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## Physical Exhaustion.

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REPORT OF GYNECOLOGICAL CASES TREATED BY  
ELECTRICITY.\*

BY FRANKLIN TOWNSEND, JR., A.M., M.D.,

ALBANY, N. Y.

*Professor of Physiology, Albany Medical College.*

This short report which I am about to present gives the result of my practical experience during the past year in the use of electricity as applied to certain gynecological cases occurring in my practice. I do not desire, nor do I intend to discuss the mooted question, of which we have all heard so much, regarding the use of electricity *versus* operative procedures in various diseases of women; but shall be very glad to listen to the views of the Fellows upon this important and vexed topic.

The cases, though not numerous, certainly represented a multiplicity and variety of pelvic and abdominal disorders so common to the female sex, and to which the treatment by electricity seemed eminently proper. Of the seventeen cases thus treated, four were for intra-mural fibroid tumors of the uterus, of exceedingly large size, causing the patients to suffer from great losses of blood, more especially at their menstrual period. Seven had simple catarrhal salpingitis, with dislocated, inflamed ovaries, attached by perimetric adhesions with uterus in retroflexion or version. Two had subinvolted uteri, with metritis, the uterus in each case being retroverted, but mobile. One had a multilocular ovarian cyst, while still another had pyosalpinx. The remaining cases, two in number, were the typical type of women suffering from pelvic inflammatory exudations following abortion, where *all* the pelvic organs seemed matted together, causing immobility of the same, tenderness being the most marked symptom.

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\*Read at the annual meeting of the American Association of Obstetricians and Gynecologists, Philadelphia, September, 1890.

I will now premise what further remarks I have to make by the statement that all of these cases had been under treatment by other practitioners for different periods, and that the more usual course had, in each case, been pursued by the medical attendant. The cases had simply been recommended to me for *surgical* interference, though, I might state that, in two of the women having fibroids, electricity had been tried, but not, as I understood it, in the most approved manner.

CASE I.—Mrs. S., Albany, N. Y., age 34, married and sterile four years. Ill five years. Symptoms: Constant nausea and vomiting; dysmenorrhœa; constant pelvic pain; constipated; dysuria; loss of flesh; anæmia; is compelled to remain in bed at each menstrual epoch, which is regular.

Examination revealed a retro flexed, immobile uterus, with peri-uterine exudation; right ovary prolapsed in Douglas' pouch, adherent, greatly enlarged and very tender; also the tube of same side. Diagnosis: Chronic salpingo-oöphoritis, with chronic pelvic peritonitis. Vomiting reflex. Other organs normal.

Previous treatment of all kinds, excepting use of electricity. Referred to me for operation. Commenced use of electricity March 17, 1890; negative pole against uterus, positive over abdomen; used from 90 to 120 m. p.; could never go beyond 120 m. p. In all, patient had forty-two sittings. Twice were the vagina and post-vaginal fornix seriously eroded.

Her condition was in no respect improved, except, perhaps, a slight amelioration of the reflex vomiting. To be operated upon in October.

CASE II.—Miss B., Round Lake, N. Y., age 27, single; ill three years. Symptoms the same as in Case I., with the exception that there was no nausea nor vomiting.

Examination revealed condition very similar to Case I., and diagnosis the same as in that case.

Previous treatment of all kinds, excepting electricity. Referred to me for operation. Commenced using electric current (constant) on March 19th, the same as in Case I. In all, patient had twenty-seven sittings of fifteen minutes each. At two different times erosions of mucous membrane were created. Always caused a certain amount of pain, and finally patient refused this form of treatment, preferring operation if I thought it feasible.

If any thing, her condition was made worse by the treatment. To be operated upon in the fall.

CASE III.—Mrs. M., Troy, N. Y., age 30, seven years married, sterile. Ill eight years. Noticed enlargement of abdomen. Symptoms: Metrorrhagia; gradual increase of tumor, and distressed by its weight; interference also with her respiration.

Examination revealed very large fibroid (intra-mural) of uterus. General health good. Patient anæmic from frequent loss of blood.



Used the sound, and entered uterus seven and a half inches. Diagnosed intra-mural uterine fibroid.

Previous treatment had consisted of tampons, applications, etc. Thought to be pregnant by one doctor. Began using electricity (constant current), March 27th, in my office; continued doing so for three and a half months, and possibly would have continued had it not been that I was compelled to take my vacation.

The uterine hemorrhage lessened decidedly, otherwise patient the same; tumor same size as at beginning of treatment.

CASE IV.—Mrs. T., age 37, married, mother of three children; two abortions. Ill ten years. Symptoms: Menorrhagia and metrorrhagia, enlargement of abdomen, anæmia, œdema of lower extremities.

Examination revealed intra-mural fibroid of uterus, about the size of an adult head. Diagnosed intra-mural fibroid of the uterus.

Previous treatment had consisted of ergotine, hydrastin, and tamponing when hemorrhage was excessive. Began using electricity October 16th, and continued twice weekly up to April 15th.

Treatment resulted in a decrease in the flow, and some, possibly, in size of tumor. Œdema of extremities the same. April 15th, general health improved. Have not seen patient since.

CASE V.—Mrs. R., Cohoes, age 24, married two years, sterile. Ill three years. Symptom: Dysmenorrhœa.

Examination revealed tender and enlarged right ovary and tube, dislocated into Douglas' pouch, but movable. Diagnosed chronic salpingo-oöphoritis.

Previous treatment had been general and local since her marriage—that is, for two years—by her husband, who is a physician. Began using electricity March 14th, three times weekly, but only 80 m. p., patient not being able to stand more. Eroded vagina. Had in all thirty-seven sittings. She became so disappointed that she has decided upon operation, if thought proper, in the fall.

The result was negative.

CASE VI.—Mrs. F., Troy, N. Y., age 39, single. Ill four years. Symptoms: Dysmenorrhœa, frequent uterine hemorrhage, pain in back, anæmia, loss of flesh, abdominal enlargement.

Examination revealed intra-mural fibroid the size of an orange. Uterus quite movable; tumor out of pelvis. Diagnosed intra-mural fibroid growth, metrorrhagia and menorrhagia.

Previous treatment had consisted of general and local of all kinds, excepting electricity. Began using electricity May 4th. Hemorrhage decidedly lessened after eight sittings. Patient still under treatment. No change in size of tumor, but she appears markedly improved in general health.

The result was beneficial, but with no marked change in size of tumor.

CASE VII.—Mrs. P., of Albany, N. Y., age 40, married twenty years, with a large family. Ill two years. Symptoms were those of

uterine polypus, metrorrhagia and menorrhagia; very anæmic; exsanguinated.

Examination revealed large fibroid polyp springing from post-cervical lips, besides intra-mural fibroid of uterine body. Operated upon April 12, removing uterine polyp. Diagnosed uterine polyp with intra-mural fibroid tumor of corpus uteri.

Previous treatment had consisted of local and general applications. Began using electricity May 10th, about a month after operating upon polyp; 120 m. p. used at each sitting, which caused pain.

This case is under observation at present time; no hemorrhage nor any marked diminution in size of tumor.

CASE VIII.—Miss F., Schenectady, N. Y., age 20, single. Ill two years. Symptoms: Abdominal enlargement; menstruates more or less irregular; no marked pain; constipated.

Examination revealed ovarian tumor, size of child's head. Diagnosed simple cyst of broad ligament.

This case had had no previous treatment, the physician simply diagnosing case by examination at first visit. Referred to me for operation.

Began use of electricity April 4th. Made 30 applications, three per week, except when menstruating.

Result was *nil*, tumor enlarging if any thing. To be operated upon.

CASES IX., X., XI., XII.—These cases were, in their general character, very similar to those whose history has been previously given more or less in detail (see Cases I., II., V.), the symptoms being identical, while the diagnosis was about the same—salpingo-oöphoritis (chronic catarrhal), with pelvic exudate. The constant current tried in all four cases, without any beneficent result, other treatment, local and general, having been used. Case IX. was a married woman, the others single.

CASE XIII.—Mrs. H., New York, aged 24, married eighteen months. Has complained ever since marriage. Original gonorrhœa, contracted during marriage; pain in right inguinal region; discharge of pus; pruritus vulvæ et vaginæ, dysuria, etc.

Examination reveals pyo-salpinx, size of sausage; possible abscess of ovary.

Previous treatment local and constitutional. Began use of electricity on May 9th, seven sittings in all made, using current of 90 to 110 m. p. Each time she complained of pain. Fearing rupture of tube, and deeming electricity in this case as unavailing and even dangerous, I aspirated tube, and washed out in the usual manner, and patient finally recovered.

CASES XIV., XV.—These cases were such as are so frequently met with when, after repeated pregnancies followed by childbirth, in healthy women generally, the uterus becomes sub-involuted in retroversion, with a possible metritis, at the same time this organ being mobile, though tender, there being no disease of the adnexa.



Diagnosed sub-involution uteri, retroversion uteri, and metritis.

Previous treatment had consisted of local applications, with general toning up of the system. In one case began use of electricity February 19th, and continued for five months regularly, excepting during menstrual periods. In the other case began treatment one month later, three sittings weekly for four months.

In both cases it seemed at first that the weight and pain in the back were somewhat relieved, though the uterus in each was equally as large and heavy as when treatment was begun. About the middle of July stopped this form of treatment, recommending Alexander's operation in the fall, which was agreed to.

CASES XVI., XVII.—Without copying in detail from my case book the histories of the two following cases, which make up the series of seventeen which underwent the treatment by electricity, I will simply say that they are such as we so frequently meet with—women suffering from general pelvic inflammatory exudations following abortion, where all the pelvic organs seem matted together, immobility being the characteristic symptom, as elicited by manual examination. These were what might be termed chronic cases, having aborted previously at periods of from four to five months prior to my seeing them. They were both hospital cases.

The usual treatment locally, abdominally and per vaginam, were tried, beside general systemic introduction of nourishment and appropriate medication. Commenced use of electricity February 4th in one case, and February 27th in the other. In both kept up regularly, three times weekly, 120 m. p. current for one month. Both cases afterward similarly treated at office for four months.

General health improved. Possible improvement by diminution of exudation, also greater mobility of parts; otherwise no better, and thoroughly disabled for work.

On looking over the results produced by electricity (constant current), in *the cases cited*, one would naturally, it seems to me, come to the conclusion that it was a decided failure in the majority of them, while, possibly, it was a *partial* success in a few. At all events, one might say that a feeling of disappointment must of necessity be the resulting sentiment.

As a summary, let me say that, regarding the cases cited, my conclusions might thus be stated:

1st. That I was much disappointed in the results derived from this mode of treatment.

2d. That the treatment was carried out, to my mind, in the most approved manner.

3d. That many of the patients objected frequently to its continuance, because of the pain it caused them, and yet the strength of the current was comparatively mild.



4th. That some objected to its continuance *absolutely*, notably because of its causing pain, but also because they were made worse.

5th. That, in two instances a current, as indicated by the milli-ampere meter (which was used industriously in all cases), showing a resistance of 120 m. p., gave decided evidence of local erosion of the parts to which the negative pole was applied.

6th. That the time and number of sittings in almost all the cases cited seemed, to my mind, to be sufficient to prove, or disprove, its value, in each individual instance.

7th. That, in my limited experience, only a few cases were benefited by its use, notably the cases of fibroid tumors of the uterus, where the *hemorrhage* assuredly was controlled.

8th. That the tumors (fibroid) were not markedly, if at all, diminished in size.

9th. That in pelvic exudates no manifestations of amelioration were shown as to the absorption of the exudate, nor in the discontinuance of pain.

10th. That the necessity of frequency of application of this method of treatment becomes tiresome to patient.

11th. That the loss of time (possibly some might call it gain) to the professional man is not inconsiderable.

12th. That there *are* dangers, possibly unavoidable, in using this method of treatment, as peritonitis, collapse, etc.

13th. That the claim or desire on the part of some patients for operative measures, if thought feasible, after a long-continued trial of this treatment, at least commands some attention on the part of the practitioner.

14th. That altogether, from this limited experience of seventeen cases treated according to the methods laid down by our best authorities upon this subject, I must sincerely confess to disappointment; and, until I find something better, though much desiring to be conservative, I shall go back to my operative work, in which, as a rule, success and permanent cure have frequently obtained in just such class of cases as cited.

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DR. VON BULOW is a very severe critic, apt to say bitter things occasionally. He was listening, not long ago, to a well-known New York tenor, when he made the remark to his neighbor: "I do not care for him. In fact, I do not think a tenor is a man; he is an illness."

## CLINICAL LECTURE.\*

## THE MANAGEMENT OF FRACTURES.

BY WILLIAM HAILES, JR., M.D.,

ALBANY, N. Y.

*Professor of Fractures and Dislocations, Albany Medical College.*

CASE I.—M. R. Fracture of the lower end of the radius, with impaction. She fell, striking upon the palm of the hand, causing considerable displacement. It was a Colles' fracture, and required considerable manipulation to restore the parts to their proper places. You will notice, now that the splints are removed, that the contour is good and that fair motion, within ordinary limits, exists, but that the forced movements of flexion or extension are painful, and are not as yet borne well by the patient.

CASE II.—K. F. Also a fracture of the lower end of the radius. Great fever must have occurred in this case, on account of the extravasation of blood. You will notice that the ecchymosis extends as far up as the elbow joint. The parts are in correct anatomical relations with each other, and the prospects are good for a useful limb. It is best to give a guarded prognosis, for impaction is sometimes followed by disability more or less pronounced.

CASE III.—S. T. Fracture of the lower end of the radius, extending into the articulation of the wrist joint. He fell and struck upon the palm of the left hand, causing marked displacement of the parts. This case is interesting on account of the advanced age of the patient—68 years. After care in reducing the fracture, we have dressed it by palmar and dorsal splints, pads, adhesive straps and bandage.

Fractures of the lower end of the radius are exceedingly common and very variable. Many of them are impacted, and require care and considerable force to reduce them properly, and also to maintain them in their proper position. There may be in some cases a dislocation of the tendon of the extensor-carpi-ulnaris, which, if overlooked, would certainly produce distortion and a disability, more or less grave in its nature. Dr. Moore, of Rochester, has called the attention to this accident, and has given us a method of reduction by circumducting the hand. Gentlemen, be on your guard in treating this or any other fracture; learn its true nature and complications; properly reduce and dress it, and watch it until recovery, and

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\* Delivered at the Albany Hospital, January 9, 1891.

remember that eternal vigilance is the price of safety in caring for fractures.

CASE IV.—H. H. Compound, complicated, comminuted fracture of both bones of the leg. This man has his leg dressed in plaster of Paris, with a fenestra over the point of necrosed bone. The tibia was forced through the garments, and a large arterial trunk severed. The fact that necrosis exists does not interfere materially with the progress of this case, for, in fact, the presence of a piece of dead bone at the seat of fracture will often act as a stimulus, and aid in the more rapid and complete formation of the callus. It is not good surgery to remove the *sequestrum* too early, and, as you will notice, it is as yet quite firm in its position. The plaster dressing is a very great boon to this man; it permits him to be quite comfortable, even during the treatment, for so severe an injury. Upon measurement, you will notice that there is scarcely any shortening. We used extension and hot fomentations during the early stages, and applied the present dressing after the swelling had subsided. The position is good and patient is doing well in every way.

CASE V.—J. H. Fracture of the patella. He struck his knee upon the sidewalk and sustained a fracture by direct violence. In this case we were able to obtain a perfect approximation of the fragments, and I think we will get bony union. There was no great injury to the surrounding parts; the articulation of the knee-joint was not injured, nor was there any great amount of effusion. I am almost sure that this man will not be aware that he has ever fractured his patella.

CASE VI.—A. S. Also fracture of the patella. He fell and struck upon outer side of the knee-joint. It is a multiple fracture, with extensive traumatism. When I first saw him his knee was greatly swollen, with marked effusion of blood and serum within the cavity of the knee-joint, and it was impossible to approximate the fragments for a week, and, as you will notice, there is still some separation of them, and we cannot expect to obtain as satisfactory a result as in the former case, on account of the accompanying traumatism; still, I have no doubt but that the function of the knee-joint will in time be perfect, even though there is one-quarter or three-eighths of an inch separation. We could, under *asepsis*, cut down over this fracture and open up the knee-joint, allow the serum to escape, and roll out the clots of blood, and wire the fragments of the patella together, with but moderate risk; but experience has



taught us that the slower method, in ordinary cases, is the better, and our results are good and satisfactory. We have had twelve cases within two years, and all have done well. The dressing, you observe, is a straight padded posterior splint, with elastic traction upon the upper fragment, carried down to foot splint.

CASE VII.—W. H. Has a complicated injury of the humerus—a green stick fracture of the middle third, with injury to musculo-spiral nerve and partial paralysis of the extensors of fore-arm, wrist and thumb. This loss of power is, however, only temporary, I hope, and will be restored after repair to injury of nerve-trunk.

Some of my hearers will remember a case of fracture of shaft of middle third of humerus, with enclosure of musculo-spiral nerve in the callus. In this case there was complete paralysis of the extensors of fore-arm, wrist and thumb. You will remember that we cut directly down upon the callus on outer side of arm, intending to reset the nerve. We found the nerve-trunk entirely surrounded by hard, bony callus, which we were obliged to cut away with chisel and mallet. Before cutting the nerve we tried the electric current on proximal side of trunk, and obtained marked contraction of affected muscles, and we concluded to suture the nerve by making an S in it, and in time the function of the nerve was in great part restored.

In both these cases the surgeon might be unjustly censured for paralysis accompanying an ordinary fracture—in fact, in the second case, at one time seemed to be pointing toward a medico-legal procedure.

CASE VIII.—G. S. Comminuted, complicated fracture of both bones of the leg (lower third). I bring this case before you to show you how to make extension under difficulties. There is some impaction and shortening, and we are using the *gaiter* extension, made from an old shoe and applied to the foot, and still employing the fracture box. Notice the large blebs and bruises complicating the case. After the acute disturbances—swelling, effusion, etc.—subside, and our extending force shall have brought the fragments down into their proper places, we can apply the plaster dressing. A fracture like this one, in lower third of leg, or fracture extending into ankle-joint, is somewhat difficult to treat, on account of having only the foot to make extension from.

CASE IX.—N. B. An oblique multiple fracture of lower third of femur, extending into knee-joint.

Gentlemen, an oblique fracture, with the great extensor and flexor muscles to overcome, will, no doubt, try your skill, but we have before you a case in which you will observe the following points: The position, length and contour of the extremity are good, and now, in the sixth week, we can feel reasonably sure of a satisfactory result, but it has only been obtained by constant vigilance.

The long splint, extending well up toward the axilla, with band around the body, and extension by weight to the limit of tolerance, and maintained honestly and constantly, have obtained for us this result. The most fruitful causes for bad results are careless and improper extension, slipping of plaster, contact of extending forces, cantankerous patients, etc., etc., all contributing toward imperfect extension.

CASES X., XI.—A. T. and A. M. Two Italians, both cases of comminuted fracture of both bones of the leg. They are ready for the application of the plaster-of-Paris dressing. It is a very great convenience, after the active processes—swelling, effusion, etc.—have subsided, to place the injured limb in an immovable dressing until solidification can take place, but always remember not to apply any such dressing either when there is any likelihood for the occurrence of swelling, with consequent danger of obstruction to the circulation and sloughing, or to apply the dressing upon a swollen limb. This is also bad surgery, for the swelling will subside and leave the dressing loose and allow overlapping to occur, and you will be rudely aroused from your fancied security when it is too late to remedy the error.

In conclusion, gentlemen, let me impress upon you the importance of the subject of fracture and the responsibility which unavoidably attaches itself to the attending surgeon, for often a fracture of the severest type proceeds without accident to recovery, while an apparently simple fracture will develop some grave complication. So be on watch constantly, and make a guarded prognosis.

Not long since I was called in consultation by a fellow practitioner to see a case of fracture of the leg. The patient did well for a few days after the injury, but was suddenly attacked by very alarming dyspnoea, and died. Cause of death was fat-embolism, the fluid fat of the fractured bones having been taken up by the veins and carried to the central organs, principally the lungs and kidneys.

I should desire to continue this subject, but my hour is expended.



## EIGHT MONTHS' WORK IN THE TREATMENT OF VESICAL CALCULUS, AND OTHER OBSERVATIONS.\*

BY IRA HARRIS, M.D.,  
BEYOUT, SYRIA.

I present, briefly, in tabular form, the chief features of my cases in the treatment of vesical calculus in the last eight months.

	SEX.	AGE.	DATE.	CHEM.	WEIGHT.	RESULTS.	REMARKS.
Case 1.	Boy.	3 years, 4 mo.	Jan. 3, '90	Phos. Lime.	45 grs.	Recovery, 18 days.	
" 2.	"	3 "	Feb. 5, '90	Urates.	245 "	" 45 "	
" 3.	"	3 "	" 12, '90	"	62 "	" 21 "	
" 4.	"	4 "	Mar. 3, '90	"	60 "	" 20 "	
" 5.	"	2 " 6 mo.	" 4, '90	Oxalate.	45 "	" 15 "	
" 6.	"	5 "	" 28, '90	"	95 "	" 20 "	
" 7.	"	12 "	April 9, '90	"	95 "	" 31 "	
" 8.	"	3 "	" 14, '90	"	63 "	" 17 "	
" 9.	"	2 "	" 15, '90	Phos. Lime.	5 "	"	Urethral.
" 10.	Man.	28 "	" 16, '90	Oxalate.	180 "	" 14 "	ad time.
" 11.	Boy.	6 "	May 5, '90	"	105 "	" 22 "	
" 12.	"	7 "	" 16, '90	"	102 "	" 15 "	Incom-
" 13.	Girl.	4 "	July 30, '90	Urates.	45 "	" *	[plete.
" 14.	Man	17 "	Aug. 9, '90	Phos. Lime.	525 "	" 19 "	
" 15.	Boy.	4 "	" 11, '90	Oxalate.	44 "	" 30 "	

\* Three hours after operation left for home.

All the above operations, with the exception of cases 9 and 13, were by the lateral incision. I am so well pleased with the success that has attended my efforts that I see no reason to change this method of operating for another. If I should do the suprapubic operation, it would be for the purpose of trying to shorten the time of recovery. I am happy to state that I have not lost a case since 1887. It may be because seventy per cent. are children, and they, as you know, bear the operation well. During the operation of case 12, a complication occurred that I trust may never happen to me again. The young man took the anæsthetic badly, and it took the entire attention of my first assistant to care for him. My second assistant did not put in appearance, so I put the staff in the hands of a quack doctor, thinking he would appreciate the need of doing just as I told him. I had intended to watch him, but, alas, we cannot all of us concentrate the mind on two things at the same time; so, just as I was about to enter the bladder, the man let the staff slip, and I plunged the knife between the bladder and the rectum. You can imagine my feelings—a sort of mixture of regret and anger; I fear a good deal of the latter. I saw by the hemorrhage I had done serious mischief. By pressure the hemorrhage was controlled. I tried to find my way to get the

\*From a letter to Prof. Albert Vander Veer, Albany, N. Y.



stone. After a time I succeeded in grasping it, but unfortunately the calculus broke, and only a piece came with the forceps. At this time the hemorrhage began again, and it took vigorous efforts to check it. I thought it good surgery to wait for another time. The man made a quick recovery, and I hope to complete the operation soon. I recall to mind a case during my first year in Syria. It was my first case of lithotomy. I invited one of the native doctors; I did not want too many to witness any mistakes I might make. Every thing was ready; the patient, under ether, in position; the doctor holding the staff. I made the first incision, and was about to pass the knife along the groove, when the doctor said, "I am in a faint." He dropped the staff, and off he went. It was a startling situation. I grasped the staff and completed the operation alone. I had the patient on his bed and comfortable before the doctor came to. For a long time I used a Key's staff, and had no assistant whatever, but this I found was taking too much responsibility for my nerves, so I trained an assistant, who has never failed me in this or any other operation.

Case 13 was my first stone case in a female. It is strange that there are so few cases of stone among this sex, when it is so common among the men of this region. Just a word in reference to litholapaxy in young children. I know that operators, especially in India, are advocating this method, and, judging from their published cases, are somewhat successful. I, for one, deprecate the use of the lithotrite on children before the age of ten years. Dr. Keegan, of India, says that "in a child over a year old a No. 6 English lithotrite and evacuating catheter will pass; over two years, a No. 7; over three, a No. 8." If it is so in India, it is not so in Syria. To my mind, the operation on young children is simply barbarous. The danger to the tender urethra and the bladder is far greater than the possible danger to the ejaculatory ducts, hemorrhage, wound of the rectum or pelvic cellulitis. I will be able to tell you my experience in the suprapubic operation soon. The reason my stone cases dropped off so soon after August 11th was that at this time I went on a long tour. When I returned to Tripoli last October, the government closed us in by quarantine, and it is still in force. So the cases I expect are kept from coming for treatment. When the quarantine is raised, I will have many surgical cases to treat.

