty cases, and Netter in forty-five out of fifty. Its presence is no indication of the intensity of the spinal involvement. Netter's explanation of the phenomenon is as follows: In consequence of the inflammation of the meninges the roots of the nerves become irritable, and the flexion of the thighs upon the pelvis when the patient is in the sitting posture elongates, and consequently stretches the lumbar and sacral roots, and thus increases their irritability. The attempt to extend the knee is insufficient to provoke a reflex contraction of the flexors while the patient lies on his back with the thighs extended upon the pelvis, but it does so when he assumes a sitting posture.

LUMBAR PUNCTURE.—By means of Quincke's lumbar puncture we can now say when a meningitis exists and are further able to determine the form of the disease. The technique of the operation is fully described in the text-books. It is a simple, harmless procedure, and in most cases can be undertaken without general anæsthesia, or with the aid of a local freezing mixture. The puncture is usually made between the second and third lumbar vertebræ, and is done with an ordinary aspirating needle. Often a few drops of blood flow first, then a clear or turbid fluid. A dry tap is unusual in cerebro-spinal fever. The needle may be plugged, or may be in contact with a nerve. In rare cases clear fluid may be obtained when meningitis exists, and in a protracted case the fluid may be turbid at one puncture and clear at the next. A clear fluid may be obtained from a puncture in the second lumber interspace, while lower down a turbid fluid may be withdrawn. In a recent *post-mortem* the fluid in the dorsal and upper lumbar regions was clear, while that in the lower lumbar and the sacral canal was turbid and flocculent. The amount of fluid varies from a few drops to a large amount—*e.g.*, 126 c.c. Cover glass preparations can be made at once, and cultures prepared by running a few cubic centimetres of the fluid on to a shunt tube of Leoffler's blood serum.

Has the lumbar puncture any therapeutic value? Williams, of Boston, thought it had, but Wentworth takes a contrary view. Netter reports some good results. We have given this point careful attention. In one chronic case the patient lingered three months. Seventeen punctures were made in all between the twenty-ninth and the seventy-fifth days of the disease, and of these fourteen were positive. A turbid, pale yellow fluid was removed at each effective tapping. On five occasions 100 cc. or more were obtained, once 125 cc., and once 126 cc. After the first two effective tappings the patient seemed better, the ten punctures dropped and he seemed much brighter, but he soon became worse and the fever rose. Following the sixth, seventh, eighth and eleventh punctures the

temperature fell 4.5 degs., 3.8. degs., 4 2 degs., and 5.8 degs. The drop in the fever followed so directly that it seemed only natural to attribute it to the lumbar puncture. The thirteenth puncture, however, was negative, yet the temperature fell 5.1 degs., and after the fourteenth tapping the temperature rose 2.6 degs. Evidently not the withdrawal of the fluid, but the peculiar character of the disease was responsible for the remission. The diplococcus intracellularis was found twice.

SPORADIC CEREBRO-SPINAL FEVER.—To what extent do isolated cases of cerebro-spinal fever occur between the epidemics? What is the nature of the primrry supperative meningitis which is met with from time to time in all communities?

Neither hospital statistics nor the ordinary death returns give any trustworthy information as to these questions.

From the Fifty-ninth Annual Report of the Registrar-General, 1896, I gather that the deaths from cerebro spinal fever in England from 1877 to 1896 inclusive, have only once exceeded 50 per annum. There has been a great reduction in the return since 1887, 233 cases for the ten years ending 1896, against 406 for the previous decade. In Scotland there were only six deaths from cerebro-spinal fever in 1895, and five in 1896. In Ireland there were 76 deaths from this cause in 1896, and the same number in 1897.

In the United States and Canada the occurrence of sporadic cases in the intervals between the epidemics has long been recognized. In Philadelphia, from 1863 up to the present date, a record has been made by Stillé Pepper, and Abbott. They show a gradual decline from 1884, when there were 124 deaths, to 1891, with 23 deaths. From 1892 to 1897, the deaths were 22, 35, 18, 17, 7, 10; 1898, 24 cases; while in the first four months of the present year there were no less than 89 deaths.

At the Johns Hopkins Hospital in the Spring of 1898 there were four cases of sporadic cerebro-spinal fever; the first of the epidemic cases.

One family presented the following history:—(1) a son, a young man, æt. 20, returned home with a terrible pain in the head. He had fever and vomiting and his head and neck were arched. He was delirious and died in five days; (2) a sister who nursed her brother, died in four days; (3) a second sister taken ill and recovered; (4) the mother, worn out with nursing her children, attacked and died in two days. These were five cases of the sporadic form in one family. The disease was not epidemic in the city.