The cholera started at Mardin July last, reached Aleppo in September, Hamath in October, three weeks later it appeared at Hums, and we expect it here any day. The disease has "cut a swath"

through these cities, as well as in the surrounding villages; in some of the latter the disease has taken half to two-thirds of the inhabitants. In the cities the death-rate was appalling, whole families being taken away. In one instance eleven were taken out of a family of twelve; seventeen in one funeral, all relatives. Physicians were taken as well as their patients. Mothers died with their children in their arms; fathers carrying out their dead children to the place of burial; children left without parents; parents left without children. It would not take many like epidemics to sweep this land of its people.

After six months' experimenting I have substituted boracic acid for iodoform in the dressing of wounds, and I have better results, at far less expense.

The last month I have had a large number of indolent ulcers under my care, and I have adopted the following treatment in every case: I first apply nitric acid (C. P.) with a glass tube, then irrigate the ulcer thoroughly with clean water; then I sprinkle a thin coating of boracic acid, and over this place a thick covering of gauze. For the first week it seems to be best to change the dressings every twenty-four hours, especially if the ulcer covers a large surface. One application of nitric acid is all that is necessary, and is not so painful as Mr. Lester's solution of chloride of zinc; and I find the dusting on the ulcer of the dry boracic acid much better than using the boracic lotion as recommended by the same author. It is very gratifying to see how soon a sluggish, foul-smelling, pus-secreting ulcer will take on new life and present a clean granulating surface, and rapidly cover over with new skin. I find one thing is very important, that is, watch that new skin, protect it, for it is your reward for your time and trouble. I find nothing better than the old-fashioned oxide of zinc ointment; this will protect the new skin, and it possesses some antiseptic properties. All this may be well known to you; but as I have so many of these kind of cases under my care, and they all get well, I thought I would give my treatment.

I am writing up my first 400 cases of the removal of scrofulous glands of the neck. I hope to have it ready to send you soon.

I have operated very often for the correcting of cross-eyes. The first seven months of the year I operated for the relief of eighty-five cases.

I would be very much pleased if you will send me, from time to time, all the printed articles you have for circulation. I feel the need of some one of my profession to talk to; I am alone as far as



the help of the native doctors is concerned. They do no surgery whatever; the cases come to me, or they go to Beyrout; so it takes about all my time to care for the surgery. I feel I am getting rusty in the medical line. I keep up with the times, but this is not all that is necessary. What is needed is constant bed-side practice.

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## A CASE OF APPENDICITIS; RUPTURE; PURULENT PERITONITIS.

BY CHARLES P. McCABE, M.D.,  
GREENVILLE, N. Y.

The following case presented so many peculiarities in its history and symptoms that I report it:

H. B., a robust, well-developed lad of 14 years, weighing 125 pounds, after working in the woods all day, December 10, 1890, went into the house at dark, complaining of a bad feeling in the stomach—said he felt “lank.” Ate an apple; soon sat down to supper, but did not eat much; said he had pain in the stomach; took some peppermint; after about an hour had a slight evacuation from the bowels; during the night had several movements of the bowels, diarrhœal in character; vomited undigested food, quite a quantity, that which he had eaten for dinner. Rested fairly well during the night.

On the morning of the 11th he still complained of pain in the stomach. Ate light breakfast, before which his mother gave him a cathartic, which was followed by five good evacuations of bowels, of healthy color. Did not complain much during the day, but kept his bed most of the time. Slept well during the fore part of the night, but during the latter part was restless and wanted to drink often.

At 6 o'clock A. M., December 12th, he complained of more severe pain, and Dr. J. B. Washburne, of Rensselaervill, was sent for, and saw him about noon, when he presented the following symptoms: Pulse 100; temp.  $100^{\circ}$ ; pain in right inguinal region; painful spots between spine of illeum and umbilicus; some tumefaction over bowels; lay straight in bed. Ordered hot applications and administered opiates.

December 13th, at noon, the doctor found him with a normal temperature, pulse of 92; more marked tympanites above umbilicus than yesterday; vomited some, and had quite a little hiccough; anorexia. Gave enema. The doctor saw him again in the evening. Symptoms much the same as at noon, only that the temperature had risen to  $100^{\circ}$ .

December 14th, at 11 A. M., pulse was 94, temp.  $99^{\circ}$ . I saw him at 7 P. M. with Dr. Washburne, when we found a pulse of 100, temp.  $101\frac{2}{5}^{\circ}$ , extreme tympanites, marked tenderness over entire abdomen (perhaps a little more tender over region of appendix



vermiformis than over the rest of the abdomen, breathing not particularly hurried, some vomiting and hiccoughing, pain paroxysmal, yielding readily to a small hypodermic of morphia. We gave enema of turpentine, applied turpentine stupes, and also gave small dose of the same per mouth, with a view to relieving the tympanitic condition. The enema came away slightly colored and with fæcal odor; no fæces.

December 15th, Dr. W. found him with a good pulse of 100, temp. 99°. Introduced a rectal tube and gave injection through it, which was retained and caused some pain. About two o'clock P. M. he vomited and hiccoughed more, pain increased in severity, respirations rose to 40 per minute. The doctor inserted an aspirating needle in transverse colon and drew off quite a quantity of gas. Vomiting became stercoraceous about 9 P. M., and he died at 10 P. M., after an illness of five days.

Autopsy held at 11 A. M., December 17th, thirty-six hours after death. Rigor mortis well marked; purplish discoloration of entire body; abdomen very tympanitic; muscular system wonderfully well developed. There were adhesions throughout the peritoneal cavity, which contained large quantities of pus held in sacculated tumors, and bathing the peritoneum generally. The appendix was enlarged and congested, filled with very hard fæcal matter; about one half inch from its extremity a perforation, about the size of a small pea, was found, with two or three minute openings on under surface also.

What, to me, seemed peculiar about this case was its short duration—only five days from the very first symptoms; the mildness of the symptoms, temperature never running above 101.5°; the pain readily controlled by  $\frac{1}{8}$  gr. of morphia subcutaneously; the position he assumed in bed, being invariably the dorsal, with lower extremities full length.

The questions naturally arise: Can typhlitis exist without appreciable pain? Were not the first symptoms of illness complained of just at the time that perforation of the appendix took place? How soon can pus form in the abdominal cavity after the commencement of the inflammatory process.

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## CORRESPONDENCE.

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### ABSTRACTS FROM OUR LONDON LETTER.

At the Hospital for Diseases of the Throat, Golden Square, London, Sir Morell Mackenzie, on the morning of November 30th, at 9:30 A. M., injected three patients with Koch's fluid.

CASE I.—The first patient, a boy aged 18 years, was a case of lupus of the larynx, upper lip and nose. The lupoid process first made its appearance in the larynx some three years ago; some twelve months later the nose and lips became involved. The patient had been operated upon on four or five occasions, for the removal of the lupoid tissue. One milligramme of Koch's lymph was injected. At about 3 P. M. the lip was observed to be more swollen. At 6 P. M. the nose also became much more swollen, and hard palate became dry and swollen. At 8 P. M. nose became very red and swollen, and a purulent discharge was noticed at the angles of the alæ, although no dyspnoea was present. The right ventricular band was seen to be very red and swollen; there was also considerable parotid and submaxillary glandular enlargement. At midnight, although the epiglottis was so swollen as to almost completely prevent one's getting a view of the larynx, the temperature remained at normal, but at 3 A. M., December 1st, the temperature suddenly rose to  $100^{\circ}$ , and remained at that point until 4 A. M., December 2d, when it became again normal. On the morning of December 1st all discharge had ceased, and the parts became dry and scaly; the patient's tongue presented a very peculiar appearance, the dorsum being studded with tubercles and granulations, while the margin of the tongue was covered with a white fur. By December 2d the parts had become comparatively dry and very scaly; on December 3d patient had no pain, glandular enlargement had subsided, and temperature stood at normal.

CASE II.—Man, aged 31. Consolidation at each apex and partially defined laryngeal phthisis. The arytenoid cartilage, the interarytenoid fold and the ventricular bands, especially left and right aryteno-epiglottic fold, were all swollen and congested; the epiglottis was pale and much thickened. Cough had been present for twelve months, hoarseness since July. Tubercle bacilli were found in sputum, although expectoration was not profuse. Patient's temperature since admission to the hospital had varied from  $97.5^{\circ}$  to  $98^{\circ}$ . One centigramme of Koch's lymph was injected at 9:30 A. M. At 8 P. M. his temperature had reached  $103^{\circ}$ ; pulse increased with the temperature, but not in same proportion, reaching only 100 at 8 P. M. During the afternoon he complained of headache. The larynx showed but slight change at 6 P. M., but at 8 P. M. the parts, together with the epiglottis, were very red, though not markedly swollen, but at midnight there was so much swelling of the epiglottis that it was almost impossible to get a view of the larynx, and patient still complained of considerable headache; at this hour his temperature read  $102^{\circ}$ , pulse 98, respiration 18. At 4 A. M., on December 1st, temperature had fallen to normal, and during the morning, about 9 o'clock, a view of the larynx was obtained, but the parts were still much inflamed. At 11 A. M., on December 1st, temperature had fallen to normal, and during the morning, about 9 o'clock, a view of the larynx was obtained, but the



parts were still much inflamed. At 11 A. M. the throat was not so sore, and patient thought he talked better. The physical signs at the apex of both lungs were much more marked, the sounds now being moist, showing increased action in this locality. On December 2d swelling in larynx had subsided, and chest sounds again became dry.

CASE III.—Boy, aged 16 years. Case of laryngeal lupus of three years' duration. In June last tracheotomy had been performed. Laryngeal examination showed the epiglottis to be pale and nodular; the arytenoids were also much enlarged, and only a small chink was left through which air might pass into the trachea. Patient was injected with one milligramme of Koch's lymph. Almost no reaction followed for a time, until at 9 P. M. the temperature suddenly jumped up to 102°; at 9 A. M. on December 1st it had again fallen back to 99°; the parts in larynx underwent great swelling, and had it not been for the tracheotomy tube, which was already in, the operation would have been imperative. The patient was comparatively comfortable, with the exception of a feeling of heat and some headache.

The principal points of interest in these cases are not only the marked reaction from so minute a dose, but also the establishment of the exact limits of the disease, an unmistakable line of demarkation being clearly defined; also that in these cases we did not get the "dangerous amount of swelling within the larynx" spoken of by others, except in one patient, where such swelling and enlargement had previously existed to such a degree as to make tracheotomy necessary. In none of these patients have we thus far had rigor or nausea, and in only one have we found any albumin in the urine, and in none have we found symptoms of hæmaturia, spoken of by Pasteur. Sir Morell Mackenzie summed up the whole thing by saying that "it changed a case in which the symptoms were merely suspicious into a typical example of laryngeal phthisis."

Hoping the report of these cases, all of which have been under my personal observation, may prove of some interest to my Albany friends, and hoping to send, later, further details concerning these cases, I am,

Yours truly,

A. G. R.

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#### PLEASANT RECOLLECTIONS OF MY ALMA MATER.

*To the Editor of Albany Medical Annals:*

Though it is not a long time since I graduated in medicine, I desire to express my esteem for the faculty of my medical *alma mater*, and to say why I think that students should still be sent to her. [After giving details of what might be termed "heredi-



tary diathesis," by which the writer was inclined toward metropolitan colleges, he says:] It was not until the fall of 1883 that I entered the Albany Medical College. While my preference was given to New York or Boston, *my father favored Albany*, and he paid the bills. "You will find a first-class set of professors there," said he; and he told me to buy the latest edition of Gray, studying only that for my first year's work, for on my knowledge of anatomy should depend every thing.

I came, I saw, and was conquered. The kind interest shown me will never be forgotten. Every student and graduate knows how willing the professors are with advice and encouragement, in the ante-room of the amphitheatre, or in their offices, and it is this that helps to place "Albany" in the front rank as an educator for young men in medicine.

The great metropolitan colleges, which graduate classes of from one hundred to one hundred and fifty, are absolutely prevented from giving the social and advisory intercourse which is such a boon to the hard-worked and, at times, discouraged student. No study is so exacting as that of medicine. Before I left home, my father said, "After you have been a student for a few weeks, you will, in a measure, comprehend how great your work is, how slowly you are learning, and accordingly you will be depressed." This I found true, and to repeat—the advantages to be gained by *personal intercourse* with the professors are invaluable, and must be considered, by preceptors and students, when a choice of a medical college is being made.

Still more to consider. A large corps of professors and a comparatively small number of students, result in such training of the latter in lecture, quiz and clinic, that I doubt if *any* medical college in the country graduates men better prepared for medical practice than "Albany." This is a strong position to take, and may appear egotistical in a graduate, but I believe it can be maintained.

But allow me to enumerate some of the features of the work done when I was a student. Lectures were given, by thirteen professors, on surgery, pathology, practice, hygiene, obstetrics, gynecology, diseases of children, diseases of the throat, ophthalmology, otology, dermatology, diseases of the nervous system, psychological medicine, medical jurisprudence, chemical philosophy, organic, inorganic and analytical chemistry, toxicology, materia medica,

therapeutics, anatomy, physiology, histology and pathological anatomy.

I have attended many surgical clinics in New York, but have never been at one that was any better than those given in Albany.

We had, in Albany, the honor of hearing Lawson Tait deliver his first clinical lecture, and saw him do his first two abdominal sections before a large audience. I understand that he would not have operated but for the solicitations of Dr. Vander Veer; and the startling spectacle of non-antiseptic operation, on the abdomen of a woman, in the large amphitheatre of Bellevue Hospital, by Mr. Tait, would probably not have followed, had he not "made a break," so to speak, at Albany. It was truly a great thing for us, as students, to see such a man work, and hear his grand advice.

Professor Merrill's *clinical* lectures on the eye and ear need no words of praise. I wish to thank him here for his kindness in giving free instruction in ophthalmoscopy, though he took much time in getting cases, and in the actual work of teaching.

The weekly *clinical* lectures on throat diseases, by Dr. Bigelow; those in medicine, by Prof. Ward; in dermatology, by Prof. Curtis, and diseases of the nervous system, by Prof. Hun, the latter giving, in addition to his regular lectures, a weekly clinic, at which we examined cases, and then defended our diagnosis as well as we could under a cross-examination by him, need more than passing praise. In gynecology we had a weekly clinic, by Prof. Boyd, and private work in dispensary to members of the senior class.

Dissections.—The work done by Dr. Van Slyke, demonstrator, was apt to be overlooked, as it was somewhat out of the way. Yet, with all due respect to the other professors, there was no man connected with the institution who was more loved than he. May the doctor's shadow never grow less.

To sum up, I believe it is the function of the Albany Medical College to graduate yearly a class of from forty to fifty members who are thoroughly trained for their life-work in medicine. That the college has done this in the past, there is no doubt. And the past and present augur well that it will continue to do so in the future.

With best wishes for the future prosperity of my *alma mater*, and continued good health and success for the hard-working and much-respected corps of instructors, I remain,

Yours respectfully,

J. A. C. ('86).



# THE ALBANY MEDICAL ANNALS:

JOURNAL OF THE

*Alumni Association of the Albany Medical College.*

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W. G. MACDONALD, M.D., EDITOR.

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## SALUTATORY.

With the beginning of the twelfth volume of THE ALBANY MEDICAL ANNALS there is a change in its editorial management, the committee of publication retiring. None are more conscious than we of the value of their labors. From the founding of the journal have they labored unselfishly for its success—a labor not without many sacrifices. Especially is great credit due to the retiring managing editor, Dr. Lorenzo Hale, upon whom most of the burden has fallen. Yet the retiring editorial staff are not unrewarded for their labors; they have the consciousness of having performed their duty well, and of having established THE ANNALS on a sound basis.

In view of these conditions, it is not without misgivings that we have assumed the management of this journal. We can only promise our friends that an earnest effort will be made to make this journal a creditable exponent of modern medicine. There will be no change in its policy. From its relations and geographical surroundings THE ANNALS and the Alumni Association of the Albany Medical College are inseparable in their interests, and it is but natural that it should be the organ of that Association. We hope to receive the hearty coöperation of the Alumni Association.

From time to time changes will be made in the make-up of THE ANNALS. We have secured for the coming year a series of Clinical Lectures, the first of which by Prof. William Hailes, Jr., appears this month. For the next number a report of a most excellent clinical lecture, by Prof. A. Vander Veer, has been promised.



We are obliged to offer an apology for the late appearance of our first number, owing to several factors over which we had no control. However, in the future, we can promise our patrons absolute promptness.

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#### MEDICAL SOCIETY OF THE STATE OF NEW YORK.

The acknowledgment of the receipt of the provisional programme and invitation of the eighty-fifth annual meeting of the Medical Society of the State of New York affords us great satisfaction. A careful study of the programme shows that the papers and discussions are likely to be of the highest order, not only in scientific merit, but also in being very practical. Without digressing too much, we may say that this society has always been eminently a practitioners' society. While many of the papers are in the particular lines of specialties, yet their character is such that they are calculated to be of great benefit to the general practitioner. For example, the discussion of Appendicitis—its pathology, the indications for early laparotomy, its technique, the resection of the appendix vermiformis during the quiescent stage of chronic relapsing appendicitis, and the relation of the physician and the surgeon in the care of cases of appendicitis, can hardly fail to be of great interest, and, from the character of the gentlemen who have promised to participate, is sure to be of corresponding utility. The discussion on Pulmonary Tuberculosis is most timely, and cannot be of less interest. A discussion on Pelvic Inflammation in Women, its pathology and its palliative, conservative and radical treatment, will be most instructive, as the time has now come when its pathology is less obscure, and from accumulated experience more accurate deductions may be formed regarding the precise indications for the employment of the different forms of treatment.

Space will not allow us to mention farther the excellence of many of the individual papers, of which there is a greater number than for many years. The President, Dr. W. W. Potter, and the business committee, of which Dr. Herman Bendell, of this city, is chairman, are to be congratulated that they have succeeded so admirably in arranging such an excellent programme.

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THE NEW YORK PHYSICIANS' MUTUAL AID ASSOCIATION makes a good showing in its twenty-second annual report, just issued. There has been a net increase in membership of nearly 30 per cent., which now amounts to 899. Albany county has twenty-

four members, most of them new ones during the year, other additions coming from Buffalo, Rochester, Troy, Utica and Syracuse. It is now making a payment of \$825 at the death of a member, and by a continuance in its growth \$1,000 can be paid, at which point the death payment is limited by the by-laws. Only members of the regular profession in this state, in good health and actual practice, can join, and it would be well for it and for the profession if large and regular accessions were made to it. During 1890, \$8,800 was paid out to members. Dr. W. J. Nellis and Dr. Curtis are examiners for it here, from whom or from any of its other members information can be obtained.

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## REVIEWS AND BOOK NOTICES.

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**DISEASES OF THE RECTUM AND ANUS.** By Charles B. Kelsey, A.B., M.D. New York: William Wood & Company.

This book ought to afford pleasure and pride to every surgeon and practitioner of medicine in this country, it being so fully abreast and up in the subjects which it professes to treat. There is no occasion for American surgeons to send abroad for special works in this branch of surgery. The author, in this edition, has given the entire volume a thorough revision, and has brought it up to the very latest in all that pertains to the treatment of the subject. He is to be congratulated upon having done his work so well. There is little, if any thing, in the entire work that one can criticise adversely. His views on the treatment of hemorrhoids will certainly receive the endorsement of the most conservative members of the profession, and the same can be said of all the subjects treated. The publishers have done their work with their usual skill and credit. A.V.

**TEXT-BOOK OF HYGIENE:** a Comprehensive Treatise on the Principles and Practice of Preventive Medicine. By George H. Rohé, M.D., Professor of Obstetrics and Hygiene in the College of Physicians and Surgeons, etc., Baltimore, Second edition, revised and largely re-written. 8 mo, 421 pp. Philadelphia and London: F. A. Davis, Publisher.

The author is, in the preface, certainly very modest. "The author cannot flatter himself that much in the volume is new." "He hopes nothing is untrue." The book gives a good impression. The style in which it is written is excellent; the arrangement is



good. The first four chapters are devoted to air, water, food and soil. Each subject is discussed very thoroughly. The impurities of water receive their full share of attention, and the author has brought together a vast amount of material containing much valuable information. A more complete discussion of the biological examination of water would greatly add to the value of the book, but the author very justly remarks that few health officers are competent to give an expert opinion upon the nature of organisms found in water. It may be added that the biological analysis of water requires an amount of technical knowledge equal at least to that of the chemist who undertakes the chemical analysis of water. Of the many excellent chapters, none are more interesting than those on sanitary building and hospital construction. In them many valuable hints may be found. The chapter on antiseptics and disinfection fails to recognize the value of sterilization by steam in a way that it should. It seems now well established that steam under pressure is the most reliable agent for the destruction of micro-organisms. Quarantine receives the requisite attention. We have found nothing untrue in the book. It can be of great value as a practical guide to health officers, and is none the less useful for the general practitioner.

ANNUAL REPORT OF THE SUPERVISING SURGEON-GENERAL of the Marine Hospital Medical Service of the United States for the year 1890. By John B. Hamilton, M.D., Surgeon-General Marine Hospital Service. Document No. 1373, Treasury Department.

The report of the Marine Hospital Service is of much value, and deserves far more attention than it receives. In the year 1890, nearly fifty-one thousand patients have received relief at two hundred different stations, comprising an amount of clinical material exceeding that of the entire in-door medical service of the hospitals of the state of New York, outside of New York and Brooklyn. All of this material is carefully studied; cases of interest are separately reported, and all the results are carefully tabulated. From many points of view the report contains much valuable information.

The Surgeon-General calls attention to emigration, and the almost absolute lack of restriction regarding health qualifications upon the part of the emigrant. There can be no doubt but that the United States has already received too many people through emigration who were already affected by chronic diseases which sooner or later placed them in alms houses and charity hospitals; nor will



these conditions be improved until a more rigorous system of examination of emigrants is instituted.

This year's report contains also a series of plans for hospital construction, with descriptions of many European hospitals, generously illustrated by photographs and drawings. Among the most valuable are plans illustrating the new general hospital in Hamburg, which, to our mind, is the most complete hospital in all its appointments upon the continent. All of these plans are placed upon file in the Surgeon-General's office in Washington, for consultation by municipal authorities who are building hospitals.

The only government support given for the study of disease is through its medical service, chiefly that of the Marine Hospital. They now have three equipped laboratories for biological and experimental research in this arm of the service. It has always been a source of deep regret that the United States has not done more for medical science, by establishing well-equipped stations with generous appropriations for their maintenance.

**AUSCULTATION AND PERCUSSION.** By Frederick C. Shattuck, Professor of Chemical Medicine in Harvard University; Visiting Physician, Massachusetts General Hospital. The Physician's Leisure Library. Detroit, Michigan: George S. Davis, Publisher.

This little book of one hundred and twenty pages contains really nothing new, but places together, in a clear manner, many facts of physical diagnosis. The illustrations are good. The chapters upon the heart in health and disease are excellent. It cannot be said, however, that the brief section devoted to the physical exploration of the abdomen is at all complete; in fact, conciseness has there sacrificed many elementary facts. However, it adds the Physician's Leisure Library a worthy number.

**OINTMENTS AND OLEATES.** By J. V. Shoemaker, A.M., M.D., Philadelphia. Second Edition. 298 pages, 12 mo, cloth, \$1.50. Philadelphia and London: F. A. Davis, Publisher. 1890.

Since the edition of 1885, the oleates of zinc and mercury have been made official in the British Pharmacopœia. In addition to our official list of ointments, and those commonly used in this country, the book gives British, French, German and Austrian official lists, and what was accessible from Italy and Spain.

Improved modes of preparation have increased the interest in oleates and ointments.

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CLINICAL LECTURE.\*

OÖPHORO-SALPINGECTOMY—A CASE, WITH OPERATION.

BY ALBERT VANDER VEER, M.D.,

ALBANY, N. Y.

*Professor of Didactic, Abdominal and Clinical Surgery, Albany Medical College.*

Gentlemen—I know not how we may be able to spend the hour more profitably than by presenting to you a case the history and symptoms of which I shall presently give, and to show the technique of abdominal operations. Without digressing too far from the subject under immediate consideration, I might say that it has always been our policy to perform a certain number of operations before the class each year, so that you may form a more definite notion of the technique of the different types in abdominal surgery than you would be able to obtain either by didactic teaching or much reading. There are yet many operators who most strenuously object to opening the abdominal cavity in amphitheatres filled with spectators. Our experience has shown us that, with proper precautions, it is as safe as in our smaller private operating-rooms. The amphitheatre has this morning received a generous scrubbing, and the carbolized spray has been employed. The floor is yet moist. I would not create the impression, however, that the spray is capable of destroying the germs in the atmosphere, but that they are less likely to be disseminated when the air is moist and the floor is somewhat damp.

The history of the case which we present is as follows:

Miss L. McC., aged 22, native of the United States, comes to us with a good family history. Although somewhat hysterical now, her previous history shows that she has suffered from no diseases except those associated with the generative organs. First menstruation at thirteen, excessively painful and always attended with

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\*Delivered at the Albany Hospital, October 7, 1890.



vomiting. It has been regular in duration and amount, but always compelled her to remain in bed during the entire period. She has suffered from pelvic pain, constant in character, and from leucorrhœa. She has been subjected to all of the usual forms of local and general treatment without benefit. She entered the Albany Hospital early in the spring, with excessive nausea and vomiting, and was again discharged much improved. From local conditions then found, no operation was advised. She has returned again to us with a relapse of her old complaint, and is, moreover, becoming hysterical. Physical examination reveals the uterus in the normal position, but rather fixed. The right ovary is somewhat enlarged and prolapsed. The tube is thickened. The left ovary and tube seem normal in size and position. Both ovaries and tubes are excessively tender to the touch and seem fixed in the pelvis. Before proceeding to an abdominal section, and the removal of the uterine appendages, we must first give our reasons for it. All of the usual forms of local treatment have been given a fair trial and have failed in giving relief. From the evident gross pathological changes and the presence of adhesions, the use of electricity is not indicated. To continue with local treatment or to employ the "rest plan" means but helping her a little onward toward chronic invalidism. I have no doubt but that the uterine appendages have often been removed upon insufficient ground in recent years, and that patients have not been improved by the operation. However, the indications in this case are so clear that we shall immediately proceed to the operation. The patient and friends have been fully advised as to the physiological condition that will result if I find it necessary to remove both ovaries and tubes.

The patient has been thoroughly bathed and the bowels moved by gentle cathartics. This morning a bath in bichloride was given. The sponges used are prepared after Lawson Tait's method. The silk-worm gut used for sutures is placed in a five-per-cent. solution of carbolic acid, and the instruments placed in simple hot water, as are the sponges. The instruments, sponges, needles, etc., to be used are numbered, towels dipped in hot bichloride are placed around abdomen, and the latter covered by dry sterilized towels. An incision is made in the median line through quite an amount of adipose tissue, down to the linea alba, about two and one-half inches long, and before opening into peritoneal cavity all bleeding points are thoroughly controlled. The sub-peritoneal fat is now raised by artery forceps on either side, and an incision made between. Now,



by passing two fingers into incision and cutting between them, there is no danger of injuring the intestines which come up underneath the opening and roll up into incision. A sponge wrung from hot water is placed over the intestines to prevent their rolling out, and the two fingers are introduced to bring the ovary and appendages into the wound. The right ovary is found deeply situated in the pelvis and firmly held by adhesions. Upon loosening the adhesions and bringing it into the incision, the ovary is found to be very much enlarged and cystic. The tube is also diseased and very adherent. It is removed and the pedicle secured by the Staffordshire knot. Sponges are placed on either side, and tube and ovary removed by curved scissors, the pedicle being allowed to drop back in place. The left ovary is now found, not so deep in pelvic cavity, but quite adherent. Adhesions are now loosened and ovary and tube brought into incision. It is found to be much smaller, and it looks healthy. Tube is very short, but healthy looking. We are justified in leaving this ovary and tube, on account of the patient's age, after loosening all adhesions. The omentum is now brought into place. After counting sponges, instruments, needles, etc., the wound is closed by silk-worm-gut sutures. The sutures are carried down through the skin, fascia muscle and peritoneum, including all in one suture, and out in the same manner on the other side, thus bringing all the parts into perfect apposition. The interrupted form of suture is used, and as each one is passed into wound and out on other side, it is held in place by an artery clamp until all are ready to be tied. The wound is closed by three deep and three superficial sutures. No drainage tube is used, as there is no hemorrhage. The ends of the sutures are left quite long. Iodoform is dusted over wound and iodoform gauze placed over this, and on either side of sutures, which are now bent down between the layers of gauze. Gamgee pads are now placed in such a way as to act as supports to the wound, and held in place by strips of adhesive plaster. Usually I prefer a many-tailed flannel bandage for this purpose. A wide flannel bandage is now placed over all to support the abdominal walls in case of vomiting, which is likely to occur. She will be placed in a special room with a special nurse, and if there is any rise in temperature, ice-bags will be used. Catheter will not be used. She is to be allowed to pass urine voluntarily; her bowels are to be moved at the end of thirty-six hours, either naturally, or by the use of an enema, or small doses of calomel, one-sixth or one-fourth grain every hour. If this fails, magnesia sulphate or a Seidlitz powder will be given.

The ovary, upon examination, is found cystic and the tube affected by a catarrhal inflammation.

November 1st, the patient again presented, wound healed by primary union, and not at all sensitive. Sutures were removed on the sixth day. No stitch-hole abscess nor an unpleasant symptom. Temperature never rose above 100° F. during after-treatment.

This patient came to the hospital December 20th, much improved in her general health.

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## VESICULAR ERUPTION IN SCARLATINA.\*

BY F. C. CURTIS, M.D.,

ALBANY, N. Y.

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The subject which I have to present to the society is one which is in itself of unusual occurrence, for it will be a rare event for the physician to meet with a vesicular eruption of scarlatina. As a rule, I have an objection to novelties as the subject for society reports, for there is more value in a discussion of the matters of every-day practice than in listening to the report of unique cases; it is more instructive and practical. My case, however, is one that is exceptional in important particulars from the general category of rare cases. It involves a common and important disease which comes constantly into the hands of the general practitioner, and, as one of the grave diseases, generally causes a large degree of anxiety on his part as to the individual affected and as to his surroundings. It especially interests the sanitary officer in respect to diagnosis, and he is concerned to know if it is liable to be attended with any deviations from the ordinary course of symptoms. It also interests the dermatologist, to whose notice the abnormal cases of the eruptive fevers are liable to come. My case is a specimen of what may possibly come in the experience of any practitioner of medicine, and, consequently, I am justified in the report of what, very likely, has not been met with by many members of this society.

I will proceed at once to a report of the case, and this, with a few remarks upon its pathological production and its literature, will constitute all that is necessary for me to lay before the society. This can all be done in a short space of time.

The patient was a stout, well-developed child, four years of age, of German parentage, the youngest of a family of four children,

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\*Read before the Medical Society of the County of Albany at the January meeting.



under the care of Dr. Hailes. The history was as follows: November 29th, after having been perfectly well all day, he was taken suddenly, toward evening, with vomiting and fever, diarrhœa soon following. The next morning a scarlatinal eruption developed, which became well-marked, and presented no unusual characteristics. Dr. Hailes saw him December 1st and 2d, and found nothing out of the ordinary on either of these days. The symptoms and eruption were those that would be found in an ordinary case of scarlatina of moderate severity. On December 3d Dr. Hailes did not see him till evening, and, at his request, I saw him the same evening. I found that a vesicular eruption had made its appearance during the day, the fourth day of the fever. The appearances then presented were as follows: The child was having scarlatina of moderate intensity. His pulse was rapid; the tongue had the red, strawberry appearance, and the throat was red and congested. The face was clear of eruption, and on the chin and neck the skin was already peeling. The body and limbs were covered with a deep, scarlatinous eruption, fading, except in pin-point spots, on pressure, the color returning slowly. It had a smooth, boiled-lobster appearance, the punctate points of engorged papilla not being marked. The abdomen was thickly covered with petechial, pin-point to small pin-head-sized, acuminate, closely-set vesicles. These were slightly elevated, and gave a rough feel to the touch. The contents, even of the small vesicles, were slightly turbid. The inside of the thighs was covered with vesicles of the same character, but much more scattered. There were a few scattered vesicles on the chest, still fewer on the neck, and none on the back, and, as I have said, none on the face. On the arms there were a few, here and there, but they were more numerous about the elbows. On the wrists and back of the hands, however, there were vesicles differing much from those on other parts in regard to their size. They were large, about the size of a split pea; many of them were somewhat irregular in outline, as if formed by the confluence into one of several vesicles. They were flat, superficial, and their contents were all turbid, as if semi-purulent. They involved about one-third of the tissue of the region affected. At first glance they presented much the appearance of small-pox on the fourth day of eruption, but lacking the solid, raised edge of the pustule, and were less acuminate. This eruption had apparently developed without occurrence of fever.

December 4th, the vesicles on the abdomen and thighs had not developed beyond the pin-head size, and, on the chest and neck,



were disappearing by absorption. They had extended to the knees, about which the large, flat vesicles, found the day before about the wrists, had made their appearance, and were thickly set. Those on the wrists were unchanged and had extended up the ulnar side of the fore-arm. They appeared to cause no inconvenience to the child. The body was still quite red.

December 5th, the cheeks, chin and neck were peeling actively in large flakes. On the abdomen the vesicles had almost entirely disappeared, leaving only here and there a solitary one, and at their sites were small scales which were becoming detached. On the wrists and fore-arm there were still vesicles, but about half had gone by absorption. None had ruptured nor been torn by scratching. On the knees vesiculation was still active, and the ankles were in the same condition as the wrists were two days before, covered thickly with split-pea-sized turbid vesicles. There were very few vesicles upon the legs between joints. The redness of the entire body was fading and the tongue was less red; there was but moderate febrile action, and the child seemed to be feeling quite well.

December 9th, four days later, I saw him for the last time. He was then up and dressed. The vesicular eruption had entirely disappeared, and, at the sites of the large and profuse points of their appearance—the wrists, knees and ankles—the cuticle was peeling actively in large, thin flakes, and there was no other mark to indicate the point or existence of the vesicular eruption. On the covered portion of the body the exfoliation was more furfuraceous. The tongue was still red and showed elevation of the papillæ, and the fauces were still congested.

The child subsequently made a perfect recovery without incident, and none of the other children were taken, although constantly exposed.

Pathologically, the eruption of scarlatina is of the nature of a dermatitis. In common with all the exanthemata, it is classed, so far as the skin-lesion is concerned, with the inflammatory dermatoses. It is placed by itself, ordinarily, as an erythematous exanthemata, measles being classified as papular, and chicken-pox vesicular. But, while the efflorescence is due to general engorgement of the cutaneous vessels, there is a larger degree of engorgement of the capillary loops which pass into the papillæ. This produces the numerous pin-head-sized reddish points that are ordinarily observed at the commencement of the rupture, and to this cause is due the appearance of small red points that cover the blanched spot that is produced on

deep pressure upon the efflorescence. Sometimes the papillæ are so much engorged as to impart a roughened sensation to the touch.

The production of vesicles may be accounted for in a pursuance of this pathological process. The papillary capillaries may be so much engorged that relief is found, just as in other conditions of dermatitis, by the escape of serum into the overlying cellular layer and the formation of a resulting vesicle. Along with the serum some of the formed elements also escape, as in the case reported, and so produce the turbid appearance that has been described. It appears to me that this better explains the pathology of this production than that they are produced as an incident of fever, seen in typhoid and other fevers, as an over-action of the sweat-glands, and a consequent follicular inflammation, producing, with obstruction to the escape of the secretion, the so-called miliaria—the sudamina of fever, or the prickly heat of hot weather. This method of the production of the vesicle is exactly in keeping with that of so-called scarlatina hemorrhagica, where, instead of the minute, dotted efflorescence, almost or entirely disappearing on pressure, reddish-brown spots appear, which are not obliterated by pressure, red blood-globules having escaped into the tissues over the engorged papillæ. The occurrence of the vesicles at the surface where the dermatitis is most intense, and the turbid character of the vesicle contents, would suffice to show that the vesicles were not follicular in origin, although, without doubt, miliaria may occur in the course of scarlatina, as in any other febrile condition.

The literature of this anomaly in scarlatina is scanty, and many authors of exhaustive treatises on the disease make no reference to it. J. Lewis Smith, in a long contribution to Pepper's System of Medicine, makes, I think, no reference to it; and Busey, in Keating's Cyclopedia, makes but casual reference to the occurrence of sudamina. Robinson, whose work is one of the best on the pathology of skin diseases, speaks of it. To quote his entire reference to it: "In cases where the dermatitis is severe, small, whitish vesicles may make their appearance, either in patches, or over almost the entire body. Occasionally vesicles may appear larger, as in herpes or varicella, as the result of sweating during defervescence, or as complications and sequelæ." Hebra shortly describes a scarlatina miliaria: "Characterized by the formation of white vesicles, seated on a red base, and filled with transparent fluid." He, doubtless, refers to the miliaria eruption only. Meigs and Pepper state that the ordinary erythema is most intense on the abdomen and *articulations*,



and go on to say that "the surface of the eruption is smooth, unless, as not unfrequently happens, it is accompanied by a development of miliary vesicles, or crops of pimples or pustules." I have not found anywhere a description of a case that presented the appearances such as those of this case, nor any attempt at other than the barest reference to the possibility of vesicles of some sort occurring, without minute description of the eruption or the method of its development.

As a final word, I may call attention to the fact that the case would seem to show that the occurrence of this irregularity in the course of scarlatina is not necessarily associated with intensity of symptoms or severity of the case.

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### SOME OBSERVATIONS ON KOCH'S REMEDY.

BY HENRY T. BROOKS, M.D.,  
BERLIN, GERMANY.

Since the appearance, of Koch's paper, to the present time, the Koch lymph has been extensively used in a great number of hospitals and private clinics, not only upon tuberculous cases, but also upon patients suffering from various diseases, and, as might have been expected, with varying results both in regard to its value as a therapeutic agent and as a means of diagnosis. It is difficult to say in just what light the remedy is viewed by the profession at large, owing to the unwillingness on the part of many to express any definite opinion. This feeling is well expressed in the words of Prof. Gerhardt, of the Charity Hospital, who has had large experience with the remedy, when he says: "Ein jeder lernt etwas, ich selbst lerne noch. bei dieser Sache, man muss mit seinen Schliesen nicht voreilig sein." (Everobdody learns something, I myself still learn from this matter; one must not be too hasty in his conclusions.)

Earlier reports before medical societies and articles in journals were of the most enthusiastic nature, and generally concluded with some glowing tribute to the discoverer Koch. For example, Von Bergmann, in his introduction to his address before the Surgical Society of Berlin, on November 16th, says: "Since the time of Hippocrates and Galen, it has been permitted to no one to ascertain the seat and cause and also the cure of a disease. In Robert Koch appears to have been presented to our nation the God-graced physician and investigator." Quite similar were remarks made by



Lindner, B. Fraenkel, Levy and many others. Whether it is due to the failure of the patients now under treatment to realize the description of the progress toward a cure given by Koch, or not, this enthusiastic spirit is, nevertheless, much more rarely noticeable, and has given way to more sober views and reports less tinged with prejudice.

In the present condition of affairs in Berlin, the status of the Koch lymph depends very much upon the source of information. If inquiry is made at the Hygienic Institute, Koch's stronghold, it will be represented as the only means of salvation for consumptives; if, on the other hand, at the Pathological Institute, where Virchow is the moulder of opinion; then the substance is a very dangerous one, of doubtful therapeutic worth, and hastens, and sometimes even causes death by the further extension of the tuberculous process. Consequently, the only means through which we can gain any unbiased information are the consideration of the reports of clinical cases which appear in the medical journals, and observation of patients as they are presented, from time to time, in the clinics.

The opportunities for clinical observation are now not so great as during the last weeks of the past year, when Berlin was filled with doctors from all parts of the world, and a number of clinics were open to those who chose to visit them. Since the beginning of the new year many of these clinics have been closed to visitors, and the number of patients under treatment correspondingly decreased. In Von Bergmann's clinic, where formerly nearly a hundred cases were under treatment, the list has been reduced to about fifteen or twenty cases, mostly of bone and joint troubles. These cases are, however, excluded from the public. The only place where cases can be seen in any number is in the City Hospital, in Moabit, where the patients are directly under the supervision of Prof. Koch. Here can be seen between fifty and sixty cases, of all forms of tuberculosis, undergoing treatment.

Of the various forms of tuberculosis that have been experimented upon, lupus shows by far the most satisfactory results, although some unfavorable cases have been reported. Von Bergmann, in speaking of this form of the disease, agrees with Koch when he says: "Whoever will occupy himself with this remedy should begin his experience with lupus." Most of the cures that have been reported, and it must be confessed the number is small, have been of this nature. The reactions are very prompt and results sometimes very rapidly obtained. Koehler reports several cures, and

holds that superficial lupus can be healed through the injections alone. If, however, the lupus lies, as is generally the case, in the deeper layers of the skin or in the subcutaneous tissue, then the conditions are otherwise. He further says we have lying under the skin, after the use of the Koch lymph, a necrotic tissue containing living tubercle bacilli. To the efforts of the body to throw off this tissue, which has become a foreign body, the skin offers a strong opposition. Only, then, when the skin itself in its whole thickness has become necrotic, can the elimination occur. Such a total gangrene of the skin in its whole thickness has, to my knowledge, not yet occurred. The dead tuberculous tissue remains within the body, and we must lay the question before ourselves, what becomes of it?

Theoretically the following conditions are to be thought of:

1st. The necrotic tissue becomes absorbed.

(a) With the living bacilli. That would be associated with danger to the organism.

(b) Without the bacilli. Then these remain lying *in loco*, and, as they are not dead, they are able, after a greater or less space of time—months can go by—to produce a relapse.

2d. The necrotic tissue is not absorbed, but remains in position and becomes encapsulated along with the living bacilli. So long as this capsule remains intact no danger can arise, but if, through accident, *e. g.*, a blow, pressure, etc., the protecting envelope is ruptured, then the danger of new infection arises. Only with the removal or death of the bacilli can we speak of cure.

Von Esmarch, of Kiel, and Rumpf, of Marburg, both report an elaborate series of cases, with cures. Arning, of Hamburg, Lenhartz, of Leipzig, B. Fraenkel, of Berlin, and many others claim to have obtained similar results. The number of cases reported as being much benefited is very large. On the other hand, Dr. Israel, surgeon to the Jewish Hospital, Berlin, reports that he used the lymph on an undoubted case of skin tuberculosis (lupus?) in which no reaction occurred. A dispatch from Bern, Switzerland, dated January 21st, says: "A young woman affected with lupus of the elbow joint has died here after repeated injections. The autopsy showed neither lung tuberculosis nor supposed heart disease, but great congestion of the lungs and brain." In spite of the unfavorable cases presented, the weight of evidence is in favor of a healing action in this variety of tuberculosis.



Laryngeal tuberculous seems to be less favorably influenced than the preceding form, although, as in lupus, cures are also claimed to have been secured. Hertel reports eighteen cases, of which eight were improved, two not influenced, and eight made worse through the use of the lymph. Fourteen cases had bacilli in the sputum, three others all the clinical signs of the disease, the remaining one being an experimental case. In all those cases which grew worse, and in one of the two which did not react, bacilli were present in the expectorations. B. Fraenkel reports fifteen cases, in all of which he secured excellent results, but adds: "I am not in a position to present a case that has been healed."

The treatment of these cases is sometimes not unattended with danger. According to Virchow\* the swelling caused by the injection of the lymph occasionally assumes a very dangerous character, through the narrowing of the larynx which it produces. In addition to this, more violent forms appear, which take on a phlegmonous character, reminding one of œdema glottidis erysipelatodes and phlegmon retro-pharyngea. In Von Bergmann's clinic bad results have been obtained, if the communication I obtain from an *interne* can be relied upon, for within the last two weeks, of three patients undergoing treatment, two have died, and the third is, at this writing, considered *in articulo mortis*. Rosenbach, of Breslau, speaking of his cases, says the question of the reaction of the larynx in laryngeal tuberculosis appears to him to be especially deserving of consideration, as, with the exception of one case, he has not as yet observed any reaction, in spite of the fact that he has under treatment cases of the most various kind, from the slightest degree to the most extensive destruction.†

Thorst, of Hamburg, reports six cases in which he obtained no alarming symptoms. His observations showed that under the influence of the remedy the fresh infiltrations become recognizable, are thrust off, and the whole process is rapidly advanced to cicatrization and healing.

Gland, bone and joint tuberculosis appears to occupy about the same position as the preceding form. Improvement and cures have been obtained in earlier cases, but advanced cases are not influenced very perceptibly for the better. Shede, of Hamburg, injected a child affected with double-sided coxitis, in the hope that, as the case was too far advanced for operation, the remedy might have a favorable

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\* Berliner Klin. Woch., No. 2, '91, p. 50.

† Robert Koch's Heilmittel gegen die Tuberculose, zweites Heft, p. 17.



influence on the process. After two injections of 0.001 and 0.002 it very rapidly failed and sank into a very sad condition. He advises in these severe cases that the remedy should be withheld, as he believes it hastens death. Koehler, referring to cures of joint troubles, says: "A tuberculous knee-joint is so far healed that the swelling has very much receded, there is no fever and no pain, and the general condition greatly improved." Enough. We speak of a *kind* of healing. But the knee remains in a flexed position. This induces us to straighten it by force, and the result is a relapse of the tuberculous inflammation. The relapse he explains on the ground that the bacilli are still in the joint, and that the force used to straighten the limb liberates them from their encapsulated position.

Perhaps in lung tuberculosis, which has been the most extensively experimented upon, and in which, probably, with the exception of lupus, the best results have been obtained, the most interest is centered. Koch's statement that beginning phthisis can certainly be healed through his remedy seems to have received some support from clinical observations, and, in part, this may also hold good in not too far advanced cases. But the statement which he makes that "patients in the incipient stages of phthisis are collectively in the course of four to six weeks freed from all symptoms of disease, so that one may look upon them as healed," has not, so far as the observations made by various experimenters go, been universally confirmed, though there are not lacking confirmatory results. Most of the observers declare that, in a majority of the cases which have come under their care, decided improvement has taken place, both in the general and local conditions. Rumpf reports\* forty-six cases which he divided into four groups:—

- I. Disease of one apex, 8 cases.
- II. Disease of one whole lobe, 15 cases.
- III. Disease of both upper lobes, 16 cases.
- IV. Disease of several lobes, 7 cases.

One case in the first group he describes as healed, four greatly, two less greatly, and one slightly improved. In the second group four were in a high degree improved, six perceptibly improved, one doubtful, one unfavorable, and three in which extension to other lobe occurred. In the third group no pronounced improvement in any, in eight simple improvement, one died, and seven indifferent. In the fourth group one patient withdrew because the treatment was too unpleasant, one slightly improved, and five in-

\*Deut. Med. Woch., No. 3, '91, p. 112.

different. He concludes that the remedy is an extraordinarily surprising one, and has scarcely an analogue in the whole extent of therapeutics. A danger which, for a certain class of patients, lies in the treatment is in a too low resistance power of the body against the toxic action of the remedy; a further danger is in the reactive inflammation within the diseased lung; and this danger increases with the degree of the pathological process. In addition to this statement of Rumpf's, Kromeyer, of Halle, says that every tubercle becomes the centre of an inflammation in the lungs. Through this inflammation a number of air-containing alveoli in the periphery of the tubercle must become functionless. There can occur as a result of this, in widely disseminated tuberculous processes, an abrupt loss of available breathing surface, followed by dyspnoea and œdema. Virchow adds that the bacilli are made mobile and distribute themselves throughout the body; also that portions of tissue in the lung, loosened through the action of the lymph, may be displaced and call forth in other parts a new process, or produce a form of aspiration pneumonia, in this case of a caseous nature. If patients have not the strength to cough out the softened material, which otherwise will be inspired, then great caution should be exercised in the use of the remedy.

Prof. A. Fraenkel reports twenty-seven cases, in most of which he secured improvement. In a number of cases the amount of expectoration and number of bacilli were reduced, and in three cases he observed an increase in the body weight ranging from two and a half to five pounds. In some of his patients all symptoms disappeared. B. Fraenkel reports seven cases, among which was one case he considered nearly cured; the physical signs had disappeared, but an occasional bacillus was found in his sputum. The other six cases were much improved. Czerny, of Heidelberg, says that definite healings of consumption have not been obtained, and that it is more than probable that severe, far-advanced cases of phthisis are more injured than benefited by the remedy.

The diagnostic value of the remedy is hard to estimate. Von Bergmann strongly affirms the value of it, while Prof. Leo, of Bomo, quotes twenty cases, and declares it is uncertain. Levy says the remedy can call forth general symptoms in non-tuberculous cases, but in tuberculous cases the local action is of great importance in differential diagnosis. Esmarch says his thirty cases, without exception, reacted promptly. Rumpf declares that it exercises a specific action in all tubercular processes of the skin as well as of internal



organs. Lindner claims that one cannot assume that no tuberculous process exists in the body if no reaction follows.

Kaposi, of Vienna, strongly opposes the acceptance of the lymph as a means of diagnosis, on the ground that the same symptoms were to be obtained in leprosy and syphilitic cases, and sometimes in a far stronger degree than in tuberculosis. Prof. Schnitzler is of the same opinion, and remarks further that he had seen undoubted cases of tuberculosis which did not react even under very strong doses. On the other hand, Dr. Babes says the observations of Kaposi are unreliable; while reactions both general and local do occur in leprosy, they are so different from those seen in tuberculosis that no difficulty can be experienced in differentiating them. He based his remarks upon seven cases all of whom showed general reaction and, with the exception of one case, local reaction also. Arning, of Hamburg, claims the reactions in leprosy are general, not local.