BACTERIOLOGY OF SPORADIC CEREBRO-SPINAL FEVER.

In a number of sporadic cases the organism of Weichelsbaum has been found. The most important contribution of late years has been made by Dr. Hill, of the Great Ormond Street Hospital for Children. In a study of the simple posterior basic meningitis of infants he isolated from seven or eight cases a diplococcus conforming in every respect with the diplococcus intracellularis. In ten years there were forty-nine fatal cases of the kind at the hospital mentioned. Clinically

the disease differs from the ordinary type, as it attacks young children and is very protracted. Skin rashes are not frequent. Still was able to isolate the diplococcus from the periarthritic exudates.

By the kindness of Professor Welch the results of the twenty-five cases in our own city in which bacteriological examination has been made may be here given. There were six of cerebro-spinal fever, eight of pneumococcic meningitis, seven of pyogenic meningitis (in which streptococci and staphylococci were found together and separately), and four showing unidentified bacilli.

The pyogenic forms of meningitis do not concern us here; no case of primary streptococcus or staphylococcus came to autopsy. I have already referred to the chronic from of cerebro-spinal fever in which the pyogenic cocci may alone be present at the time of death.

PNEUMOCOCCIC MENINGITIS.

The pneumococcus has long been recognized as the most important organism in the production of meningitis, and the first question is how far sporadic cases of cerebro-spinal meningitis are due to it. Of twenty-five cases in the Johns Hopkins Hospital it was isolated in eight. Of twenty cases examined by Councilman, Mallory, and Wright, it was primary in two and secondary in eight. Netter examined sixty-one cases of meningitis bacteriologically, and found the pneumococcus thirty-five times, the same with streptococcus once, and once with staphylococcus, the streptococcus alone thirteen times, the diplococcus intracellularis three times. We may consider three groups of pneumococcic meningitis.

1. The meningitis as a complication of lobar pneumonia. In Montreal my attention was called to the frequency of this complication in eight of one hundred consecutive autopsies. The other groups are pneumococcic meningitis.

The clinical features of pneumococcic meningitis present many points of interest. Is the case one of cerebro-spinal fever with pneumonia, or of inflammation of the lungs, with an added meningitis? This question does not often arise at the bedside, as it is most exceptional for the meningitis of pneumonia to present the symptoms of cerebro-spinal fever, and in doubtful cases the lumbar puncture will settle the matter. The age of the patient is important. In meningitis complicating pneumonia all the cases were above the twentieth year, a striking contrast to cerebro-spinal fever, in which a large proportion are under twenty. A second point is the latency of pneumonia, which is much more often recognised in the deadhouse than in the wards. Netter states that fully one-half of the cases are latent. Headache and early delirium are present in all cases, owing to involvement or cortex. On the other hand, the mind may remain clear throughout cerebro-spinal fever. Spinal symptoms are rare in the meningitis of pneumonia. The importance of lumbar puncture cannot be too strongly emphasised. In a case of pneumonia in the wards of cerebral symptoms, the puncture showed the pneumococcus in the exudate. Lastly, an important point is that meningitis complicating pneumonia is almost always fatal. Personally I have never seen recovery under these conditions.

Secondary meningitis from local infection from nose, ear, &c., is often of pneumococcic origin.

Primary pneumococcic meningitis exists, and is abrupt in onset. The most important point to be determined is the exact proportion of primary cerebro-spinal meningitis due to pneumococcus and to diplococcus intracellularis.

Treatment.

In our cases no special drugs were used. Morphia was given to check pain, and sponging practiced to reduced temperature. Our mortality has not been very great when we consider the severity of the cases, thus eight cases died out of eighteen in hospital, and nine among the twenty-one I have seen. A distinguishing feature is the relief of pressure by withdrawal of cerebro-spinal fluid.

In two of our cases the spinal canal has been opened, drained, and irrigated. So far as I know, an extensive laminectomy had not been done for acute spinal meningitis until our first case on November 6th, 1898, was operated upon by Dr. Cushing. The spinal canal was thoroughly irrigated with salt solution and a quantity of purulent exudate washed out. No change followed in the existing paraplegia. The bladder and kidneys became infected, and the patient died two months after the operation. At the autopsy spinal meninges were smooth and looked normal. It was impossible to say where the dura mater had been incised, and there were neither adhesions nor thickening of the pia-arachnoid

In another case laminectomy was performed on the fourth day by Dr. Cushing. A catheter was passed beneath the dura mater, and the membranes drained and irrigated. For several days the patient seemed better, but he developed a hæmorrhagic cystitis, and died on the sixth day after operation.