Koch, after saying that his remedy is a glycerine extract of a pure culture of the tubercle bacillus, speaks of the composition and action of the same as follows: \* "It appears to me to be a derivative of albuminoid bodies and to stand close to them, but does not belong to the so-called group of toxalbumins. The tubercle bacilli produce by their growth in the living tissue, just as in artificial cultures, certain substances which exert a damaging influence upon the living elements, the cells, in their neighborhood. Among these is a substance which, in certain concentration, kills and so alters living protoplasm that it is transformed into the condition described by Weigert as coagulation necrosis. In the tissue which has become necrotic the bacilli find such unfavorable conditions of nourishment that they are not able to grow further, and under certain conditions even finally perish. In this way I explain to myself the remarkable phenomenon that one finds numerous bacilli in organs freshly affected with tuberculosis, while this is rare in the condition of coagulation necrosis. On this account, individual bacilli are not able to effect necrosis of a great area, for, as soon as the necrosis has reached a certain stage, the growth of the bacillus, and therewith the production of the necrotic substance, decreases, and there appears a kind of reciprocal compensation which causes the vegetation of individual bacilli to be a confined one, *e. g.*, as in lupus, scrofulous glands, etc." Speaking further of its action, he says: "I have had opportunity within the last month and a half to collect information

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\*Dent. Med. Work, No. 3, '91. p. 101.

upon the healing and diagnostic actions on about 150 patients in the Moabit Hospital with different forms of tuberculosis, and can only say that all that I have recently seen harmonizes with my earlier observation, and that I have nothing to alter in what I earlier reported."

The *Apothecaries' Newspaper* says the lymph will soon be placed on sale in drug stores, but this is doubtful, owing to the unstable nature of the substance; further, the manufacture of the lymph will not be monopolized by the government, but that private laboratories given up to its manufacture will be under government inspection.

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## THE STUDY OF RHINOLOGY AND LARYNGOLOGY IN LONDON.

BY ARTHUR G. ROOT, M.D.,

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Thinking that possibly my professional brethren, particularly that portion interested in diseases of the throat and nose, might have an interest to know something of laryngology as it is seen and taught in London, I take this opportunity of presenting a brief résumé of my experience since I commenced my special studies.

I feel it my duty at the outset to state that, so far as the medical gentlemen themselves are concerned, I have found them universally courteous and hospitable. Never in my life have I been treated more handsomely. I find them, socially, men of culture and refinement; professionally, I am sure they are both scientific and conscientious.

The hospital with which I have most closely identified myself is the Hospital for Diseases of the Throat, in Golden Square, at the head of which is a man thoroughly familiar to almost every one of the medical profession the world over—Sir Morrell McKenzie. As this institution is, in many respects, similar to others in the city, and doubtless among the most prominent, permit me to use it as an example. Upon the staff of this institution appear many names familiar to us all—McKenzie, T. Mark Howell, Granville MacDonald, R. Norris Wolverten, Mr. Hutchinson, and others.

The hospital itself, as its name implies, is an institution devoted exclusively to the treatment of throat troubles, together with such concomitant diseases as come properly under this head, namely,



many nose, neck and ear troubles. No patient applying for admission who is not a proper subject for a hospital of this nature is permitted to become a patient. Connected with this hospital is an out-door department, most admirably arranged, men and women being separated, and one of the best drug departments it has been my pleasure to see. Connected with the out-door department is an examination department supplied with every necessary requisite for a thorough and careful study of the cases. Private consulting-rooms open off from the general room for examination, one for women and another for men. Here one is able to see and carefully study every possible condition of throat and nose diseases, and, guided by competent instructors, one may also treat and operate; all the necessary instruments and appliances are at hand, and the utmost care is shown in their use. In the out-door department from 1,000 to 1,200 patients are treated weekly, which is quite a sufficient number to give variety. I have also been many time surprised at the class of people presenting themselves as out-patients, many to all appearances being in good circumstances.

In passing through the wards for the first time, I was most forcibly struck with the cleanliness and care evident upon every hand; here every thing possible is done for the patient's comfort, and, indeed, it is a most luxurious home for many of them. The superintendent, Miss M. B. Mackay, who is at the head of the staff of nurses, is a most efficient person; nothing is neglected, and perfect order is maintained. The operating-room is situated quite apart from the wards, and is most admirably arranged. The system by which this hospital is heated is like all other English buildings, by open fire-places, and while, as an American, I object to heating some buildings by this method, I am convinced it has its advantages in a hospital, as can easily be seen, I think, in point of ventilation. The drainage has also been a matter of careful attention, and every closet is supplied with carefully adjusted traps. So much for the hospital itself. As to admission and care of patients it is much the same as that pursued in other hospitals. The patient is given a bath and put in hospital clothes, and is made generously comfortable and gradually prepared for treatment, whatever it may be. Our in-patients are made up of those suffering every form of disease met with in the practice of this branch of medicine. At present, Sir Morrell McKenzie has had many cases under treatment by injections of Kock's lymph, and it is needless to say that they have been cases of much interest, both to us and to many other physicians.

During the proper season, there is a course of lectures, given to post-graduates, embracing the field of laryngology and rhinology, and, besides this course of lectures, there are numerous special lectures, embracing many particular details.

Laryngology and rhinology are becoming, year by year, of more vital importance. Conditions hitherto but partially understood, or conclusions previously hastily drawn, are gradually feeling the influence of more careful study. Much discomfort and misery formerly experienced by patients, due to the fact that the real cause had been overlooked and improperly treated, is, fortunately, being done away with; the parts particularly considered by the laryngologist and rhinologist have been recognized as far too intricate and their manipulation far too delicate to permit of treatment by any other than a specialist.

The larynx has been styled the "gateway of life," and, indeed, the phrase is an appropriate one. Hidden from sight, and so delicate in proportion, are the parts with which the specialist has to deal, that it requires an accurate and minute knowledge of them and a large experience to arrive at the point of proficiency. The specialist is here often called upon to make most delicate distinction, and a failure upon his part to fully recognize and appreciate the exact condition present may lead to a result both disastrous to the patient and humiliating to himself.

To Sir Morrell McKenzie and his efforts do we owe much, for it is undoubtedly due in no small measure to his efforts that we now look upon laryngology as a well-established branch of specialism. If one will carefully note the improvement in instruments and technique made by him, he cannot but admire his perseverance and ability.

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## CORRESPONDENCE.

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*Editor Albany Medical Annals:*

I send you herewith an addition to the list, which you have previously published, of misspelling of the word "pterygium." The list is of more value than a mere curiosity, for it shows a deplorable want of education in the ranks of physicians. It seems incredible that such curious combinations of letters could be seriously used by members of one of the learned professions," but each of



these words is a literal transcript from a formal certificate sent to one of the governmental departments at Washington, and has the sanction of a "board" of three graduates in medicine.

That you may more readily imagine the dense ignorance that concocts such travesties on our medical terminology, I copy a letter lately received from a physician practicing in the capital of one of our western states. The letter begins with startling abruptness, but it is just as our colleague wrote it :

Toren down in the bowels that is the Abdominal mussels much relaxed so much so that the bowls fall in the basket of the hips, and of corse this alows the Midriff or diaphragm to fall from under the hart and lungs that is the diaphragm fails to support the heart and lungs this of corse alowes the weight of the lungs & hart to more or less hange on the bronchial tubes or pipes and the blood vessels, and by so doing naturally he cant have good inspiration and expiration allso the hart falls to have full support and by this weakness it naturally gives him palpitation of the heart allso alowe the lungs to congest east as I find the left lung at present. Now as to stooping fawward naturally makes him gidy or blind as such move alows a rush of blood to the head. This he claimed was caused by a sunstroke in the Army. of corse a sunstroke could and ofen cause a relaxation of this kind.

A partial arrangement of the "petergugiums" in alphabetical order has been made for the convenience of rejecting duplicates.

Pertrigum.	Pterigerum.	Ptirygium.	Ptyurgrum.
Perygioin.	Pterygeron.	Ptirigiem.	Ptrygium.
Perygum.	Pteriygium.	Ptirigion.	Ptrevgium.
Peterygium.	Pteryigun.	Phorygaum.	Ptrevgium.
Perigion.	Pterygium.	Phrygium.	Ptrygun.
Petterygium.	Pterigium.	Phytergium.	Ptrigium.
Pteorygium.	Pterygum.	Phrygeum.	Ptryrgium.
Pteerygiam.	Pterygeriun.	Ptorygion.	Ptrigeian.
Pteregium.	Pterigem.	Ptorygiunn.	Ptriguim.
Pteerygium.	Pterygerun.	Ptorygium.	Ptrygion.
Ptegeryum.	Pteryain.	Ptorigiune.	Ptrygium.
Ptererygium.	Pterygum.	Ptytergium.	Ptrygum.
Pterigium.	Pteregrum.	Ptyrigion.	Ptreguim.
Pterrigum.	Ptereyregium.	Ptyrigium.	Ptregium.
Pterregium.	Pterrigium.	Ptyregium.	Ptrygeum.
Pterygum.	Pterygon.	Ptyrrigim.	Ptreigum.
Pterydgium.	Pterginum.	Ptyregum.	Ptregyum.
Pteregeon.	Ptergim.	Ptyerigium.	Ptreguum.
Pterygrum.	Pterrigyum.	Ptyregegim.	Ptrerygen.
Pteryrgium.	Pterygin.	Ptyrxgium.	Ptriguim.
Pterygeon.	Pteregeum.	Ptyrgurm.	Pturigim.
Ptergium.	Pterygium.	Ptyriggerum.	Pitirguin.
Pterigyum.	Pteryaim.	Ptyerigim.	Purygium.
Pterrygium.	Pterygean.	Ptyigium.	Puryguim.
Pteregyum.	Pteryium.	Ptyrigin.	Pyterigium.
Pterrigium.	Pteregryum.	Ptyerguin.	Pytrigium.
Pteryguim.	Pterregyum.	Ptyregun.	Styrrigium.
Pterggia.	Pteriguim.	Ptyrguim.	Styrgium.
Pterygerum.	Pterrygum.	Ptyrejioun.	Terrygium.
Ptergyum.	Pteurigium.	Ptyrigirum.	Terrygarum.
Pterygun.	Pteygium.	Ptyrgum.	Terygium.
Pterigeon.	Pteygeum.	Ptyrrigium.	Terygeian.
Ptergyon.	Pteyrigon.	Ptyeriguim.	Terrigeum.
Pterhygium.	Pteygum.	Ptyrigum.	Terigium.
Pterygeruum.	Ptirigium.	Ptyergium.	Terygerum.

Teryguim.	Terrigum.	Tyrigum.	Pterrygii.
Terrigerum.	Terigerum.		Pteregyi.
Terrygium.	Teregum.	PLURAL FORMS.	Phrygia.
Teregium,	Torregium.		Ptorigia.
Teregyum.	Tterygim.	Pteregumi.	Ptergia.
Tergeum.	Tyrigium.	Pterygima.	Pterigeri.
Terregium.	Turgeum.	Ptegruggie.	Pteryguina.
Terregum.	Tyriginn.	Ptrygii.	Ptereguiums.

T. F.

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## MEDICAL PROGRESS.

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TYPHOID AND PSEUDO-TYPHOID BACILLI IN RIVER WATER.—Dr. Cassedebat (*Annales de l'Institut Pasteur*, No. 10, October, 1890), following up Rietsch's work on the river waters of Marseilles, gives the result of an examination of seventy specimens of water from which 250 cultivations were made, with the view of determining whether the Eberth bacillus is to be found in the waters of the Durance which supply a part of the city where typhoid fever is endemic and often epidemic. In no case was he successful in finding the Eberth bacillus, but he was able to separate three bacilli—"pseudo-typhoid bacilli"—which resemble the typhoid bacilli in many respects; like it, they can all withstand the action of pretty strong carbolic acid. They all present clear spaces or deeply-stained masses, which might readily be taken for spores; but they and the true typhoid bacillus containing these bodies are all killed at a temperature of 45° C. They stain equally badly by Gram's method. They have a lateral and oscillatory motion as well as the forward motion. The plate cultivations are so much alike that unless all four can be seen together it is difficult to distinguish one from the other. On potatoes, in broth, and in milk, they are alike, except that they develop with different degrees of rapidity and vary somewhat as regards the alkalinity and acidity of their products at the end of about thirty days, and also as to the degree and time of appearance of the turbidity produced in broth. There are differences, however, to be observed in these organisms grown in broth or milk to which small quantities of the various aniline staining reagents have been added. The ordinary cultivation methods are sufficient to distinguish these four forms from ten others (a list of which is given in the paper) for which the typhoid bacillus has at times been mistaken. None of the pseudo-forms are quite so toxic to white mice as the true form, and one of them is quite innocuous. Although Cassedebat was not able to find the true form in water taken from the water-supply which was most open to contamination, he found that this was not because bacilli could not live in water, as in distilled water, to which a cultivation had been purposely added, he could easily distinguish its presence at the end of forty-four days, and when added along with half a dozen other forms he could find them at the end of seventeen days. He comes to the conclusion,



therefore, that the true typhoid bacillus does not occur in water so frequently as is sometimes represented, and that one or other of the forms of pseudo-typhoid bacilli has in certain cases been mistaken for it.

KOCH'S TREATMENT IN LUPUS.—Mr. Jonathan Hutchinson (*Archives of Surgery*, January, 1891) gives an account of two cases of lupus under his own care, in which Koch's fluid was used by Dr. Heron. In both cases the disease presented some peculiarities. One of the patients was a little boy, in whom the lupus, which was of the vulgaris form, was too extensive for any other method of cure. Very weak injections were given at first, but their strength was afterwards increased, and they were repeated eight times, with good reaction on all occasions except the last two. No great benefit has accrued, the only perceptible effect on the lupus patches having been that some of them suppurated more freely, while others looked rather more red and shed scales more abundantly than they did before. Many of them have shown no change whatever. The other patient was a lady, aged 55, with lupus erythematosus on the face, scalp, forehead, and upper part of the chest. Five injections in all were given, on the later occasions in full strength. She reacted in the ordinary way, but no very obvious effect was produced on the patches. Mr. Hutchinson, however, points out that as the presence of a bacillus in lupus erythematosus has not been proved, there was no reason to expect that the Koch treatment would cure it. It should be added that, in a postscript to the report, Mr. Hutchinson says that since it was written, the patches of erythema on the cheeks of the second patient have, to a large extent, disappeared. The improvement occurred suddenly, ten days after the injections had been given up as useless. The patches on the cheeks still remain. Mr. Hutchinson adds: "It is too early to venture any opinion as to whether the improvement will be permanent, or whether it is in any way connected with the treatment."—*The British Medical Journal*.

TREATMENT OF FOREIGN BODIES IN THE LARYNX AND ŒSOPHAGUS.—In a lecture on foreign bodies in the larynx and in the trachea in children (*Rev. Mens, des Mal. de l'Enfance*, January, 1891), M. Jules Simon expresses the opinion that if the diagnosis is certain, and if the surgeon cannot remain in attendance, the proper treatment is to perform tracheotomy. Further, he holds that the operation ought not to be deferred if the foreign body is of irregular shape (fish bones, nails) or liable to swell (peas, beans, etc.). The trachea should be freely opened, and at a rather lower level than usual; before introducing the tube the child should be placed in various positions while the wound is held open, in the hope that the foreign body may be immediately expelled. Even when this occurs he recommends that the tube should be worn for several days at least, as it checks hemorrhage and tends to prevent subcutaneous

emphysema. The diagnostic symptoms of foreign body in larynx he considers to be—sudden onset, dyspnoea without alteration of the voice, and the absence of angina. He gives the above advice as to tracheotomy, after reporting and discussing a case in which a boy, aged 6, spontaneously expelled, during the act of vomiting, a portion of the antenna of a lobster which had entered the larynx during an attack of coughing three or four weeks earlier. Such a termination is, however, he holds so rare that it ought not to affect the judgment. In the same number of this periodical is a short note by Dr. B. Polikier, of Warsaw, on a simple manoeuvre by which he succeeded in two cases in obtaining the immediate expulsion of a coin—in each case about the size of a halfpenny—which had become impacted in the œsophagus, and had given rise to dyspnoea. In both cases it was easy to feel the coin externally by pressing the finger gently into the groove between the sterno-mastoid muscle and the trachea. Gentle rubbing and kneading over the coin, the fingers making gentle pressure upwards and a little backwards, was followed in a few seconds by an act of vomiting, during which the coin was expelled. In the first case the uvula was tickled at the same time, but the second case showed that this was unnecessary.

A CASE OF RESECTION OF THE SPLEEN.—Bardenheuer (*Centralblatt für Chirurgie*, No. 6, 1891) reports a case of resection of the spleen, an operation which stands alone in the literature of the surgery of that organ. The patient was a female, 47 years old, and gave a good history. She had suffered from no previous illness except a fever when seven years old, and from an injury to the left side. In the beginning of the year 1890, she began to suffer from dysmenorrhœa, weakness, vomiting and pelvic pain. Upon examination, in June, a cystic tumor, the size of a child's head, was found in the pelvis, which seemed fixed by adhesions, and attached by a broad band to the uterus. The uterus was in a position of exaggerated antifixion, and displaced somewhat to the right. A diagnosis of ovarian cyst was made, and an operation was undertaken for its removal. After breaking up the adhesions in the pelvis, the operator found that the cyst had its origin in the spleen. Three methods of treatment presented themselves to Bardenheuer—first, suturing the walls of the cyst to the abdominal wound; second, excision of the spleen; and, third, a resection of that organ. The first seemed undesirable, for by it the spleen and stomach would continue in this abnormal position, and the pain and gastric disturbances would not be relieved. Since recent experiments had shown the feasibility of removing portions of abdominal glands in the lower animals, it was concluded to excise that portion of the spleen which was involved by the walls of the cyst. Accordingly, while an assistant held the spleen with his hands so as to control the hemorrhage, the operator removed the necessary portion of the spleen with a scalpel. The hemorrhage was not great, except from the hilus, where a single large vessel was ligated. The cut surfaces of



the spleen were touched with the actual cautery. When the spleen was released, it assumed its normal position.

Seven weeks after the operation the patient left the hospital cured. An examination of the cyst-walls and contents showed that it was not parasitic in its nature. Reporter regarded it as a blood-cyst dependent upon the injury.

THE DIAGNOSIS OF HEMATURIA AND OF TUMORS OF THE BLADDER.—Guyon (*Gaz. méd. de Paris*, No. 23, 1890), in a clinical lecture, considered that hematuria was a symptom of the utmost importance in tumors of the bladder, and that by careful observations it was possible to exclude all other diseases with which blood may appear in the urine. The principal feature of hematuria with vesical tumors is the sudden onset without premonitory symptoms, and very often its equally sudden disappearance. There are intervals between the attacks, more or less prolonged. It may be a week, a month, a year between attacks, yet these intervals gradually become shorter. This is the usual course of hematuria with tumors of the bladder. Out of a large series of cases observed by Guyon, there were only three in which hematuria did not occur. Occasionally when hemorrhage once commences it never ceases, but in these cases it is an evidence of ulceration. In tumors situated about the neck of the bladder, hemorrhage is likely to occur with the last portion of the urine voided.

The examination of the bladder with metal instruments in these cases is, for the most part, without result; but, on the contrary, when soft instruments are employed, in connection with irrigation, much can be learned. After the bladder has been irrigated with great care, the soft catheter is left lying in the bladder and observed. First, the last drops of the irrigating fluid return clear; then in a short time the urine begins to flow by drops, which progressively are deeper and deeper blood-stained, until at last almost clear blood flows from the catheter. When these observations can be clearly made, they are pathognomonic of vesical tumor. The cystoscope may be a valuable aid in locating the site of the tumor, its size and the character of its base, and in cases where the tumor is not attended with hematuria. The author thinks, however, that characteristic hematuria is, even in cases where cystoscopic examinations give negative results, of great diagnostic value.

GUNSHOT WOUND OF THE ABDOMEN.—The *Medical News* of December 27th contains a report from Dr. A. B. Miles, of New Orleans, of a case which not only adds one more to the growing list of successful enterorrhaphies for gunshot wounds, but also presents a remarkable feature in the unusual number of peritoneal and intestinal lesions. The patient, a young man aged 24, had accidentally shot himself in the median line of the abdomen, at a point midway between the umbilicus and the symphysis pubis. On abdominal section, which was performed within half an hour from the time of

the injury, three wounds were found in the mesentery, and no fewer than sixteen perforations of the coats of the small intestine. Each of these intestinal wounds was closed by Lembert's sutures. The operation, which lasted for a little longer than two hours, was followed by a speedy and complete recovery.

A SUB-DIAPHRAGMATIC ABSCESS.—(*Centralblatt für Chir.*, No. 41, 1890). Dr. Zehnder reported a case of sub-diaphragmatic abscess in the clinic of Prof. Küster, of Berlin. The illness began by an attack of biliary colic, which was followed by localized peritonitis, probably produced by ulceration of the gall-bladder. The patient had subsequently a sudden attack of dyspnœa with the expectoration of nearly a quart of gall-stained pus. At the time patient was received in the hospital, the right pleural cavity was filled with pus. An operation was undertaken for excision of the ribs and drainage. At the operation, a communication with lung the size of a silver dollar was found. Two days later the patient died from heart failure. At the post-mortem, it was found that the abscess had its origin below the diaphragm and communicated with the gall-bladder, which contained a large gall-stone.

WHAT MEDICAL EXAMINING BOARDS LEARN.—The following answers were given to the questions of a State Board of Medical Examiners :

Symptoms of œdema of the glottis are that the patient feels husky and has sore throat. I would amputate it, if necessary. I would do the operation within three or four months, if it was a bad case.

The dose of morphia sulph. for a child of five years, hypodermically, would be one-fourth grain, and if that doesn't give relief, I would give one-half grain

The dose of antipyrin for a child five years old is fifteen grains every three hours.

The kidney is a muscular formation, in shape oblong, color quite dark, weight about one pound to one and a half, but may vary considerable.

The sympathetic system is composed of all the filament of nerves that start from the spinal cord, and are distributed to all parts of the system, especially the brain. The cervical portion ramifies the encephalon in general. The dorsal portion ramifies the anus.

Extra-uterine pregnancy may be a fungoid growth or tumor fibroid in its character or any extra growth in the uterous would be called extra-uterine pregnancy.

A breech presentation may be known by the sense of touch, the buttox being different in formation from the cranium. The anus is different from the mouth, absence of tongue and nose. Get your finger in the inguinal region soon as possible and assist your patient by firm but gentler tention

The normal temperature of the human body is from 112 degrees to 140 degrees.

The temperature of the system is variable. In health the cuticle stands at 70 degrees.

The average respirations are 70 per minute.

The best way to facilitate the expulsion of the placenta is to let the woman get up and walk about the room, allowing five minutes to elapse after delivery before requiring her to get up and walk.

Phymosis is the result of old age.

The difference between galvanism and electricity is that one of them is the substance itself and the other its use.

Phosphorus burns and makes nitrogen gas.

The technical name of rhubarb is columbo —*From Annual Report on Laws Regulating Medical Practice, by R. J. Dunglison, A.M., M.D.*

The practice of the healing art should be limited to those persons that be *profound, sad and discreet*, grandly learned and deeply studied in physick.—*Statute of Henry VII. of England.*



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TYPHOID FEVER IN ALBANY.

The question whether typhoid fever is epidemic in Albany or not has attracted much attention, both upon the part of the profession and the laity. The discussion has become not only general, but there has developed a great diversity of opinions regarding the character of the fever, some most excellent practitioners claiming that the fever does not correspond in its clinical features to typhoid fever, but rather to a type of continued fever, upon which is grafted a malarial element; while others, equally as good observers, maintain that the fever is typhoid, but that it does not exhibit the typical features of the disease in all cases. It will be remembered that the same differences of opinion existed regarding the nature of the West Albany epidemic of a year ago. In that case the differences were quite clearly settled in a discussion before the Albany County Medical Society, where the preponderance of evidence showed that it was typhoid fever. Dr. Greene, of West Albany, who saw much of that epidemic, gave an exceedingly interesting and lucid account, which demonstrated its typhoid character. There can be no reasonable doubt that there are an unusual number of cases of fever in Albany this winter. None will dispute that there is a proportion of cases that are clearly typhoid; that there also is a proportion of cases which are purely ephemeral in character, but associated with gastro-intestinal disturbances, the patients recovering in from ten days to two weeks. So far all are agreed, but there is yet another type of the disease, which includes, we believe, a large proportion of the cases, that does not correspond accurately to either typhoid or ephemeral fever. Its temperature curve, gen-

eral physiognomy and duration do not correspond to typhoid fever. We have yet to learn why the symptoms and the course of typhoid fever should be so clearly defined regarding its temperature curve, duration, etc., in order to make a diagnosis. None of the gentlemen would care to deny, we think, that typhoid fever, as well as pneumonia, may exhibit, in different years and in different epidemics, very varied symptoms. Why are we to insist that the symptoms this year of typhoid fever shall accurately correspond to a given type, like block in the pavement?

Text-book and bedside medicine are very often at variance, but post-mortem experience can settle all these differences. We understand that already a number of post-mortem examinations have been made in these obscure cases, and that the characteristic lesions of typhoid have been found. In cases where patients recover, a considerable amount of valuable information is to be obtained from a careful biological study of the stools. The bacillus of typhoid fever is sufficiently well established to make its discovery in fæces pathognomonic. It exhibits sufficient peculiarities in its cultivation upon suitable media to demonstrate beyond a doubt that it is the specific organism found associated with typhoid fever. It might be added *that it does not liquefy culture media, especially bouillon-gelatine*; so that the opinions formed by a correspondent of a Sunday paper can have no force, at least so far as the bacillus of typhoid is concerned, when he asserts that our water-supply is purer than four years ago, because gelatine is not so quickly liquefied now as then.

The daily papers are apparently becoming great factors in moulding opinion in matters medical. Our good friends of the daily press have doubtless done a great service to humanity in giving them accurate descriptions of the best methods of bone-grafting, and of curing tuberculosis, and more recently of the causes of this epidemic of fever in Albany. None can deny that they have discussed the subjects very glibly. In fact, their volubility can only be exceeded by their misinformation.

Naturally, in the study of the etiology of typhoid fever, attention is directed to the water-supply, and in this case it has been the source of much agitation. The Albany Institute, a scientific society, the discussions of which are usually of great merit, has met and solemnly decided, after much discussion, that the water-supply of Albany is essentially bad and the water is not to be drunk without strictest aseptic precautions. There is no denying that our water-supply is very questionable, and very few can be made to believe that



all of Troy's sewage passes by on the other side of the river, so as not to affect our in-take. Yet, in the discussion before the Albany Institute, we are unable to see, from the proceedings published, with the resolutions, that any evidence was produced to show that the water contained a single pathogenic organism. Not one of the gentlemen present, whatever bad names he called the water, was able to bring the slightest evidence to substantiate his beliefs. We are sure that no court of law would convict a man on such flimsy testimony.

We are very sorry not to be able to add something in the way of elucidating this interesting and to us anxious problem. It has and does seem to us, however, that a little more investigation and a little less assertion might be beneficial, remembering that there are other sources of disease than water, and that the questions of milk-supply, sewerage and atmospheric conditions may, upon investigation, be found quite as interesting topics for discussion as the question of water-supply. It would appear a very fitting thing for the Albany County Medical Society, by a properly constituted committee, to investigate this important question.

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#### COLLECTIVE INVESTIGATION AS TO THE CAUSES OF EPIDEMIC INTESTINAL DISEASE IN ALBANY AND VICINITY.

Dr. Joseph D. Craig has undertaken the very commendable task of collecting and digesting the clinical and sanitary observations of the profession in Albany and vicinity relative to the diseases which are epidemic with us this winter. As Dr. Craig has pointed out, it is exceedingly desirable to obtain as much information as possible concerning the etiology and precise character of these conditions. It is sincerely to be hoped that the profession will interest themselves in this investigation and furnish Dr. Craig with all possible data. We may be sure of an impartial review of the evidence by him. Any physician who has not, through oversight, received a copy of the subjoined letter and blank, would confer a favor by writing the investigator.

ALBANY N. Y., *February 16, 1891.*

DEAR DOCTOR—There have been prevalent in Albany and vicinity, since the first of January last, many cases of severe irritative diarrhoea and catarrhal enteritis, with or without gastric symptoms. The same intestinal disturbance has been called in some places winter cholera. This form of disease has become so frequent as to amount almost to an epidemic, and, as a consequence, there has arisen great public and professional interest in the subject. At the same time, typhoid fever and an anomalous variety of fever, accompanied by irregular chills, neuralgia, and gastric and intestinal symptoms, have become epidemic in this section of the state.

It has become a matter of importance, both to the public and to the profession, to ascertain, if possible, the causes which have produced such diseases.

I have, therefore, volunteered to make a collective investigation of the subject and invite an expression of opinion from the profession in this section of the state. Full information is particularly desired from places using potable water derived from other sources than the Hudson and Mohawk rivers. The opinions expressed will be properly tabulated and presented at an early date in a paper to the profession of Albany. A copy will be furnished you if you desire.

Your co-operation is desired and the favor of an early reply to the questions in the enclosed blank earnestly requested.

Very truly yours,

JOSEPH D. CRAIG.

COLLECTIVE INVESTIGATION AS TO THE CAUSES OF EPIDEMIC INTESTINAL DISEASE IN ALBANY AND VICINITY.

- A—1.—Do diarrhoeal diseases prevail in your practice to an unusual extent?  
 2.—What is the source of the drinking water in these cases? River, well or other water?  
 3.—What unfavorable atmospheric conditions have these diseases followed?  
 4.—Were any of the cases contracted in other places? If so, where?  
 5.—What kind of drainage system have the houses in which these cases have occurred, and into what does it empty?  
 6.—What is your opinion as to the causes of such diseases, particularly in reference to—  
 (a) Drinking water?  
 (b) Atmospheric influences?  
 (c) Other causes?
- B—1.—Have you had, to an unusual extent, in your practice—  
 (a) Typhoid fever?  
 (b) Anomalous or other fevers?  
 2.—If so, what cause do you assign?  
 (a) Drinking water?  
 (b) Importation from other places?  
 (c) Direct contagion?  
 (d) Local sources of infection, as privies, cess-pools, sewers, etc.?  
 3.—Is there any known relation in your cases, or do you suspect any relation to exist between the drinking water and drainage system?
- C—Can you remember a previous epidemic of like intestinal disease, where like atmospheric conditions prevailed? If so, will you give particulars?
- D—Will you kindly report any case where the relation of cause to the disease has been POSITIVELY ascertained?
- E—Remarks:  
 From \_\_\_\_\_

ANOTHER MEDICO-LEGAL CASE.

The physician's lot "is not a happy one, is not a happy one." Our good friend, Dr. R., is now a defendant in the Superior Court in New Haven. The facts of the case, as presented by the prosecution, are that Mr. D.'s son was bitten by a savage bull-dog and sustained a severe lacerated wound of the face. A messenger was sent post-haste for Dr. R. Dr. R. did not exhibit a proper enthusiasm to serve the plaintiff, but mildly insinuated that if Mr. D. first paid a



little balance due him it possibly might influence his conduct. Furthermore, that he had, just then, a very urgent case several miles in an opposite direction from the home of Mr. D., which he must immediately attend. The messenger returned home, and the plaintiff waited twenty-four hours, when Dr. K. was called, who dressed the wounds, which finally healed, leaving a bad scar. Now the plaintiff claims damages because of neglect upon the part of Dr. R., thereby incurring, upon the part of the child, unnecessary pain, and producing an unsightly scar. The case of the prosecution is a particularly strong one. How any physician can decline to ride seven miles to treat a family who never paid him a cent for previous services is beyond our comprehension. It is a well-known fact that banks are in the habit of loaning money to such people, even without a note. Grocers are anxious to deliver provisions to them, and clothiers are ever ready to hand out their best garments, simply for the asking. We repeat, it is far, very far beyond our comprehension, how any physician can be so inhuman as to decline to restore, as far as possible, the comeliness of this son of a "chosen people," this pride of a mother's heart. He should be made to pay heavy damages, even if he has to mortgage his horse to the banker, and pay cash to the grocer and clothier.

And yet there is, perhaps, a defence for Dr. R. How many physicians, having a large country ride, are worried and worn out by serving this class of people, who never pay fees if they can avoid it, whatever be their circumstances; whose demands upon the physician's attention are only exceeded by their ingratitude; people who take advantage of public opinion and the physician's humanity to continue their impositions. The same dishonesty, greed—call it what you will—in this same worse than worthless class of people, leads to a great majority of the actions brought for malpractice in our courts. None are more willing than the medical profession, we are sure, to minister to the wants of the deserving poor.

It is a disgrace to any judicial system that actions may be brought against medical men for the most trivial causes, like this one, by unscrupulous clients, aided and abetted by equally unscrupulous lawyers, who have visions of a division of the spoils. When a law is enacted, compelling the plaintiff to give bail for costs, with a reasonable extra allowance for counsel fees, before a malpractice suit is brought; when physicians defend vigorously their rights in court, and do not enter into compromises to avoid publicity, then, and not until then, will there be less trivial, if not unfortunate, litigation.

## REVIEWS AND BOOK NOTICES.

EXPERIMENTAL SURGERY. By Nicholas Senn, M.D., Ph.D.,  
Attending Surgeon in Milwaukee Hospital; Professor of the  
Principles of Surgery and Surgical Pathology in Rush Medical  
College. Chicago: W. T. Keene. 1890.

There is no standard of comparison by means of which to measure this volume, as there is no other so complete. It is not claimed that it is altogether new, but rather a collection of papers by the author relating to his individual experience in experimental surgery. The amount of experimental research by Dr. Senn has really been enormous. We know of no one who has done so much as he in the special department of experimental research in surgery. In the main his conclusions have been valuable, yet we hardly feel like carrying into effect his conclusions regarding fracture of the neck of the femur—first, because we are unable, from his experiments, to agree with him in the conclusion that fixation of the fragments by bone-pegs, etc., is followed by bony union; second, that operative interference is too hazardous, even in these aseptic and antiseptic times.

The chapters on ligature and embolism contain much valuable information. This is particularly true of his study of air-embolism. We know of no book or paper anywhere which contains so much of fact regarding this condition as this volume. Unfortunately the table of cases is not complete.

The later researches of the author, the surgery of the pancreas and of the intestinal canal, are familiar to all surgeons, and undoubtedly represent the best of the author's work. The rectal insufflation of hydrogen for diagnostic purposes has, by the experimentation of Dr. Senn, been placed upon a more substantial footing before the profession. While the value of lateral anastomosis by means of bone plates, in its widest application, may be questionable, yet there are conditions where their application is of great utility.

The book, as a whole, is very readable, well printed and neatly bound. We are sure that it will find many readers who will be amply repaid for the time spent in its perusal, by a rich addition to their fund of knowledge.



EINFÜHRUNG IN DAS STUDIUM DER BAKTERIOLOGIE von Dr. med. Carl Günther in Berlin. Verlag von Georg Thieme, Leipzig.

Dr. Günther has written at once an interesting and a practical manual of bacteriology. It cannot be said that the chapters on general morphology and classification are particularly complete, but as the book is only an introduction to the study of micro-organisms, it probably answers the purpose. The chapters descriptive of the technique of bacteriology are the most valuable in the book. The accurate description of the several steps in the preparation of the different tissues for study is of inestimable value to the beginner, and more especially to those beginners who have not had the advantages of a practical course in bacteriology by competent instructors. What has already been said regarding the technique of staining is equally true of the chapters upon the artificial cultivation of organisms.

The chief members of the group of non-pathogenic organisms are described and their characteristics given. A more minute account of the pathogenic organism is desirable; although Dr. Günther has been very clear, yet, at times, it seems to us unnecessarily brief.

However, the tables of photograms are the most valuable portion of the book. The author is a most skillful photographer. We shall not be saying too much when we say that, for the student, this collection of photograms is as valuable as that of the larger atlas of Fränkel.

OPERATION BLANK. Prepared by W. W. Keen, M.D., Professor of the Principles of Surgery in the Jefferson Medical College, Philadelphia. Lea Bros., Philadelphia.

Those who have occasion to do surgery in private houses will appreciate the following blank:

.....18

For the operation on M.....  
 residing at..... on.....  
 ..... at..... o'clock, please see that such of the following  
 preparations as are checked are all made beforehand.

(Surgeon's name),.....

#### FOR NURSE.

##### I. THE PATIENT.

1. The day before the operation shave the parts; scrub well over a wide area with soap and water; then with ether; then with a sublimate solution. 1:1000; then apply a sublimate gauze dressing and bandage and let it remain in place until the operation.

2. See that the bowels are opened by a gentle purge given the previous evening, and if need be by a morning enema.
3. Wash out the vagina and rectum.
4. For breakfast, a cup of clear soup (no bread or other solid food), and no food later.
5. Have the patient in bed (in an adjoining room, if possible) a half-hour before the operation, with night-dress, chemise or undershirt, drawers, and stockings only.

## II. THE ROOM AND BED.

1. Take up the carpet, remove curtains, draperies and all furniture except a bureau, washstand, table, and two cane-seat or wooden chairs; clean the room; clean the walls and ceiling with a brush or broom covered with a towel; then wash the floor, wood-work of walls, and furniture with carbolic solution, 1:40; have clean carpet strips ready to lay on the floor after the operation.
2. A firm four-legged table, with three old blankets and a pillow in front of a window (north light preferred).
3. Remove the window-curtains, and screen the lower sash by paper or towels.
4. Four small tables for instruments, dressings, etc.
5. Protect the floor.
6. Two blankets on the bed instead of sheets.
7. Protect the bed by rubber cloth and a draw sheet.
8. Ten hot-water bottles well corked.
9. Hoops to support the bed-clothes.
10. Waste water bucket.
11. Five china basins and one tin basin.
12. Three sheets and fifteen towels, wrung out of sublimate solution, 1:1000, the night before the operation, and rough dried.
13. Two dozen large safety pins.
14. Tumbler, tablespoon and teaspoon.
15. Nail-brush.
16. Two pitchers of cooled boiled water.
17. Plenty of hot water.
18. A sheet of stout wrapping-paper for the Allis' inhaler.
19. 1½ yards of white flannel for a binder.
20. Fresh clear soup and milk.
21. Olive oil, two ounces.
22. A pint of vinegar (to cleanse the hands after the operation).

## III. DRESSINGS, ETC.

1. One can of Am Ende's sublimate gauze.
2. One roll of Hartmann's wood-wool dressings.
3. A piece of "rubber dam" x inches.
4. Four bandages, inches wide.
5. Two ounces of borated cotton.
6. ¼ pound of "Globe antiseptic wool."
7. Bed-pan and urinal.
8. Catheter.
9. Thermometer and temperature chart.
10. Hypodermatic syringe.
11. A bent glass feeding-tube.

## IV. MEDICINES, ETC.

1. Carbolic acid (No. 1), fl ʒ vs. in a half-gallon bottle of distilled water.
  2. Carbolic acid (No. 1.), fl ʒ vj.
  3. Two ½ pound cans of Squibb's ether.
  4. Chloroform, fl ʒ iv.
  5. Liq. morph. sulph., fl ʒ j.
  6. Four suppositories, 1 grain opium each.
  7. Spirits ammon. aromat., fl ʒ j.
  8. Alcohol, Oj.
  9. Ten-grain powders of sulfonal, No. iv.
  10. Brandy, fl ʒ iv.
  11. Lime-water, fl ʒ iv.
  12. Sublimate tablets for 1:1000 solution, No. xx.
- After checking items, send to drug-store.



## PERSONAL.

—It affords us great pleasure to be enabled to present to our readers, this month, a paper on Koch's remedy, by Dr. Henry T. Brooks (A. M. C., '87), who is now pursuing post-graduate studies in Berlin. Dr. Brooks has devoted much time to the study of pathology, having previously been a student in the laboratory of Johns Hopkins University. He now has a position in the Pathological Institute at Berlin, of which Prof. Virchow is director. Regarding Dr. Brooks' contribution, we may say that it is, to our mind, the fairest estimate of the remedy which we have seen. There can be no doubt but that the enthusiasm with which Koch's discovery was introduced is now giving way to calmer judgment.

—As an evidence of the energy with which members of our Alumni Association seek to fit themselves for the duties of the profession, and also for its intrinsic worth, we are happy to present the paper of Dr. Arthur G. Root (A. M. C., '90). Dr. Root is doing very earnest work in London in diseases of the nose and throat. He is to be congratulated upon having obtained so favorable a position for the pursuit of the study of a specialty which will be his life-work. It may be said that in certain lines London affords opportunities for post-graduate study not excelled anywhere in the world. Especially is this true regarding the study of the diseases of the nose and throat, and of the eye and ear. For American students the difficulties of language often more than counterbalance the advantages of continental universities. The facilities for study in London, until recently, have not been so accessible as they should have been to the student. Lately, however, an organization has been established and regular lectures and demonstrations are given to graduates in medicine.

—A convention of the Phi Sigma Kappa Fraternity was held February 20th, in the chapter-rooms of Alden March Chapter (A. M. C.). Delegates and ex-members were present from all parts of the country. Business sessions were held in the morning and afternoon. In the evening a banquet was given at the Hotel Kenmore; covers were laid for forty. The present members of Alden March Chapter are among the under-graduates of the Albany Medical College. The graduate members of this chapter located in this city are Drs. Eugene Van Slyke, W. J. Nellis, A. J. Blessing, A. H. Bayard, W. G. Macdonald, Albert Marsh, W. G. Murphy, G. E. Lockner, J. W. Kniskern, W. H. Happle, G. G. Lempe and F. W. Loughran.

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CLINICAL LECTURE.\*

PAPULO-SQUAMOUS SYPHILIDE—SCABIES—PEDICULOSIS CAPITIS.

BY F. C. CURTIS, M.D.,

ALBANY, N. Y.

*Professor of Dermatology, Albany Medical College.*

*Papulo-Squamous Syphilide.*—This patient, who comes to-day for the first time to the dispensary, presents the following history: His age is 22; his health has always been good. Prior to the present eruption he says he has had none. The eruption made its appearance some eight or ten weeks ago. It appeared first on the lower extremities, on the anterior, extensor surfaces about the knees and below; afterwards it extended to the arms, and subsequently appeared upon the lower part of the trunk. As we now see it, a description of the lesions, which are said by the patient to be identical with all that have existed since the commencement, would be, as you will observe, first, as to geographical distribution; we find it symmetrically developed, both sides of the body being affected; then, further, we see that it is about the knees, on the legs, on the arms, and especially on the elbows, also on the lower portion of the back. Taking the individual lesions, we see that these upon the legs may be described as flat, somewhat elevated papules, about the size of a ten-cent piece, oval in shape, of a dark red color, except those covered with scales, which are dry, not very adherent, some of the patches being abundantly covered, others lightly. Some of these flat papules, for such they appear, although slightly elevated, have run together to form a large patch, preserving still the oval outline. Such is a description of the lesions found on the legs. Now look at these upon the elbows, both of which are covered with patches the size of a quarter of a dollar, of a brighter red color than those on the legs, and covered with closely adherent thicker crusts

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\* Delivered at the Albany Medical College, January 29, 1891.



of a whitish, silvery color. These are also circular in outline, though there are two or three patches along the line of the ulna that have been formed by running together of several smaller ones. Those upon the back, which are few in number, are but slightly elevated and slightly scaly and of a darker color, though not so dark as those on the legs. There are no subjective symptoms present.

This case is one which presents the points for diagnosis of but two diseases, psoriasis and syphilis. Recalling the case of psoriasis shown two weeks ago you will remember the marked features of that disease. It came on at about the age of 18; it exhibited a symmetrical development; it showed itself at different and remote parts of the body, and was especially abundant on the elbows and knees, which are places of election for it to develop; it was circular in outline, the lesions varying in size from the head of a pin to a quarter of a dollar, of a bright red color, save where covered, as most, even the minute ones, were, with a crust of imbricated scales, which suggested the usual description of them as resembling drops of dried mortar. Now, very much this appearance is seen in most of those we see here; but (and this is the important point to notice) these on the lower extremities are distinctly different in some particulars—the patches are smaller, thicker (that is, elevated to form flat papules), they are of a dusky, dirty red color, and the scales are much less abundant and less adherent, and of a darker color.

Before pronouncing upon a diagnosis, let us enquire into the existence of concomitant symptoms of suspected syphilis, and more closely into his history. We find distinct enlargement of both the post-cervical and epitrochlear glands, which speaks for the existence of syphilis; upon the fauces and under the sides of the tongue are patches resembling syphilitic mucous patches. As to the history given, I must say, do not rely too closely upon statements of the patient regarding syphilis, but we have the admission of his having had gonorrhœa and enlargement of the inguinal glands, but no sore, although we do find in him still some enlargement of these glands and a slight suspicious scar near the frenum. There is no history given of a roseola, but while that seldom fails to occur as the first secondary syphilide, it may, in careless individuals, such as frequent the dispensaries, actually escape observation. There is certainly no question of this young man having syphilis.

What, in a few words, are the diagnostic points between these two suspected lesions? Psoriasis is more likely to be symmetrical, to affect large areas of the skin at once, to affect remote parts of the

body at once, to affect by preference the elbows, knees, scalp and loins. Both lesions are covered with scales; those of psoriasis are silvery white, thick, adherent, a little drop of blood oozing if they are scratched off, whilst those of the syphilitic papulo-squam are dark, not abundant, and easily detached. The psoriasis patch is hardly elevated above the skin, and of a bright red color; that of syphilis is a distinctly elevated papule of a dull red fresh-cut ham color. The size of the former varies from a minute point of a commencing plaque to the size of a quarter or fifty-cent piece; of the latter they are pretty uniformly the size of a split pea. As to the history of the lesion, psoriasis will always be uniformly the same, and very likely in an old subject a history will be given of previous attacks of the same character, since it begins to make its appearance no later than the age of eighteen or twenty, whilst syphilis is multifarious and seldom retains long the same form, and does not repeat itself twice alike. Besides, in syphilis, a history of syphilis and concomitant symptoms will be given, which, of course, may likewise occur to one having psoriasis.

What shall I say, then, is the diagnosis here? Comparing the case as shown with the points of diagnosis, I must confess that it is one of unusual difficulty of diagnosis. Seeing only the elbows and arms, with the statements of similar lesions of the other parts, I should not hesitate to say that the case is one of psoriasis; but, analyzing the lesions on the legs, with the clear evidence of syphilis present, I should not doubt the case was a papulo-squamous syphilitide. I am quite certain that it is a remarkable case in which both diseases co-exist. We will put him upon  $\frac{1}{16}$ -grain doses of red iodide of mercury in tablet form, and if he reappears at the clinic will watch its results upon the lesions on the legs. My impression is that those on the arms and back will not be affected, whilst those on the legs will slowly disappear.

*Scabies.*—We have seen several cases of this already. The present one, a man of middle age, shows two or three points noteworthy for the sake of diagnosis. You will see he has not the typical appearance of scabies illustrated in this admirable lithograph of Duhring's, in which the hands, and especially between the fingers, are covered with papules, vesicles and small pustules. In fact, there are only papules anywhere, and they are mostly on the back of the hands, wrists and arms. These are itching, and he has the same sensation on the body, but very few lesions are present. In fact, the disease is but lightly developed, although he has had it for sev-



eral weeks. How are we to recognize it? Notice, first, the distribution of it, for this is important in the diagnosis of all skin diseases. We find that, though the fingers are largely free, that it is most abundant on the ulnar side of the wrists; this is, I think, an important point to notice. Then, here are papules and some very minute vesicles, and here at one of the latter is a pretty well marked dark line of a canaliculus. Very likely with a pin we could find in that vesicle an acarus. We have one more diagnostic mark, which will satisfy us, and we find it, namely, a papulo-vesicle on the dorsum of the penis. This history and these lesions, thus located, establish our diagnosis. My observation is that we much more frequently meet with cases of scabies presenting these slighter manifestations of this disease than we do the typical ones, but the symptoms are seldom so slight as to baffle diagnosis. The disease is increasing in frequency, for years ago it was not very often seen. Suppose we put him upon an ointment suggested by Dr. White, of Boston— $\mathcal{R}$  Sulphur, 3 ij; naphthol, 3 j; balsam of Peru and vaseline, each  $\mathcal{z}$  j. He can take a thorough bath and rub one-third of this on every part of the body at night, and repeat for three nights. This will suffice unless there is further itching, when he can repeat it to the affected parts only for two nights. He should have all clothing next to the body boiled and cleaned.

*Pediculosis Capitis.*—This case of a child, on the back of whose neck, under her long hair and up on the back of the scalp there are oozing patches of eczema, scratched and torn, you will recognize, having seen it before at the clinic, as one of pediculosis capitis. The points of diagnosis are very evident—First, there is no affection of skin except on the back of the head and neck, it being limited, as I have heretofore suggested, to a line back of the ears; next, this is an itching, active eczema; and, third, this eczema is an artificial one, due to the presence of pediculi, which can be seen in numbers on the scalp, as well as the small white bodies agglutinated to the hairs, which are ova. The location of the eruption is an important point. A child having general eczema of the scalp may contract pediculi, in which case they would be secondary; when the back of the head alone is affected, the pediculi are the primary cause of the dermatitis set up by the scratching. You will find it only in children, and generally in the poor and ill-nourished. The best remedy is kerosene oil, which may be applied as freely as can be without having it run down the neck; at night the head being bound up in a towel. Repeat this for several nights, if necessary,

and, at any rate, at the end of five or six days when the ova will have incubated. Subsequently, for the inflamed scalp, give white precipitate ointment, diluted one-half; this has the advantage of being likewise a mild parasiticide.