Dr. Musser, of Philadelphia, has also had an unsuccessful case. In England Dr. Rodleston, and Mr. Herbert Allingham have reported a case of sporadic cerebro-spinal meningitis, in which the patient recovered after laminectomy and drainage. The operation which has been adversely criticised in some quarters, seems to be justifiable in severe cases, where the spinal symptoms are very marked, on the principle of a desperate remedy for a desperate disease.

THE PHYSIOLOGICAL EFFECTS OF CASTRATION IN THE MALE AND FEMALE.

A great deal of speculation has found expression in contributions to the study of the physiological effects of castration in the male and female, but, in truth, it is fundamentally erroneous to treat the two operations as if they had anything in common. The ovary is not a gland like the testis, and it is hardly likely therefore that the former possesses any internal secretion akin to that which is held to be furnished by the testis. The loss of this internal secretion in the male is credited with the production of more or less marked depression, which not unfrequently culminates in melancholia. In the female, on the other hand, the functions of the ovaries which call for removal have generally long since fallen into abeyance so that the ablation of functionally inactive organs is not likely to entail any corresponding constitutional disturbance. With regard to the sexual appetite, its preservation or otherwise must greatly depend upon circumstances. The loss of the ovaries in an unmarried female usually leaves the sexual appetite undeveloped, whereas in a married women the nervous system has received previous impressions which may keep awake and prolong the period of sexual activity. The same thing holds good in males. If the testicles are removed before puberty no sexual appetite is developed, but if what we may call the sexual habit has been formed the nervous system reacts to certain stimuli as a matter of routine even though the original essential stimulus is wanting. After all these are details of no practical importance, because the conditions which call for castration on the one hand and removal of the ovaries on the other are always such as to render the question of sexual appetite a point of more than secondary importance.

TRIGGER-FINGER (DIGITUS RECELLENS).

Dr. David Reisman in the *Philadelphia Polyclinic* (Vol. VII, No. 13) reports a case of digitus recellens and gives a careful resume of the literature of the subject.

Trigger-finger is a rare and annoying affection, characterized by a sudden locking of the finger when it is flexed or extended to a certain point. The finger thus locked cannot be further flexed or extended without a powerful voluntary effort, and frequently not without the aid of the other hand. The forcible overcoming of the resistance is usually attended by a distinct, audible snap.

Trigger-finger is considerably more frequent in the female than in the male sex, and usually involves but one finger, the middle finger being the seat in over one-third of all cases.

Schmit pointed out the interesting fact that the disease was common in seamstresses, embroiderers, knitters, and mattress-makers, and he attributed it to functional overuse of the fingers.

Dr. Riesman's case was probably of nervous origin, the part affected being the little finger. The present case presents nothing of peculiar interest except possibly the pronounced acroparesthesia, accompanying the condition.

The prognosis of trigger-finger is on the whole good, and a considerable number of recoveries is on record. The treatment generally advised is the application of iodin, electricity, massage, passive motion, and fixation of the finger by means of a splint. Inveterate cases have been treated by operation, which usually consist in removing whatever obstacle to free movement exists. If any underlying cause, like rheumatism or gout, is ascertainable, proper general treatment is of course to be instituted. In cases accompanied by pronounced paresthesia phenomena, the use of ergot may be tried.

ECZEMA IN INFANTS.

It is almost the universal belief of pediatric authorities that eczema in infants and young children is largely of intestinal origin. It seems certain that diet frequently plays an important role in its causation. By this is not meant that any particular article of food causes eczema, but rather that faulty nutrition of the tissues, due to dietary errors, plays a considerable part in the production of the disease. The intestinal indigestion which results from over feeding is one of the most common caus s. The early and excessive use of farinaceous foods or milk containing a high percentage of fat are also undoubted factors in its production. Although the child may be well nourished, careful observation will usually reveal some form of indigestion or dietetic error.

In young children delicacy of the skin is undoubtedly a factor of importance in the production of eczema. Causes which would produce but little irritation in the adult frequently cause serious inflammation in the sensitive skin of the child.

The diathetic nature of eczema has been discussed with considerable warmth While it is doubtful whether the disease can strictly be called a diathetic one, it is certain that it is more common in the children of rheumatic and gouty parents.