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## A REPORT OF CASES OF INJURY OF THE KNEE-JOINT, WITH REMARKS.—A CASE OF REMOVAL OF THE PATELLA.\*

BY HENRY FLOOD, M.D.,  
ELMIRA, N. Y.

L. G., aged about 40 years, on July 4th, 1883, was, with several friends, celebrating, by shooting an old army musket, which was loaded with powder and paper wads. One of his friends drew up the musket to shoot, and, not seeing L. G., shot him in the knee.

My examination revealed that the patella was broken into a number of small pieces, which were carefully removed. I found that the other bones of the knee-joint were not injured. I closed the wound, after carefully washing it out, and placed into it a rubber drainage tube. The leg was placed in a splint. Considerable inflammation followed, but not sufficient to cause any alarm. An abscess formed in the synovial sack. I passed a probe into the opening; finding the most dependent portions of the pus cavity, I made two counter-openings; I then passed drainage tubes through the openings. The tubes were left until the discharge ceased flowing. After this was done, the knee rapidly improved and healed, resulting in a complete recovery.

The man has complete use of his leg. There is only a slight hitch in his gait. He goes without a cane and performs hard labor. I have seen him handle a plough and do it very well. One seeing him walk would not realize that the patella had been completely removed.

The removal of the patella is a very rare operation. I cannot find a report of a case where it has been removed for accident. It has been removed for necrosis.

I find the following in *The Medical Record* of March 8, 1890: "Dr. E. Kummer, of Geneva, has published a contribution on this subject, in which he advocates the following propositions:

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\*Read at the eighty-fifth annual meeting of the Medical Society of the State of New York, Albany, 1891.



“(1) Total extripation of the patella can be performed without impairing the patient’s gait or markedly interfering with movements of the knee-joint. (2) The operation is indicated in cases of tubercular osteitis of the patella, provided the articulation remains intact. (3) The extripation can actually prevent the development of articular lesions, and thus save the knee-joint, provided the operation is resorted to sufficiently early. (4) In cases of tubercular osteitis of the knee-cap a total removal of the bone offers better chances in regard to recovery than scraping out the morbid foci.”

Dr. Kummer adduces an illustrative case, referring to a girl, aged 25, with primary tuberculosis of the right patella, but with a perfectly intact knee-joint, where he made an excision of the bone, and that with excellent results. About two months after the operation the patient was able to extend her right lower limb as under normal conditions; could kneel with perfect freedom, and without any pain or discomfort; could walk four or five hours daily without lameness or fatigue, or run up and down stairs with ease.

A similiarly successful case of total removal of the patella has been published by Professor Kaufman, of Zurich. The patient, a married lady, aged 33, was suffering from fungoid osteitis of the left knee-cap, of eight years’ standing—the operation was performed in November, 1882. A month later the lady, being frightened by a fire next door, tore off all dressings and ran out of her house, having swiftly descended a staircase. Since then her knee-joint remained perfectly movable.

An interesting case of total excision of the patella for acute necrosis has also been published in *The Lancet*, March 16, 1890, by Mr. Page, of Newcastle-on-Tyne. The patient recovered with a perfectly useful limb.

#### CASES OF DISLOCATION OF THE KNEE-JOINT.

A. C. was sitting in the back end of a wagon, when a team of horses behind him became frightened, and one of the horses sprang into the wagon. He does not know in just what manner he was injured, whether the horse struck him or whether he was injured by jumping out the wagon. Upon examination, I discovered that the head of the tibia of the left leg was thrown outwards from the condyles of the femur and the patella. All the bones of the leg were free from a fracture. After some little manipulation, I found I could throw the dislocated tibia back into its place, and as easily throw it out again. I reduced the dislocation. He was treated by

keeping the leg in a splint about two months. This man had very little trouble with the knee, but was lame for some months afterwards. I recently saw him, and he was walking very well; still, some lameness exists.

I was called several years ago to see a man who was injured by an express train striking the wagon in which he was riding, throwing him a long distance. I examined him and found both knees dislocated. The sublaxations of the tibia were outward. The man was removed to the City Hospital. The surgeon in charge reduced the dislocations. The result in one knee was perfect, and a lameness in the other resulted, but the man gets about very well and is able to perform hard labor.

Dislocation of the knee is very rare. There are not any signs characteristic of dislocation of the knee-joint, except the deformity produced by the condyles of femur with the patella thrown out in one direction and the tibia in the other direction, producing a distortion of the limb which at once suggests the nature of the injury.

Hamilton, in his work on fractures and dislocations, reports the following interesting cases. He says:

“I have mentioned the case of N. Smith, who, in consequence of a fall from a window, had a dislocation of the right femur, tibia and patella. The tibia was sublaxated outwards, and the leg was partially flexed upon the thigh, with the toes everted. By moderate extension, made with my own hands united with alternate flexion and extension, the bone was easily and promptly restored to its place. Having reduced the femur also, the limb was laid over a gently inclined plane made of pillows; very little swelling followed the accident, and his recovery was rapid and complete.

“A man was received in the North London Hospital with a partial dislocation of the tibia outwards, and, although the knee was much swollen, the nature of the injury was easily determined. The knee was immovable and the toes turned outwards. Mr. Hallam, the house surgeon, reduced it by extension and counter-extension made by his own hands. M. Pitts records a similar case in a young lady, produced by a fall down a flight of stairs. It was easily reduced by extension and counter-extension. Inflammation followed, but it was finally controlled, and she regained the use of her limbs.”

In one case of sublaxation, mentioned by Sir Astley Cooper and in a second recorded by Bransby Cooper, the recovery of the functions of the joint did not seem to have been so rapid, the joint remaining unstable and tender for a long time afterwards.



## A CASE OF INJURY TO THE KNEE.

I was called to Germania to see Mr. K. A., a young man nearly 20, who had been a perfect type of health and physique. He left his home to go to a neighboring lumbering camp to peel bark. While at his work his ax slipped and struck him on the knee, inflicting a small but deep cut at the lower and outer border of the patella. The knee commenced to pain him severely; he immediately started for his home, walking five miles. The knee and leg began swelling and became exceedingly painful; a thin discharge came from the wound. The attending physician tried several times to find pus with a hypodermic needle, and finally with an aspirator needle, but was not successful.

When I examined him, he was a mere skeleton, with a weak and rapid pulse, and was in a critical condition. The knee was considerably swollen, and the thigh from knee to hip was very much enlarged and painful, the skin being hard and tense.

I gave patient ether, and carefully probed the wound. I worked the probe into the opening and along the injured side of the patella, and passed it upwards until the end passed about one inch above it. The probe entered a large cavity. I then cut down upon the end of the probe. I opened the cavity. I should judge a quart of pus flowed from the opening. I made a free opening into it and probed it with my finger. I found the cavity reached above the knee and half way to the hip. It completely surrounded the femur. I passed a probe into the cavity and opened it on each side of the knee at the most dependent portions. I passed five drainage tubes through the openings. He was placed upon my fracture bed and leg placed in a splint. This insured perfect quietude for the knee and made the care of the patient a very easy and simple procedure. The cavity was carefully washed out with a weak solution of carbolic acid three times a day, mild opium powders were given him, and the patient was carefully nourished. He commenced from that time to very rapidly improve, and in two months he was about on crutches. Passive motion was used to provide against ankylosis, but with each endeavor to try it severe inflammation followed. The inflammation was so persistent that it was found necessary to abandon the motion and to keep the leg quiet. The knee is considerably ankylosed, yet motion enough was saved so the patient can use the leg very well.

## A CASE OF FRACTURE AT THE KNEE-JOINT.

M. W., aged 50, was working on a blast furnace trestle. He fell about ten feet, causing a compound comminuted fracture of the femur. Upon examination I found a portion of the shaft of the femur protruding from the wound, and by passing my finger into the opening I ascertained that the condyles were broken into several pieces, involving the knee-joint. I removed several detached pieces of the condyles. I was compelled to saw off a piece of the shaft of the bone before I could reduce it. I passed a drainage tube through the wound and dressed the case antiseptically. Considerable synovitis followed; the drainage tube, however, took care of the discharge. The bones united, there was complete ankylosis of the joint, and the leg was one and three-quarters inches shorter than the other.

## A CASE OF INJURY AT THE KNEE-JOINT.

In January, 1888, I was called to see J. O., aged 14, who, while coasting, was thrown from his sled, striking on his knee, cutting it quite severely. He was treated by poultices applied to knee. Two weeks after the injury, when I first saw him, the knee was very much swollen and painful; he had chills and sweats; his temperature was  $104^{\circ}$ , pulse 120, and he was emaciated, with loss of appetite, and passed restless nights. The cut in the knee was discharging a thin pus.

I probed the opening and found a large pus-cavity. I passed a probe about the distended cavity until I found the most dependent portion and then made a counter-opening. I used in the case for drainage several strands of carbolized silk thread. I dressed the leg antiseptically and placed it in a splint. The drainage was complete. The fever and pain immediately subsided and the patient made a very quick and rapid recovery, with perfect motion in joint.

Part of the cases reported were treated before antiseptic surgery was generally adopted by the profession, and was not practiced by me. Others were treated antiseptically; the results in the latter cases were better and more speedily reached.

These cases illustrate the great principles in treating injuries of the knee-joint, namely, thorough drainage and absolute rest.

Thorough drainage will prevent the severe inflammation and dangerous symptoms arising from pus being confined about the joint. There are many cases of injury of the knee-joint having high fever, chills, sweats and great pain, with loss of appetite and



emaciation. These symptoms almost universally arise from pus being confined somewhere about the joint. With its evacuation and complete drainage you may expect an immediate and decided improvement.

Absolute rest is necessary to promote a rapid recovery, also some kind of splint. It makes very little difference whether the splint is made of plaster of Paris or kindred materials, or of wood or leather. If you succeed in keeping the knee-joint quiet and can attend and dress it without moving it, you meet all the requirements of the case.

The splint I used in these cases is made from a double inclined Day's splint. The portion of the splint forming the double inclined plane is made stationary, with a slight elevation at the knee, deviating somewhat from a horizontal position. A space about four inches long is cut out at the knee-joint, and a sliding shelf is made to take its place. When a leg is on the splint, all that is necessary to dress the knee is to draw out the shelf, and the knee is perfectly free from the splint, and the dressings can be removed and reapplied. When through, all that is necessary is to slide the shelf back to its place in order to support the knee. This splint has proved so satisfactory that I have used it altogether in treating injuries of the knee-joint.

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## A CASE OF IMPERFORATE ANUS OF EIGHT WEEKS' STANDING—OPERATION AND RECOVERY.

BY WILLIAM HAILES, JR., M.D.,  
ALBANY, N. Y.

I received the following notes from Drs. O. C. and J. Alexander, of Albany, who were called to attend Mrs. L., April 23, 1890, and, after a rather tedious labor, delivered her of a female child. Attention was called the next day by the nurse to the fact that the child had had no passage from the bowels, and a small sound could be passed upwards for three-fourths of an inch, where the rectum ended in a blind pouch.

The mother of the child strenuously opposed any thing in the way of an operation, and consequently nothing could be done for the little sufferer. The child nursed from the breast, and for five weeks was quite comfortable; became plump, but required anodynes to make it sleep. The mother secretly gave the child morphine dissolved in water. In estimating the dose, I should say that this

new-born infant was taking about a thirty-second of a grain of morphia three times daily. The abdomen became distended, and about the sixth week œdema of the extremities occurred, with pitting upon pressure. There was occasional vomiting of food, mixed with bile, and sharp colicky pains. The child was fretful, and the abdomen was enormously distended, but still the mother strongly resisted any surgical aid. About the eighth week she consented, and I saw the child in consultation with the Drs. Alexander, and found a feeble, emaciated child of eight weeks, with the greatest distention of the abdomen I have ever seen, with œdema of the extremities and a cyanotic condition of the circulation, with very great venous engorgement over the abdominal parieties. Upon examination I found that the child had a normal, well-developed anus, which could be explored for about three-fourths of an inch, but no bulging of



FROM A PHOTOGRAPH OF THE CASE TAKEN PRIOR TO OPERATION.

any kind could be detected from above, and no impulse could be felt even when the child made violent efforts in crying or struggling.

We proposed to the parents to dissect through the tissues toward the supposed location of the end of the gut, keeping an open and clear wound by means of retractors, etc., loosening the end, and suturing it to the edge of the sphincter ani muscle; but the mother opposed any operation, and only consented to the use of a trocar. Accordingly, a trocar three-sixteenths of an inch in diameter was selected, and was passed up into the cul-de-sac and given a slight inclination toward the left side, in order to better reach the rectum coming down on that side. We experienced no difficulty in tapping the distended bowel, and a copious discharge of healthy fæces, yellow and rather fluid in consistency, was evacuated through the tube by moving a probe up and down the canula and with occasional



tepid injections. The tube was worn more or less constantly for several days, and then we began gradually to dilate the opening, for sufficient time had elapsed to permit of adhesions between rectum and cul-de-sac. The child improved steadily; the abdomen recovered from its hyper-distention, with no unfavorable complications ensuing, no dilation from retained ingesta, and no atony of the bowel; assimilation was good. The only troublesome feature of the case was a tendency of the opening in the bowel to contract, and we were obliged to repeat the dilatation every few days. Being absent from the city on my summer vacation, I found upon my return that the child had not had a movement for three weeks. I found a distended abdomen and a closure of the bowel. I divulsed thoroughly, and since that time there has been no trouble, the opening remaining patent and the child quite comfortable, but the mother still persists in giving the child morphine.

I had thought from the persistent tendency to cicatricial contraction that it would be necessary to dissect the end of the gut and bring it down, and stitch the mucous membrane to the edge of the sphincter muscle before a satisfactory condition could be obtained, but the child recovered without it.

This case is the longest one on record without movement of the bowels that I have seen. Mr. R. Harrison, of Lumford, England, reports a case successfully operated upon thirty-three days after birth. This one was fifty-six days.

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## A REPORT OF FOUR CASES OF CANCER OF THE CLITORIS WHERE CLITORIDECTOMY WAS PERFORMED.\*

BY FRANKLIN TOWNSEND, JR., A.M., M.D.,  
ALBANY, N. Y.

In presenting this report of four cases of cancer of the clitoris, I must say that, although the subject is familiar, the cases which I cite may present some exceptions that may prove instructive.

CASE I.—Miss M., aged 60. Menstruation appeared at 16, which was always regular. Noticed growth in vulva or clitoris, in 1885; this continued until in March, 1887. Always in severe pain about the privates. No other affection known to patient. Has always enjoyed good health.

Examination on March 27th, 1887, revealed an enormously enlarged and tender clitoris, which, at the time, was diagnosed as

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\* Read before the Medical Society of the State of New York, February, 1891.

cancer, and promptly removed by tying off the mass by the Staffordshire knot. Six months after, the patient, though apparently well, developed a disease of the liver, from which she died. Post-mortem revealed metastatic cancer of the liver.

CASE II.—Harriet M., aged 42, widow, mother of two children, came to St. Peter's Hospital Dispensary. Upon examination, diagnosed cancer of the clitoris. Operation by ligation, as in the first case. Died, after enjoying good health for eight months, from metastatic cancer of the liver, as proven by post-mortem examination.

CASE III.—Private practice. Miss X., 24 years of age. Father died of cancer of the stomach. Always enjoyed good health until three years before I saw her (1886), when she began to notice swelling and tenderness in vulva. This increased more or less rapidly, and when I first saw patient I found the clitoris greatly swollen and hard, as well as being tender, more or less hemorrhage from the denuded surface was manifest, and the patient was in a deplorable condition from pain and irritation of her genitalia. I removed clitoris by use of the cautery. Wound healed kindly. One year later the disease manifested itself in the labia minora and majora, involving also her urethra, causing her great distress. Palliative measures used without avail. Patient died some months later.

CASE IV.—Private practice. Mrs. W. I., age 57, mother of four children. Was still menstruating, though irregularly. Noticed swelling in vulva in February, 1888. Diagnosed cancer of the clitoris. Other parts not involved. Operated by ecraseur. Patient died within the year, post-mortem revealing cancer of peritoneum and liver.

I would not take up your time in citing these cases, were it not for the fact that they had certain peculiarities about them. In the first place, it will be noticed that the clitoris was the portion *originally involved*, which is decidedly rare, if I may judge from Rokitansky and others, who say of epithelioma that its site is ordinarily the lower and inner surface of the greater labium—"in the sulcus interlabialis, that is to say, between the external skin and the mucous membrane." In only *one* instance was the clitoris the origin as quoted from Richet, who had a case of primary epithelioma of the clitoris in a woman aged 40 in his ward in the Hotel Dieu. The tumor was removed by the thermo-cautery. I cannot find outside of Richet's case any report of epithelioma *originating* in the clitoris. At all events, if such exist, I am not aware of it. Another interesting factor in the cases I have cited is that metastatic cancer of the liver, as in Cases I. and II., took place, while in Case IV. cancer of the peritoneum followed more or less promptly after operation.

Still another rare factor presents itself relative to Case III., where the age of the patient was only 24—especially when we consider



Winkel's statistics, who says that 9.7 per cent. of epithelioma of the vulva occur between 30 and 40 years of age; 25.8 per cent. between 41 and 50 years; 32.2 per cent. between 51 and 60 years; 25.8 per cent. between 61 and 71; 6.5 per cent. between 71 and 85.

Zweifel says, as to the etiology of epithelioma of the vulva, that we know but little, and that its development is greater with advanced years. But relatively few cases are met with in early life. According to L. Mayer's statistics of thirteen cases observed, seven cases were between 50 and 60 years; three between 30 and 40; two between 40 and 50, and one between 60 and 70. Hildenbrandt's three cases were respectively, 53, 56 and 62 years of age. West saw a case of epithelioma of the vulva in a woman of 31.

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## INCISION VERSUS RAPID DILATATION FOR STENOSIS OF THE CERVICAL CANAL.\*

BY JAMES H. REILLY, M.D.,  
FAIR HAVEN, VT.

I feel that I owe the society an apology in claiming that better results can be obtained in the treatment of constriction of the cervical canal for dysmenorrhœa and sterility than by the more modern procedure, rapid dilatation, as advocated by Goodell and other eminent gynecologists; but after an experience in the treatment of forty cases, my statistics force me to take the stand that I have taken.

When cases of this kind first came under my direct observation for treatment, I resorted to the operation by means of rapid dilatation as a means to produce a radical cure. I assisted at the operation a great many times during my service as hospital interne, and whilst I looked upon the operation as a barbarous procedure, it evidently accomplished the dilatation to such a marked degree that I reconciled myself with the idea that the end justified the means. That the canal could contract again to the same degree as before operation appeared at that time to me an impossibility, but it was not my privilege to watch the progress and termination of these cases after leaving the hospital, and, not hearing of any unsatisfactory results, I concluded that the operation must have been very gratifying to the operator as well as to the patient. After entering practice,

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\* Read before the Vermont State Medical Society, 1891.

when cases of this nature presented themselves to me, the first operation that suggested itself was that of rapid dilatation; and after meeting with cases where, after dilatation to the maximum extent (suggested by enthusiastic advocates of the operation), and carrying out the after-treatment in the manner advocated by them, the contraction was as marked as before the operation, if not to a greater extent, I have concluded that the operation does not overcome, to a permanent degree, the contraction of the cervical canal.

The causes for which we are called upon to do this operation generally are dysmenorrhœa and sterility. When I say dysmenorrhœa and sterility I do not mean to say that all cases of painful menstruation are due to a constriction of the cervical canal, nor that all cases of sterility are due to this condition. I have only reference to those cases where every other reason is excluded and a stenosed condition of the cervical canal exists. When called upon to treat a case of sterility, I think we are justified in operating if this condition is found to be present, although history of dysmenorrhœa is not associated with the case, a condition not at all uncommon; in fact, the only case of sterility which I have successfully treated by rapid dilatation is that of a woman who presented herself to me for treatment with the following history: She had been married eight years, was twenty-one years of age when married, and had never had any serious sickness. She was very anxious to have children, and stated that if the fact that she had none was due to any condition that could be corrected she wanted to have it done. She menstruated regularly, and never had severe pains immediately before or during this period. There was no ulceration around the external os. On passing the sound it met with considerable resistance at the internal os, and was forcibly passed through. The uterus was found to be in its normal position. The only condition about her that I found to which her sterility could be attributed was this apparent constriction at the internal os. I dilated this rapidly under ether, passed a sound at short intervals for a month, after which I did not see her for four or five months, when I was called to see her for some of the disagreeable symptoms of pregnancy, and in a year from time of operation I delivered her of a twelve-pound boy.

Of the forty cases that I have operated upon, ten were for sterility and thirty for dysmenorrhœa. On the first ten cases that came under my observation for dysmenorrhœa I operated by rapid dilatation, and of these but four were relieved permanently. The condi-



tion of six others, after periods varying from three months to a year, was as bad, and in two cases worse, than before operation. They underwent a secondary operation by incision, and after a period of from one to two years I have yet to hear of an unfavorable result. Of the remaining thirty cases operated on by incision, permanent relief followed in every instance. Within the last six months I have operated on three cases which I have not included in my statistics, as I do not regard a case permanently relieved until they pass a period of one year without a recurrence of the trouble. Of the ten cases operated upon for sterility, six underwent the rapid dilatation operation. This operation proved effectual in but one case, and that as reported. After one year's time the contraction was as marked as before the operation. They underwent a secondary operation by incision. Two of them have borne children, and one other is well advanced in pregnancy, and in one the constriction is as marked as before the operation. The other patient passed from under my observation about six months after the operation. She was not pregnant at the time. On four patients I have done the operation by incision during the past year; two are now pregnant—one two months after the operation, and the other four months. On two I have operated within the past three months, and they are still under my observation.

The constriction in every case that came under my observation has been at the internal os. In not a single case have I met with any resistance with the ordinary sound until I came to the internal os, and in every instance the constriction has been so marked that an ordinary probe could not be passed unless considerable force was used. What we accomplish by dilatation is a paralyzation of the sphincter muscle surrounding the internal os, but it is only a temporary paralysis, and will gradually resume its functions again in the same manner as the sphincter ani, and after forcible dilatation for diseases peculiar to the rectum. The great tendency for this muscle to contract again after dilatation is not at all surprising. Very true, the muscular fibres that are ruptured by the dilatation lose their power of contractility, but it is almost an impossibility to rupture them all with the instruments devised for rapid dilatation, and I doubt whether we will rupture any of the fibres if only carried to the extent advocated by some authors. When we reflect and consider how soon after labor, where the muscle surrounding the internal os is put upon a stretch to an extent of six times as great as can be accomplished by any of the dilatation instruments now in use,

and how soon after it resumes its power of contractility, it is inconsistent to expect to deprive the same muscle of its function under the force of the instruments devised for that purpose. The operation by incision is not attended with any more danger than by rapid dilatation. A number of instruments, called hysterotomes, or metrotomes, have been devised to do the cutting. The objection to these instruments is that they do not incise deep enough. In my hands the long, blunt-pointed bistoury has accomplished the desired result without any trouble.

Pelvic peritonitis or cellulitis is a contra-indication for the operation; in fact, it is essential that any inflammatory trouble peculiar to the pelvis should not exist to have the operation successful. If the operation is done and any inflammatory trouble exists, the operation is certain not to be a success, but the inflammatory condition aggravated. This does not include endometritis; but, on the contrary, when this disease exists, which it does very often in consequence of a stenosed condition of the internal os, the cure of it is facilitated by the opening of the os.

The operation should be done as soon after a menstrual period as possible. This will give the tissues sufficient time before the next period to become completely healed. If the tissues are in an inflamed condition at the subsequent period, contraction is very sure to follow; for this reason a patient should not be operated upon close to a menstrual period.

A mild cathartic is given the night before the operation. If this does not prove effectual by time of the operation, the bowels are unloaded by means of a rectal enemata. A vaginal douche is given the morning of the operation; this leaves the parts in a proper condition for the operation. The various steps in the operation are as follows:

The patient is anæsthetized and placed on a table, and a bivalve speculum introduced, or a Sims, whichever is preferred by the operator. The cervix is grasped by the forceps tenaculum and held in a fixed position. A dilator is passed to open the os up to a degree large enough for the bistoury to enter. After passing the bistoury, the next step is to make the incisions. I resort to the crucial incision, one anterior and one posterior and two lateral incisions. A blunt-pointed, double-edged bistoury has been devised to simplify the operation by avoiding turning the instrument. I use the single-edged one, and do not experience any difficulty in turning it from one wall to the other. The depth of the incision is governed by the



experience of the operator. The danger of a deep incision lies in the severing of the circular artery. As near as I can determine, the depth of the incision I usually make is about three-eighths of an inch. The hemorrhage is controlled by compression with absorbent cotton passed into the canal on an applicator. Occasionally I have found it necessary to resort to applications of the persulphate of iron to control the bleeding. A douche of hot water is again given, a stem pessary introduced and held in place by tampons saturated with a solution of glycerine and carbolic acid (ten grains to the ounce), a hypodermic given, and cold applications are kept over abdomen for about four days. A vaginal douche is given once a day for about ten days. If symptoms of pelvic inflammation develop, the pessary is taken out and a sound or dilator passed every few days, and hot applications are to be made instead of cold. It is the exception for inflammatory symptoms to develop. The patients generally make uninterrupted recovery, and are able to be around the tenth day. The pessary can generally be left in for three weeks before removing. If the period is due before that, it will be essentially necessary to remove it at the expected time. The patients are instructed how to place tampons themselves. If the operation is for dysmenorrhœa, sounds should be introduced a few days before the expected period; if for sterility, I generally wait until after the period before their introduction. If the patients are not carefully observed and dilatation kept up for a year after operation, it is certain not to prove effectual.

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## CORRESPONDENCE.

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### MORE TYPHOID.

*Mr. Editor :*

In your editorial on "Typhoid Fever in Albany," in the February MEDICAL ANNALS, you refer to the resolution condemning the river water passed by the Albany Institute at a recent meeting, implying that it acted without sufficient warrant, and intimate that a suspected water cannot be declared positively dangerous till the germs of disease have been actually discovered in it.

According to the books in every physician's library, as I am informed by good authority, waters have been condemned times without number, not only without the positive evidence of germs, which you seem to require, but even before such germs were positively known to exist; not only so, but it is only within a very few years

that scientific men have been able to isolate and identify these germs at all.

You are probably aware of the absurdity of requiring that the disease germs be actually found, for the physiological test (drinking the water and getting the disease) would seem to be sufficiently conclusive, and till very recently all waters that have been condemned have been condemned on such grounds and on such grounds alone. You are probably also aware of the difficulty of catching these little organisms, and that it is not done by the simple process of "putting salt on their tails," as birds are said to be caught sometimes.

In the writer's opinion, the physiological test is not "flimsy testimony," although to make assurance doubly sure it might be well to have that test corroborated by cultures and the microscope. Pending that long and laborious examination, however, it is scarcely safe to assume the innocence of the river water and call it harmless, for such a course, if it is really dangerous, as seems most probable, would lead to needless exposures. It is well to err on the safe side, if err we must, and so it is best to have the water sterilized. The general opinion of the people is certainly to the effect that the river water is unfit to drink, not only because it is dangerous, but because it is dirty, it being with many a question of æsthetics quite as much as of health.

MEMBER OF INSTITUTE.

[We should be exceedingly sorry to do the Albany Institute an injustice, and yet, upon reflection, we feel that we put the case none too strongly when we made the assertion that the action of the Institute was not warranted by the evidence, if we are to judge from the reports of the meeting given in the daily papers. The writer of the letter places his defense of the action of the Institute very ingeniously upon the basis of æsthetics, medical experience, and the physiological test. None are more willing than we to maintain that from an æsthetic point of view the Albany water-supply is "dirty," but that does not prove that it has propagated typhoid fever.

Further, "*according to the books in every physician's library, waters have been condemned times without number,*" etc. We want to sanction all of this, and then inquire how it proves that the Albany supply is a menace to public health. We hope our good friends of the Albany Institute do not agree with the author who once presented a paper before a medical society in which he maintained that water was "only suitable for bathing purposes, and there was some question about that." Medical literature is full of condemnations, and many things have been condemned which should not have been. There is no better time than now for clearing a little misunderstand-



ing regarding the micro-organisms in water, especially the typhoid bacillus. *We hold, the microbic origin of typhoid fever being granted, that if typhoid fever is produced by drinking an impure water that it is conclusive evidence that that water contains the micro-organisms of typhoid fever, whether they can be discovered either by the microscope or cultivation or not. Inoculation is of all evidence the most conclusive of the pathogmomononic character of micro-organisms.* It must not be forgotten that the science of bacteriology is yet young, and that microscopic and and culture demonstrations are often defective, if not fallacious. This agrees with our correspondent's physiological test, upon which much stress is very properly laid. We challenge him to show where, from the proceedings of the meeting held, that the least conclusive evidence was established to show that a single individual has suffered from typhoid fever through our water-supply.

We may be allowed to add that our only motives in this discussion have been to promote accurate observation and to prevent, as far as it lies in our power, the general ill effects upon the people of circulating reports of a menace to their health without sufficient reason. We have no doubt that such reports have already added much to the anxieties of our citizens, diminished trade and increased the consumption of alcoholic beverages in our city.—ED.]

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## MEDICAL PROGRESS.

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THE TREATMENT OF FIBROID TUMORS OF THE UTERUS AFTER THE METHOD OF APOSTOLI.—Dr. John Homans (*Boston Medical and Surgical Reporter*, March, 1891) has written a very interesting account of his experience with electricity in the treatment of uterine fibroids. The most exact and approved methods were employed. The following are Dr. Homan's conclusions: "Here are thirty-five cases, the subsequent history of which I know more or less about. I am aware that electrolysis has not been followed up with the persistence that Dr. Apostoli and Dr. Keith demand, but it has been pursued so long as my patients would endure without more encouragement in the way of cures.

"*Size of the Tumor.*—In only one of the cases has the size of the tumor diminished, and two of these are cases where the menopause has occurred soon after the treatment à la Apostoli.

"*The general health* has been improved in fifteen cases, has been made worse in two, and death has resulted from the treatment in one.

“*Profuse hemorrhage* has been diminished to normal or a bearable degree in nine, has been increased in six, and unchanged in nine cases.

“*Locomotion* has been made easier in sixteen cases, and more tiresome in five.

*Pain* was lessened in six cases and increased in two; unaffected in five. In sixteen it was not present.

“*The menopause* has occurred in four cases since the treatment began.”

“From this review, we may expect, in the majority of cases, that the general health will be improved, the hemorrhage will be lessened, the locomotion will be made easier, and that the pain will be lessened, but we must almost never expect diminution in the size of the tumor, and seldom on its arrest in growth. I have learned enough about treatment à la Apostoli to know that its results are not certain enough to induce me to pursue it as a routine treatment, and that it is occasionally fatal, through the fault of the surgeon, if you please, I am willing to admit; but still, once in a while fatal. Electrolysis for fibroids has not been as encouraging and efficient and harmless in my hands as Dr. Apostoli's books would lead me to suppose it ought to be. I have hardly used my battery during the past year.

“From December, 1887, when I began the practice of electrolysis à la Apostoli, I have operated by abdominal section fifteen times for the removal of uterine fibroids, with fourteen recoveries; so that it may be inferred that I have found nothing sufficiently curative in electrolysis to make me lay down my knife and never take it up.”

THE POLYURIA OF PREGNANCY.—Dr. Voituriez (*Arch. de Tocol.*, December, 1890) concludes, after a study of this subject, that, in the course of gestation, polyuria of a type entirely confined to pregnancy is sometimes observed. In such cases the urine is clear, slightly acid, and of normal composition, excepting that the proportion of water is greatly increased, so that the specific gravity is low. Sugar and albumen are alike absent, and no cystitis is present in cases of this affection. Polyuria of pregnancy is probably more common than is generally believed. The only way of authenticating a case is carefully to collect all the urine passed every twenty-four hours. The disorder is not usually detected until the middle of the pregnancy. It rapidly disappears after delivery. In nature it is exceedingly mild, and it appears to endanger neither the mother nor the child. Dr. Voituriez describes a case where a pregnant woman was compelled to make water over twenty-four times in twenty-four hours, passing over seven pints of urine daily. She suffered from slight thirst. Yet she was safely delivered of a living (first) child, which weighed nine pounds. Tarnier's forceps had to be used. Directly after delivery polyuria ceased and never recurred. The secretion of milk was normal. Bromides and belladonna had been administered, but proved useless.



GUNSHOT WOUND OF THE PREGNANT UTERUS; OPERATION; RECOVERY.—Dr. C. C. Bradley (*American Practitioner*, Nov. 1890) reports the above case as follows: Eva M., aged 20, colored, and single, shot herself with suicidal intent, the bullet entering the abdomen about four inches to the right, and on a line with the umbilicus. The girl was six months pregnant. Upon consultation an exploration was decided upon, which was done by a median incision. The abdomen was filled with blood, there being numerous large clots. Upon examination a bullet wound was found in the right side of the fundus of the uterus. This wound was oozing, and was closed by three Lembert's sutures, checking the hemorrhage completely. A careful examination failed to reveal any wound of exit in the uterus or any intestinal wound. The abdomen was carefully cleansed with hot water and closed with silver wire, a drainage-tube being first placed in the median line and another in the wound of the entrance of the bullet. The patient recovered well from the shock of the operation. Thirty-six hours after the operation the patient aborted. The foetus had a bullet wound just below the acromion process of the scapula, another just above the umbilicus, and the right leg was shattered just below the knee. The bullet was not found. The case made a good recovery, and left the hospital cured four weeks after the injury.

LACTIC ACID IN INFANTILE DIARRHŒA.—About two years ago Lesage published a paper in the *Revue de Médecine* recommending lactic acid as an effectual remedy in a form of infantile diarrhœa characterised by frequent green stools containing scraps of undigested food. Dr. Thomas, in the *Méd de la Suisse Romande* (1890, No. 11, p. 677), confirms Lesage's statement as to the efficacy of the remedy in this form of green diarrhœa, believed to depend on a bacillary infection, but he states, also, that it is of use in cases of gastric or gastro-intestinal dyspepsia without fever, characterised by vomiting and flatulence, and by diarrhœa of non-slimy, foetid, yellowish or greenish stools containing undigested curds. The prescription used was a solution prepared as follows:—Lactic acid, 2 parts; simple syrup, 15 parts; water, 85 parts. One teaspoonful should be given from a quarter to half-an-hour after each meal; if given sooner the acid is liable to cause rapid coagulation of the milk in large solid curds. In mild cases he found five or six doses a day sufficient, but in acute cases he gave it much more frequently.

A CASE OF FISTULOUS COMMUNICATION BETWEEN THE STOMACH AND TRANSVERSE COLON.—F. May (*München. Med. Wochenschrift*, No. 21, 1890) reports a case of fistulous communication between stomach and transverse colon, in which the diagnosis was made during life. A patient, aged 47, suffered from feculent vomiting, which was treated by lavage of the stomach. It was noticed that soon after the lavage, the patient evacuated a portion of the fluid per rectum, and that by rectal insufflation of gas, immediately

after the distention of the ascending colon, the stomach was inflated.

With the possibility of closing the fistula in mind, an abdominal section was undertaken, when the malignant character of the process was discovered, and no further operation was attempted.

A week later the patient died. At the post-mortem a communication the size of a man's fist was found between the stomach and colon. This fistula had already existed four months, yet the patient was able to take and digest large quantities of food. No undigested food was ever found in the stools.

FIBROMYOMA OF THE FALLOPIAN TUBE.—Dr. Schwartz (*Revue d' Obstétr. et de Gynéc.*, 1890) describes a case of "fibroid" disease of the tube, or, at least, of a fibromyoma developed in the broad ligament investing the tube. The patient was fifty-four years old. She had suffered for a twelvemonth from severe pains, and every fortnight free flooding appeared and lasted several days; before it began, the patient suffered from epileptic convulsions. The tumor was of the size of an egg, and was attached to the tube by a pedicle one inch long, and as thick as a man's finger. The tumor was simply removed, as the tube and ovary were healthy and were, therefore, left alone. A fortnight after the operation there was flooding for two days, but no fits.

PROF. KEEN recently operated on a man seventy-five years of age for hydrocele, doing a radical operation. After removing the tunica vaginalis, which had become enormously thickened, he stitched the edges together with a continuous suture, so that any small vessels remaining bleeding would be checked in this way. A rubber tube and horse-hair were used for drainage. The rubber tube, he says, should be removed in twenty-four hours; the horse-hair in three or four days; and, at the end of five or six days, remove the stitches.—*Times and Register*.

PROF. BRINTON, at a recent lecture, gave the class the following plan for making filiform bougies: Take a whalebone strip, which, when split in two, will make two bougies; cut off the end perfectly square, then make a round or olive point by rotating the end on a piece of emery paper; to make the neck, make a series of incisions, and, commencing three inches from the point of the filiform with the edge of the knife, scrape toward the point; the neck should slope gradually to the point, then it should be made to pass through a tunnel catheter, and, lastly, finished by passing a number of times through the catheter.—*Times and Register*.

WOULD BE TEMPTED.—An editor, who does not mind a joke at his own expense, says he went into a drug store recently and asked for some morphine. The assistant objected to giving it without a prescription. "Why?" asked the editor; "do I look like a man that would kill himself?" "I don't know," said the assistant; "if I looked like you I should be tempted."



THE  
ALBANY MEDICAL ANNALS:

JOURNAL OF THE

*Alumni Association of the Albany Medical College.*

W. G. MACDONALD, M.D., EDITOR.

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INTERVIEWS WITH PHYSICIANS.

The *Evening Union* of March 24th gives, under the above title, an interesting account of a discussion held by the New York County Medical Society upon the following topic: "Under what circumstances and to what extent may members of the medical profession properly permit their names and opinions to be published by the secular press?"

We have been expecting to hear that this subject would receive attention at the hands of the profession, in view of conditions now prevalent. It is a matter of some curiosity to know who proposed this discussion, whether it was proposed by the gentlemen who have been interviewed, widely quoted and perhaps extensively advertised by the daily press, or by gentlemen who have not had the pleasure of "seeing one's self in print." The discussion seems to have been, in the main, satisfactory to the reporters. Particularly gratifying to them were the remarks of a well-known specialist in genito-urinary surgery, who took the "sensible view" of the matter, and said:

"I think we are all sensible of the fact that if a newspaper wants a particular item of medical news it will get it by hook or by crook, and it seems to me far wiser for a physician, if he is consulted, to state his opinion, or, better yet, to write his opinion upon a subject, than to allow a distorted view to get into the papers."

His conclusions as to the main question were affirmatively as follows:

1. In cases where our opinions are sought for in regard to matters relating to the public health.

2. Where our advice or opinion is sought in regard to new or unusual methods of treatment.

4. Although not strictly pertaining to this question, perhaps it is permissible for physicians to advertise their names and addresses in the public prints, and in my individual belief there can be no serious detriment in a physician stating the fact that he treats a certain class of diseases.

We were not aware until now that there was a member of the New York County Medical Society who is so excessively timorous that he cannot withstand the demands of the reporters. The newspaper reporter is ingenious, energetic and persistent, but the methods by means of which reporters have succeeded in extracting unwilling opinions and reports of cases occurring in private practice are beyond our comprehension. We hope those reporters will remain in New York, for we fear that with the less sophisticated members of the profession residing in suburban or purely rural districts they would succeed in drawing from them the very secrets of their lives. Of course, there can be no objection to advertising one's business directly in the public prints. What an agreeable spectacle it would be to see the advertisement of our prominent specialists and professors or the modest card of the gentleman just quoted sandwiched between the advertisements of "Big G" and "S. S. S." in the medical department of a metropolitan daily. Or the opinion of a distinguished professor of internal medicine printed in a column parallel with advertisements of Dr. Green's Nervura or Scotch Oats Essence. Naturally no objection can be raised. Young gentlemen with a large stock of opinions, a little shop-worn, but really very serviceable and of full width, may advertise a "bargain day," or a "grand closing-out sale," before opening with their new spring styles. Of course, all of these things can add only to the general esteem in which we are held by the public and assist in maintaining the dignity of a "learned profession."

The press have found, so they say, a doughty champion in the distinguished editor of a justly esteemed and influential medical journal, who had this to say :

"The press have had a good deal said against them that they do not merit. As a rule the members of the press are very intelligent. As one who is brought into constant contact with them, I have been surprised by their knowledge even of medical subjects. When Dr. Koch's discovery was announced, I found in the short space of forty-eight hours these men had seen bacteria with the microscope, knew all about tuberculosis, and could talk more intelligently on it than many candidates for hospital appointments. I have had a con-



siderable number of personal interviews, and I have never seen any particular misrepresentation on the part of the members of the press of any remarks made in a straightforward and truthful manner."

This is also somewhat peculiar. We are at loss to know how a gentleman busied in a special profession as an editor and practitioner can have occasion to be in "constant contact" with members of the daily press and know so much of their knowledge of medical subjects; yet, to the readers of the metropolitan press it is very obvious. A wonderful adaptability do these reporters have, for, not in "a brief moon," but in two days, have they learned more of tuberculosis than many men have acquired after three or five years of special study.

This is an important, if not vexatious, problem that confronts us. After a careful study of the subject, the ANNALS is unable to see how humanity has been benefited or the medical profession has maintained its dignity by popular newspaper medical interviews or essays. We are very sure the unscrupulous in the profession seize upon it as a ready means of notoriety and pecuniary gain. It also will appear, we think, that the present code of ethics, in spirit as well as letter, provides the most dignified method of the disposal of interviews, and the one which, in the future, as in the past, is likely to be most productive of good.

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#### THE STATE BOARD OF MEDICAL EXAMINERS.

At last, after much agitation within the medical profession and among the laity, the law designed to regulate the practice of medicine in our state, has assumed a practical shape and, in accordance with chapter 507 of the Laws of 1890, the Regents have appointed State Boards of Medical Examiners as follows: From the Medical Society of the State of New York—for three years from September 1, 1891, W. W. Potter, of Buffalo, William S. Ely, of Rochester, and Maurice J. Lewi, of Albany; for two years from September 1, 1891, William C. Wey, of Elmira, and George R. Fowler, of Brooklyn; for one year from September 1, 1891, J. P. Creveling, of Auburn, and Eugene Beach, of Gloversville. From the Homœopathic Medical Society of the State of New York—For three years from September 1, 1891, William S. Searle, of Brooklyn, Horace M. Paine, of Albany, and Asa S. Gosh, of Fredonia; for two years from September 1, 1891, John McE. Wetmore, of New York, and Jay W. Shel-

don, of Syracuse; for one year from September 1, 1891, E. E. Snyder, of Binghamton, and A. R. Wright, of Buffalo.

It seems to us that the Board of Regents have exercised a rare and commendable discrimination in the selection of the members of the examining board. There is not a single member to whom the slightest objection can be made. The nominations of the Homœopathic Society have also been from among their most liberal and progressive members. The geographical distribution of the membership has been fair, all sections of the state being represented.

From our personal knowledge of the members, especially of those appointed from the State Society, we are sure that their work will be well done. None of them are connected either directly or indirectly with the faculties of any medical college, yet all of them are men of large experience and irreproachable standing in their respective communities. We can rest in the assurance that the examinations will be conducted with absolute fairness, and that, which is equally important, gentlemen will only receive certificates who are able to show a reasonable preparation and fitness for the practice of medicine.

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#### THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

The agitation of the subject of the removal of the *Journal of the American Medical Association* from Chicago to Washington is receiving much attention. We are at a loss to understand minutely just why this change is desirable. The arguments in favor of Washington are: That it is the capital of the country; is the appropriate home of the journal of our national medical association, and that the Library of the Surgeon-General's Office may be used in a way to materially benefit the *Journal*. Neither of these arguments carry with them an overwhelming amount of conviction. The annual meetings of the American Medical Association have never been held continuously in any one city, nor does it seem desirable that the association should be permanently located. True, Washington is the political center of the country, but it surely is neither the center of science nor medicine. Its location is not so favorable for the distribution by mail of the *Journal* as Chicago.

For ourselves, we are unable to see what advantages are to be derived from a closer association of the *Journal* with the Library of the Surgeon-General's Office. There certainly can be no intimate or official connection between the two. From the character of the



*Journal*—being chiefly the report of the proceedings of the American Medical Association, each successive number being a part—we can see no advantages to be derived from the Library that the *Journal* does not already possess. Nor does any change in the editorial management or the character of the *Journal* seem at the present time desirable.

Before closing, there is one more subject which demands our attention as a profession, however distasteful it may be. We refer to medical politics, which, in recent years, have figured altogether too extensively in our national societies. The readers of our medical journals for the past year will not fail to remember characterizations of medical gentlemen in this connection which, to be most charitable, must be called undignified. Nearly all societies have, we fear, a proportion of membership whose chief energies are devoted to managing things. They are especially solicitous that there shall be a fair division of honors *among themselves*, very much to the disgust of members who have that antiquated notion that medical societies were not solely organized to increase the number of titles men may like to see appended to their names, but rather for the reports and discussion of matters appertaining to scientific medicine.

We are led to believe that this contemplated removal of the *Journal of the American Medical Association* has entirely too much politics—especially of the self-interested variety—in it, and it appears to us that its accomplishment is fraught with many dangers to the continued prosperity of this valuable journal.

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#### ST. PETER'S HOSPITAL.

This useful and honored institution presents again its annual statement of work done, and its needs for the ensuing year. Just now, St. Peter's Hospital has an increased burden to bear, in the paving of Broadway and of North Ferry street. Eighteen hundred dollars has been required for city taxes for this purpose. It seems to us unjust that an institution devoted—as this one is—to almost purely charitable work, should yet be compelled to help bear the burdens of taxation. And the more the shame, when we know that this hospital maintained the accredited charitable work of the poor department of this city, at a loss of nearly two thousand dollars, during the past year, to say nothing of nearly nine hundred dollars' worth of work for which they received no compensation whatever;

or an outlay of nearly four hundred dollars in excess of all the donations received. Six thousand treatments were gratuitously given in the out-door department, together with seven thousand prescriptions. The in-door department was occupied to its full capacity during the year and the service has been most excellent. The attending staff have been regular and conscientious in their visits. The nursing and management by the Sisters of Mercy has been most commendable.

St. Peter's Hospital is doubtless greatly embarrassed by debt, there being a funded mortgage for thirty thousand dollars. It is a very sad commentary, that a necessary and well-managed institution is compelled to pay an interest-rental upon the very building which it occupies. We hope that the management may this year receive not only enough to satisfy their urgent demands, but also a generous contribution toward the reduction of its permanent debt.

The necessity of placing our hospitals upon a better financial basis must be patent to all, if we are to adequately fulfill the demands placed upon them. We wish that we were strong enough to suggest and carry out some means for their relief. There is a plan which as yet has never been tried in Albany, as far as we know—Hospital Saturdays and Sundays. In other cities—notably London and New York—this plan has worked well and has been a source of considerable annual income. With proper organization a vast number of small contributors may be reached who do not now give any thing for maintaining our medical charities. Small contributions by a great many are better than large ones by a few, for an increased number of contributors means an increased number of people interested, and it follows, we think, that if we can only get a sufficient number of people acquainted with and interested in hospital work, the disagreeable question of hospital support by voluntary contributions is carried a long way toward solution.

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#### THE ALBANY HOSPITAL.

The Governors of the Albany Hospital, in conformity with their usual custom, have presented their annual statement of expenditures and work done, together with an appeal to the citizens of Albany for voluntary contributions for the maintenance of the hospital for the coming year. At least six thousand dollars will be required, over and above the income of the hospital, for its maintenance in its present state of usefulness.



We are glad of the opportunity of presenting the management of the Albany Hospital to our readers and incidentally to point out some of the wants of that institution and to correct certain false impressions which have from time to time been current in our city. First, an impression has been pretty generally prevalent that the hospital received from the municipal authorities four dollars a week for each patient in the wards who is not able to pay his own expenses. This is only partly true. For the year ending February 28, 1891, the hospital received compensation from the poor department for fifteen hundred weeks' service, at four dollars a week. At the same time, it furnished eight hundred weeks' service for which it never received a dollar from any source. It may be added that, by actual calculation, the average weekly expense of maintaining a patient in the wards of the Albany Hospital is above five dollars; so that the hospital actually performed four thousand dollars' worth of purely charitable work in the in-door department, besides sustaining a loss of over one thousand and five hundred dollars in the care of patients who were presumably sustained by the department of municipal charities; or in all a sum more than a thousand dollars in excess of the sum obtained through the last appeal. This apparent deficiency has been made up by small special donations and by economic management of the proceeds derived from the private rooms. The ambulance has until recently been a source of misunderstanding. The hospital has never received a dollar for the police service that it has rendered, although it has been maintained at an expense of nearly three hundred dollars a year.

During the year, nine hundred and forty-nine patients have been treated within its walls; a number exceeding that of any hospital outside of New York and Brooklyn. In the out-door department, seven thousand treatments were received by patients, exclusive of the large number of people who received medical advice at the free clinics which are maintained throughout the year. Three thousand prescriptions were compounded and given to needy patients. The total expense of the out-door department is met by the hospital fund. The amount of work this year has been an increase over that of previous years. The hospital has been filled to its full capacity about all of the year. The lack of ward accommodations has compelled the withdrawal of the ambulance from service on different occasions. The other hospitals of the city have also done an increased amount of service during the year.