In an article appearing not long since in this journal, Dr. Bulkley classifies the internal causes of eczema as (1) dietetic; (2) assimilative; (3) neurotic; and the external as (1) climatic; (2) hygienic. The parasitic theory is strongly urged by some, but it is not yet proved that microorganisms are the exciting cause of most cases, though they undoubtedly are such in many instances.

Whatever the exciting cause may be, it is certain that the condition somewhat vaguely expressed by the term predisposition is of great importance. The skin of some children becomes eczematous upon the slightest irritation or exposure; in other children the disease can hardly be produced; irritation may result in dermatitis or local inflammation, but not in eczema. Predisposition is an element which must be considered in every case.

In infants, eczema shows but slight tendency to spontaneous cure. It is prone to relapse, and, as a rule, is a prolonged and discouraging disease, When occurring in children suffering from chronic indigestion, it is especially rebellious to treatment, and assurances of speedy cure should be made with great caution.

PHYSIOLOGICAL EFFECTS OF EXERCISE.

The recent observations of Dr. William regarding the effects of muscular exercise upon the heart and other organs is quite in accordance with the data furnished by previous investigators. The facts in question were obtained from an examination of the participants in a long distance running race held last month in Massachusetts. The results as recorded in the lay press are as follows:

The men who entered the race were vigorous, healthy, normal young men; average age 22 years; at the finish all were in a more or less exhausted condition; there was a loss of weight varying in individuals from 6⅛ pounds (maximum) to 1¼ pounds (minimum); there was a loss of temperature varying from 5.4° F. (maximum), to 0.5° F. (minimum).

By far the most interesting result of these studies was the demonstration that every form of exercise and every individual participating should receive separate consideration as to the effect of this violent and prolonged muscular exercise upon the heart. These latter studies justified the following conclusions: That before the race the hearts of all the men who finished were in a condition of relative healthy enlargement (physiological hypertrophy); that the only heart examined beforehand which was of reduced or normal size was that of a man who dropped out on the way; that the effect produced upon the hearts of those who finished was simply a participation of its muscular structure in the general muscular exhaustion which resulted from the effort. The chief signs of this muscular exhaustion of the heart subsi d before the men left the examining room.

The conclusions to be drawn from this report are, that while the injurious effects of such exercise in the case of picked and healthy men may not be apparent, there is at least a temporary cardiac hypertrophy as well as a considerable strain on the blood vessels and excretory organs. Even admitting that all this is strictly physiological, it is not the less true that frequent exercise of this kind will produce a condition of muscular hypertrophy, which, as in other conditions, is prone to result in secondary degeneration. We believe that habitual muscular exercise of a violent character is decidedly inimical to health, and that any form of muscular development which greatly exceeds the demands of daily life is an element of danger to the individual. Health and longevity are not promoted by this condition, but rather by a proper activity and due equilibrium of the various organs and tissues of the body. Bodily endurance rather than phenomenal strength is the object to be attained.

A Method of Removing Foreign Bodies from Beneath the Nails. —*Nouveaux Remèdes* for August 24 calls attention to this procedure:— Soften the nail by applying to it a 10 per cent solution of caustic potash, scrape away the softened portion with a piece of glass, repeat the potash application and the scraping, and the foreign body is exposed and can easily be removed.—*New York Med. Jour.*

BOOK REVIEW.

SAUNDER'S MEDICAL HAND ATLAS.

Atlas of Diseases of the Skin, including an epitome of pathology and treatment by Prof. Dr. Franz Uracek of Vienna. Edited by Henry W. Stelevagon, Jefferson Medical College. Philadelphia: W. B. Saunders; Toronto: W. Carveth & Co. 1899. $3.50.

This is the latest of the series of atlases which are being placed before the profession by W. B. Saunders of Philadelphia. This series has been remarkably successful. It filled a long unsupplied want: and filled it well.

Those of the series which we have had were, we think, quite as good as could be placed on the market for the general practitioner.

The present volume seems to be arranged so as to be of great service. There are chapters on general therapeutics and treatment of individual skin diseases which are extremely helpful to everyone who has to do with skin diseases,—and who in the profession has not? The editor, Dr. Stelevagon, the well known Clinician of Jefferson, has done his work well.

While we know it is extremely difficult to study skin diseases from books, we must say that the 63 beautifully executed plates and 39 half-tone illustrations will greatly aid those in need of aid.

We commend the book as a useful and practical addition to the study of skin diseases.

Annual Analytical Cyclopædia of Practical Medicine, by Charles E. de Sajous, M.D., and one hundred associate editors. Volume III. Philadelphia: The F. A. Davis Co.; Toronto: Carveth & Co. 1899.

This third volume of Sajous' monumental work will be welcomed by everyone who has the good fortune to know the value of its predecessors.

In reviewing volume I., we took occasion to note the general plan of the work, and to give it a hearty endorsation. To those of the profession. who have read, or used, the first two volumes, no message is necessary. But to those who have not, we would say to the general practitioner of medicine who is anxious to know the latest in his science and art, the whole work is invaluable.

This volume contains among many other subjects of interest, articles on criticism by Osler and Norton; and ophthalmic goitre by Putnam of Boston; goitre by our own Adami of Montreal.

Byford, Stinson, Keyes, Sayre and Stelevagon are other contributors to this volume, which perhaps exceeds in interest either of the other two.

The letter press, illustrations, maps and chromo-lithographs are up to the highest standard of the American printer's art, than which no higher praise can be given.

We appreciate the volume as a distinct and valuable addition to our own library, and feel sure that any of our readers who have not secured the work, cannot spend money on books to better advantage than by purchasing this work.

A Manual of Surgical Treatment. By W. Watson Cheyne, M.B.,F.R.C.S., F.R.S., Professor of Surgery in King's College, London, Surgeon to King's College Hospital, etc., and F. F. Burghard, M. D. and M. S. (Lond), F.R.C.S.,. Teacher of Practical Surgery in King's College, London, Surgeon to King's College Hospital, etc. In six imperial octavo volumes, with illustrations. Volume I, 285 pages, with 66 illustrations. Cloth, $3.00, net. Lea Brothers & Co., Philadelphia and New York. 1899.

Who has not experienced the want of detailed information, especially as regards the after treatment of our cases, and have had to learn the best methods of procedure from experience? Nothing can replace experience; but it is often of the greatest advantage to have a detailed record of that of others upon which to base our work. It is this want the authors intend to supply, the details as to treatment from the commencement to the termination of the illness. They have omitted diagnostic symptoms largely, and confine themselves to pathology and symptom so far as it is necessary to render intelligible the principles on which treatment is based, and do not discuss the various treatments proposed by others, but plainly state what the authors by experience have decided as the best line of action in all cases. The work is well worthy the perusal of those interested in surgical treatment.

THE TEXT OF ANATOMY BY AMERICAN AUTHORS.

This work surpasses anything of the kind that has ever been produced, the authors have endeavoured as far as it is possible to make a text-book which shall stand as a living teacher to the student. The various topics have been arranged on familiar lines, and each author has set forth his subject in the method which his experience has shown him to be the most useful to the student. The pictorial and diagramatic illustrations are abundant and of striking artistic excellence. In fact it is a perfect anatomical atlas, and to the general practitioner who wants to refresh his memory on muscular attachments and relations, as well as arteries, veins, nerves, etc., the work gives a most vivid likeness of all parts. The authors may well feel proud of their production.

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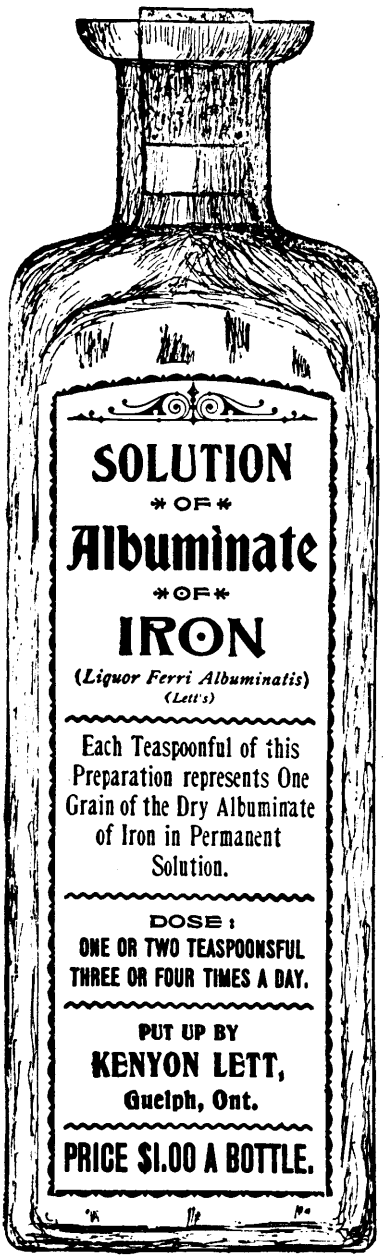

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