The question clearly presents itself: What are we going to do for increased hospital service? Shall we increase the size of our present hospitals? Shall we build new ones, either to be supported by voluntary contributions or municipal tax? The building of new hospitals involves a large expenditure of money and the employment of an increased number of officers and nurses, which at present does not appear to us feasible. Again, it is exceedingly doubtful whether the building of a municipal hospital, under the care of the department of public charities, can be undertaken. Our city has already a very high assessed valuation and the tax rate is not low. Already we have a bonded debt, which should not be increased except for the most obvious necessities. The administration of large or relative hospitals is much more economical than that of smaller ones. The Albany Hospital may point back to more than one-half a century of usefulness and is inseparable from the growth of our city. True, it has had its hours of adversity, but never has been dishonored. It was founded by men whose memories are cherished by us all. Alden March, who did so much to establish Albany as a center of medical education, labored industriously for its organization. From its central location, it must be the chief receiving hospital of the city. From its history and associations, it will long be sought by patients from a wide circle of the surrounding country. The necessities are clear, and to our mind the solution of the problem is not attended by unsurmountable difficulties. The Albany Hospital should be enlarged: first, by the addition of sufficiently large wards for the increased demands of the department of public charities and for further provision for the reception of ambulance cases, so that many unfortunate scenes need not be repeated; and second, but not less important, an increase in the number of private rooms, which, as in the past, may yield a revenue to assist in making up the deficiency in the charity wards. Unless we can have these increased facilities, patients who have been coming to Albany for treatment are going to slowly and surely gravitate elsewhere, not only to the direct damage of our city, but to the damage of our medical college, as well. We are of the belief that twenty-five thousand dollars would cover the necessary expense of needed additions to the Albany Hospital, and that that amount can be easily secured, if an earnest effort is made. The citizens of Albany have contributed liberally for the building of association buildings and public halls. Is there any reason why they will not contribute as liberally to the establishment of a public charity, which is more clearly necessary?



We believe that the time has now come when the Board of Governors of the Albany Hospital may appeal with confidence to the people of Albany for the necessary funds required for these much-needed improvements. We trust that they will receive at least the amount called for in their annual appeal.

Yet another word: It cannot but have attracted the attention of many of the readers of the statement of the Board of Governors of the Albany Hospital, not only this year, but in many of the years gone by, that no recognition is given to the labors of the attending staff. We are sure that they are not unconscious of the value of the services of the members of the staff—services which, although not advantageous to the givers, are very often accompanied by many self-sacrifices, especially upon the part of the senior member of the staff. While we do not care to detract from the credit due to the Board of Governors of the Albany Hospital, for their able management of its affairs, we cannot help thinking that the credit for the fair name of the hospital is equally due to the conscientious services of the Attending and Resident Staff.

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#### SHOEMAKER ON HEREDITY, HEALTH AND PERSONAL BEAUTY.

The editor of the *American Lancet* is in a somewhat troubled state of mind regarding this volume, and complains in a recent number: "We are at a loss to understand the author's preface, nor are we clear as to the purpose he had in mind when he wrote the book. It does not seem to be either for the laity or the profession. It reads more as if he had spent dreamy autumn days in dictating his impressions and beliefs to an undefined audience. Heredity, health and personal beauty are important factors in individual lives, and to the transcendental the discussion before us may prove soul-satisfying. To most mortals we suspect that it will seem as if much space were consumed in pointless and profitless discussion. As might be expected, those chapters relating to dermatology are most satisfactory to the reader, but even these are more satisfactorily discussed in the author's work upon skin diseases."

It is very comforting to find that "a shade of sadness" comes into the lives of others. We had felt after reading "Heredity, Health and Personal Beauty" that nature had been more than unkind to us, or that iron-handed necessity had crushed out from the mind all those beautiful conceptions of the æsthetic which are the peculiar joy of a cultivation. But we find others, so we are partly relieved of our sorrows. We cannot quite understand the book.

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CLINICAL LECTURE.\*

CATARRHAL CONJUNCTIVITIS—GRANULAR LIDS—PLASTIC IRITIS  
—TRAUMATIC IRITIS—CHALAZION—HYPERMETROPIA.

BY C. S. MERRILL, M.D.,

*Professor of Ophthalmology and Otology, Albany Medical College.*

REPORTED BY C. H. MOORE, M.D.

*Catarrhal Conjunctivitis.*—The first case which I shall present to you this morning, Mary D., aged 13, complains that for the past three weeks she has had trouble with her left eye. Has had very little pain, but a sensation as if sand were in the eye. The lids stick together mornings, and there has been a slight discharge from them most of the time. Examining the eye, you will notice that the conjunctiva of the lids is red and somewhat swollen, with little flecks of mucus here and there. There is also some congestion of the ocular conjunctiva and a slight tendency to ulceration at the outer edge of the cornea. The general appearance of the child shows that she is poorly nourished, and evidently does not live under good hygienic surroundings. This case is one of a class that you will frequently be called upon to treat—a case of catarrhal conjunctivitis. As a rule, they yield readily to treatment. I will prescribe for this girl a mild astringent lotion—

℞ Acidi borici, . . . . . gr. xvj.  
Zinci sulph., . . . . . gr. iij.  
Aquæ des., . . . . .  $\frac{3}{4}$  ij.

M. S.—Drop two drops in eye three times a day.

At night I would direct her to place between the lids a little vaseline. It will be well to-day, in view of the tendency to corneal ulceration, of which I have spoken, to drop a drop of a solution of atropine (four grains to the ounce) into the eye. Attention should also be given to the general condition of the patient and the health improved. I would give syrup ferri iodide, gtt. x, three times a day.

\* Delivered at the Albany Medical College, February 13, 1891.



*Granular Lids.*—Our next patient, Mrs. N. C., aged 48, is one of that class that form a large proportion of the cases that we treat at our eye dispensaries. This woman has had granular lids for years, and has been under treatment at different times in other cities. She first presented herself here about three weeks ago. At that time both corneæ, beside presenting cicatricial evidences of previous inflammation, caused by the roughened surfaces of the lids, were the seat of considerable acute inflammation and marked corneal ulceration. The treatment pursued was at first two leeches to each temple, counter-irritation by means of tincture of iodine painted on the brows, and the use of atropine. Later the lids were everted and touched lightly each day with a crystal of sulphate of copper. She was also directed to use the following :

℞ Aluminis, . . . . . gr. vj.  
 Zinci sulph., . . . . . gr. iiij.  
 Aquæ des., . . . . .  $\frac{3}{4}$  ij.

M. S.—Two drops in each eye three times a day.

Her condition to-day is much improved, and if she is able to fully realize the importance of constant treatment over an extended period, and will avail herself of it, much more improvement may be looked for ; but, like many of her class, she is already impatient and anxious to leave.

As a companion case, I would present this man, Adam L., aged 36. He has also had granular lids for many years. He first came under my observation about two months ago, at which time his condition was pitiable. A perforating ulcer had already destroyed the integrity of the right cornea, and both eyes bore unmistakable evidences of granular lids of long standing. His treatment was in part similar to that of the preceding case, except that I ordered for him a weak solution of glycerite of tannin to be dropped in his eyes once a day. When I first saw him, he was unable to get about without assistance, but now his vision is very much improved. We may look for even more, but little in that respect can be hoped for as regards the right eye.

*Plastic Iritis.*—The next patient, G. W., aged 22, says he never had any trouble with his eyes until about a week ago. He then noticed that his left eye became red and inflamed, there was considerable pain extending from the eye to the brow above, and more severe during the night. His vision, which he is sure was as good in that eye as in the other, became much impaired, and has remained so. On examining the eye, you will notice that the iris is of a muddy

tint. As I shade the eye with my hand the pupil responds very sluggishly to light and shade. Around the cornea is a zone of ciliary congestion. He has been under no treatment as yet.

Let us put a drop of atropine in the eye and observe the effect. Now you see a pupil partially but irregularly dilated; above are two points and below one where the iris is adherent to the anterior capsule of the lens. These adhesions are termed posterior synechiæ. This is a typical case of iritis, one of the most important diseases the eye is subject to—a disease often acute in its onset and rapid in course; if not early recognized and promptly and properly treated, almost invariably causes permanent injury to the eye. The causes are various, but syphilis and rheumatism furnish by far the largest proportion of cases. Injuries to the globe or iris, exposure to cold and wet, and excessive straining, also, cause this disease. It may occur secondary to other diseases of the eye.

On questioning this young man, he admits having contracted a syphilitic sore about two months ago. Beyond this sore and a falling out of the hair, he has had no other symptoms to indicate syphilis, until his eye became inflamed.

This, then, is a case of plastic iritis, specific in its origin. It is called plastic because of the exudation of lymph that has caused the adhesions you have noted.

Now, as to treatment, the early and free use of atropine is indicated, using a four-grain solution and dropping two drops in the eye from four to six times a day. He should remain quiet, not use his eyes, protect them from the light by wearing dark glasses, and abstain entirely from liquor and tobacco. I would also give him mercury, preferably the corrosive chloride, a twenty-fourth of a grain combined with tincture of cinchona, three times a day. It may be necessary to apply leeches to the temple.

This next case, F. C., aged 25, is also one of specific iritis. At present the right eye is affected, but last fall he had a similar attack in the left eye, from which he has recovered. His right eye has been troubling him about three weeks. He admits syphilitic infection, and has been constantly under appropriate medication since his appearance here last fall. His right eye, notwithstanding the treatment, does not improve as rapidly as it might, but then, his home surroundings are against him. I have no doubt that if this patient would enter the hospital, thus putting himself under better hygienic conditions, we would see a marked improvement within thirty-six hours.



*Traumatic Iritis.*—The next case, Wm. G., aged 37, is one of a class of cases you may be called upon to treat at any time. While engaged in shovelling coal, four days ago, he was struck in the right eye by a piece of coal, he thinks about the size of a walnut. He has had nothing yet in the way of treatment, except the application by himself of raw beef to the eye. He says that he suffers a great deal of pain. As you look at the eye, you will notice that there is a great deal of ciliary congestion. At about the center of the cornea is a whitish spot, but if you will allow the reflection from a window to pass over it, you will see that the surface of the cornea is unbroken. Around this spot is a haziness of the cornea, and above, scarcely discernible by this light, is a minute black speck, imbedded in the cornea. His vision with this eye is only a perception of light. The iris is muddy in hue and responds very slowly. As a result of the injury, this man has a corneal abscess, due to the force of the blow from the piece from which no doubt came the small particle you see above. But he has more; he has a severe traumatic iritis, and his eye must be carefully watched if we would save it. I would advise him to enter the hospital, would remove the foreign body, imbedded in the cornea, apply two leeches to the right temple and use atropine in that eye every three hours. If the inflammatory action is not less, by to-morrow, ice cold applications should be made to the eye. In a case of this kind, your prognosis should be guarded.

*Chalazion.*—The next two patients, Katie B., aged 14, and Thomas K., aged 40, present on their right lower lids a form of small tumor that you will often see, both on the lower and upper lids. It is what is termed a chalazion and is due to the obstruction and distention of some of the follicles of the tarsus, more frequently the meibomian. When small, these tumors are not troublesome, and they occasionally disappear without treatment; sometimes they go on to suppuration. Their removal is not difficult and is done as I will show you on these cases. Standing behind the patient, I evert the lower lid, then with this Beer's knife I make an incision into the tumor at right angles to the edge of the lid; with this small spoon-shaped instrument, the contents are then scooped out, which you will observe are of a glairy, cheesy-like nature. For a day or two, owing to the cavity filling with blood, the tumor will seem as large as before, but this will gradually disappear. It is sometimes necessary to remove them from the outer side of the lid; in these cases the incision should be made parallel to the edge of the lid.

*Hypermetropia.*—The next patient, Miss Ella B., aged 24, com-

plains that when she uses her eyes at near work, such as reading or sewing, although she sees distinctly at first, after a few minutes the letters seem to run together, her work blurs before her eyes, and if she persists, pain in the eyes and headache ensue. In other words, she has what we term asthenopic symptoms. Testing each eye separately, it is found that she has  $\frac{2}{30}$  vision in either; that is, she is able to read at twenty feet, those letters on the Snellen test card; that observation and comparison of cases have shown the normal eye is able to read at that distance. If I place a convex glass +60 before either eye, she is still able to read the same line distinctly; a stronger glass blurs the letters; but placing a +42 before each eye and allowing her to use the eyes together, she sees the letters as distinctly as without any glass. She has what is termed a manifest hypermetropia of a forty-second. The ophthalmoscope shows her total hypermetropia to be about a thirtieth. I would order for this young woman a convex 42 and let her use it for all her near work. By means of this glass we will relieve the eyes from the strain that the error of refraction causes and I have no doubt she will have much comfort from their use.

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## THE ETIOLOGY OF THE INFLUENZA.\*

BY HOWARD VAN RENSSELAER, PH.B., M.D.,

ALBANY, N. Y.

*Lecturer on Materia Medica in the Albany Medical College.*

When considering the modern views on the etiology of the various epidemics of influenza, it is interesting to delve a little into the past and see in what light our predecessors viewed it.

Epidemics of influenza have been known for many centuries; the first one of which we have any definite account having taken place more than two thousand years ago, among the soldiery of the Athenian army in Sicily, B. C. 415. Since then, fragmentary accounts of various smaller epidemics during the dark ages have been handed down to us. The earliest accurate report of more modern times is that of the serious epidemic in Great Britain in 1510. From that time to the present there have been similar epidemics, many of them slight, but about twenty important ones, twelve of which were in this century. These varied considerably in severity and in the character of their symptomatology. In nearly all of these the cause was referred to some meteorological or telluric influence, as, for

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\* Read before the Medical Society of the County of Albany, April 29, 1891.



example, comets, earthquakes, volcanic eruptions, swarms of caterpillars, locusts, birds, insects, and mice. Many of them considered the cause to be due to fogs—foul, fetid and stinking, as they were variously characterized—which at the time were unusually prevalent. They were also thought to be the precursors of cholera.

The recent epidemic started, probably, in Kolomna, a little village south of St. Petersburg, in Russia, about the last week of October, 1889, and traveled at once to the capital, prostrating one-half of the population within three weeks. Once started, it spread out, fan-like, towards the west with amazing rapidity, and reached our own shores in a little more than six weeks. It swept rapidly through the United States, and apparently died out. It made its reappearance, however, on our western boundary a short time ago, and has gradually worked its way east.

The question in our minds at once arises as to whether the poison is of a miasmatic, a contagious-miasmatic, or a pure contagious origin. The very great rapidity of its dissemination would seem to favor the first.

It is impossible, however, that all the germs could have come from one place, and is extremely unlikely that suitable elements for the growth of the germ would be present in soil of such widely varying conditions of moisture and of temperature as would be found from the most northern to the southernmost latitudes of Europe, each capable of setting up independent foci. Then, again, the prevailing winds at that time were toward the east, so that if it was of a purely miasmatic origin the disease should have been swept by it towards the Orient.

Its course westward is interesting and instructive. In Russia, where railroads are few and travel slight, the disease took nearly a month to spread; but just as soon as it fairly reached Central Europe, with its vast network of railroads, its progress was of astonishing rapidity.

Were the poison carried alone by the wind it should infect, at the same time, large cities, hamlets and lonely farms. Such was not the case; for we find the metropolis suffered first, then the smaller towns, and finally the rural communities.

Then, again, its course was much modified by natural obstacles, as mountain ranges and seas. In those countries, hemmed in by these safeguards, Spain, Italy, England, and the Balkan states, it appeared among the last, and finally reached Norway. It did not seem to spread to the latter country from Sweden, which was early

attacked, but by the way of Denmark, its course having been checked by the intervening mountains.

To America and other foreign countries it was evidently carried by the steamers. Once having entered cities, it first attacked those who congregate in great numbers in large buildings, as in post-offices, banks, schools, factories, and among soldiers. Men were generally earlier attacked than women, and in general those of an out-door to those of sedentary habits.

From all these facts it seems probable that human beings act as hosts for the germs, giving them off to their fellows, and that the epidemic is not a miasmatic, but rather a contagious miasmatic, or a purely contagious disease.

During the past few years remarkable activity has been displayed by members of the profession in the realm of bacteriology. The tendency of all these workers has been to ascribe to micro-organisms the cause of all the infectious and contagious maladies. In many of these diseases the cause has been positively proved to be due to some micro-organism, usually to some species of bacteria. Reasoning from analogy, the other contagious diseases have been brought under the same head, though proof, in them, is as yet wanting.

As might be expected, at the onset of this epidemic hundreds of careful workers plunged ardently into the investigation of the micro-organisms which were supposed to cause the influenza. From these scientific and well-known bacteriologists have appeared negative results only. A certain amount of positive knowledge, however, has been obtained.

The various secretions, excretions and exudates have been carefully examined, as well as the blood and solid viscera. They have been studied by culture, inoculation and staining methods. The result of all this careful work is as follows: The blood was examined in its fresh state and by culture and staining. In the fresh blood some small moving bodies were found by Klebs and Kollman, but they could not be cultivated by any known method, and were not considered necessarily abnormal, as similar forms have been discovered in the blood of healthy persons. All other investigators found nothing.

Most of the examinations, however, have been made from sputa. As a result, several old forms have been found, in varying proportions in different cases. The most common forms were the diplococcus pneumoniæ, the streptococcus pyogenes, and the staphylococcus pyogenes aureus. There were in most of the cases a few



scattered forms, mostly air, non-pathogenic bacteria, of no special import. Where pneumonia was present as a complication, the diplococcus of Fraenkel and Weichselbaum was the prevailing form. No new bacteria have been identified.

From this very brief résumé of a great amount of painstaking labor, we may infer that the micro-organism which causes influenza, if it is a micro-organism, as most scientific people believe, probably does not belong to the group called bacteria.

The terms "bacteria" and "micro-organism" are considered by most people to be synonymous. But this is not so. The bacteria, about which we know the most, and which produce diseases like pneumonia, tuberculosis, erysipelas and typhoid fever, are but one division of micro-organisms.

Another variety which we are just beginning to learn about is represented by the plasmodium malarix, which causes malaria. This form has no connection at all with bacteria, and one which we are unable to cultivate by any known method.

There is another division, or probably divisions, about which we know, except by inference, nothing. In this division are the supposed micro-organisms which cause the exanthemata and yellow fever. To review very briefly, then, it seems probable—

(1) That the influenza belongs to a contagious-miasmatic or to a purely contagious disorder, the weight of evidence being that it is a contagious-miasmatic.

(2) That the pathogenic bacteria that have been found in the secretions and tissues of those suffering from influenza do not cause this disease, but that they have developed in large numbers in the body, because, during the progress of the malady, they have found conditions suitable for their growth and propagation; but that they may be the exciting cause of the complications.

(3) That there is much reason to suppose that the micro-organism which does cause influenza is not a bacterium at all, but may be allied to those supposed forms which cause malaria, or the exanthemata.

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BROKE HIM UP.—"Is the doctor in?" asked a tramp at the door of an Arch street physician yesterday. A few minutes later an oldish female came to the door. "I just wanted to see if the doctor wouldn't give me a pair of his old pants," said the tramp. "I'm the doctor," replied the lady. The tramp had several attacks of vertigo as he dropped down the steps.

CASES OF AURICULAR DISEASE TREATED BY MEANS  
OF THE CONSTANT CURRENT.

BY DR. EUG. STRAUVEN.

(TRANSLATED BY DR. W. F. ROBINSON.)

CASE I.—M. V. D., aged 60, peddler, good constitution, father of three healthy children, addicted to drinking. On account of his business, he is often obliged to remain for hours in the cold and the wet. He has suffered with lumbago and sciatica. For several days he has been afflicted, without known cause, with a very annoying buzzing in the left ear. This buzzing disturbs his sleep and at certain times it even prevents him from pursuing his business, on account of the intense dizziness which it causes. An examination of the ear showed only a slight hyperæmia around the margin of the tympanum.

The treatment consisted in placing the positive pole, attached to a small electrode, just in front of the ear, while the negative pole was applied to the fore-arm of the opposite side. A current of four milliamperes was applied for five minutes and then slowly withdrawn by means of the rheostat. The current caused the buzzing to cease completely and all the symptoms were very much relieved for about six hours. The trouble then returned, but with less intensity. The next day the treatment was repeated and the symptoms disappeared, never to return.

CASE II.—M. T. A., aged 28, engineer. Fifteen years ago he suffered from chronic otitis media, and since then he has been troubled with deafness and noises in both ears. They were of two kinds—a sort of blowing sound and the other a kind of crepitation, which rendered his life almost unendurable and gave rise to terrible headaches two or three times weekly.

The galvanic current stopped this crepitation absolutely for three or four days, at the end of which time it returned again with the same intensity. In this case the electricity, though in no sense a cure, was of the greatest possible value to the patient, since it relieved him for the time of this terrible annoyance, which not only rendered his life almost insupportable, but threatened to seriously affect his mental powers.

CASE III.—Mme. de P., aged 33, mother of two children. Has suffered for some weeks with deafness and buzzing in the ears. An examination of the ears revealed the fact that they were both filled



with wax; when this was removed the deafness was very much less, but the buzzing was unaffected.

The application of the galvanic current stopped the buzzing absolutely and after eight treatments the patient was discharged, completely cured.

The following cases show what can be done with electricity in ear troubles, but it must be understood that there are many cases especially of the chronic form, which are absolutely rebellious to all treatment of whatever kind, electricity included.

Since this great agent has cured so many cases, however, no case should be given up until a fair trial of electricity has been given.

#### NEURASTHENIA.

CASE I.—Mlle. R., aged 45, belongs to a very nervous family. At the age of 20, she was compelled to leave the paternal roof, on account of family troubles, and lead a life of excessive intellectual labor and struggle, which sufficed to upset a nervous system already affected by hereditary nervous taint. She presented the following symptoms: Persistent frontal headache, memory and intelligence both enfeebled; she cannot fix her attention for any length of time on the same thing and is obliged to vary her occupations; obstinate insomnia, sleeps only an hour or two; loss of appetite and, as a result, pronounced anæmia.

The treatment was directed to the two principal symptoms, the anorexia and insomnia. For the former, the whole list of stomachics were tried; they were not only without effect, but they brought on occasional attacks of gastralgia. The insomnia showed itself equally rebellious to the treatment by drugs. Chloral, morphine, codeine and sulfonal, all were of little or no avail. Hydrotherapy was also tried, but on account of the poor general condition of the patient, reaction did not take place after the baths, so that the result was only to enervate her all the more. Nothing remained but electricity, and this was accordingly tried, with most satisfactory results. Mild galvanization of the brain was first tried, but the patient's nervous condition was such that she could not stand it. Recourse was then had to cutaneous faradization, by means of the wire brush, applied to the back of the neck, shoulders and arms. The treatment lasted ten minutes and was repeated every two days. After three treatments the headache disappeared. The sleep returned little by little, so that she was soon sleeping three or four hours a night. The melancholy and morbid condition of mind also

disappeared, so that the anorexia alone remained. This result was reached in about two weeks. Galvanization of the brain was now returned to and this time it was better supported. At the end of six weeks, the insomnia, melancholy and headache had disappeared and the appetite was growing stronger every day.

This case brings out strongly the power of the electric treatment, since six weeks of it had accomplished more than months of treatment by other methods.

CASE II.—Mlle. L. P., aged 28. Her mother was subject to attacks of nervous gastralgia, and her father had died of lung trouble. She leads an isolated, monotonous life, never going into society, but spending her time at home, reading, with the result of overtaxing her brain. Her symptoms were as follows: She was sad and melancholy, was disgusted with existence, had ideas of suicide and was troubled with insomnia, as well as enfeeblement of the mental faculties. She notices, herself, a certain want of coherence in her ideas, which troubles her very much. The digestive functions are torpid and menstruation irregular, often being absent for many weeks at a time.

I began the treatment of this case with galvanization of the brain, which was very well supported. After seven treatments she slept the whole night, and the morbid agitation had disappeared. At the end of two weeks, during which daily treatments were given, the patient was practically restored and went into the country to complete the cure.

In order to curé this malady completely, hygienic treatment must be used, and in many of the cases this treatment is essentially mental. A frequent cause of this affection is a prolonged tension of the mind, on account of the existence of a fixed idea. It is this dominant idea which must be removed and this is best done by changing the patient's whole manner of life. It is for this reason that a journey is often of so much benefit in these troubles.

Electricity has a great advantage over other forms of treatment in these cases, as it has no bad effect upon the digestive functions, as do the narcotics. On the other hand, it stimulates these functions and in this way improves the patient's nutrition. Another advantage is that there is no danger of its becoming a habit, as is the case with morphine, chloral and the like, since the electricity may always be stopped without inconvenience to the patient.

I submit these cases and these reflections to my honorable colleagues, in the hope that they will themselves be induced to verify their truth.



## ASSOCIATION OF THE ALUMNI OF THE ALBANY MEDICAL COLLEGE.

### EIGHTEENTH ANNUAL MEETING.

The eighteenth annual meeting of the Association of the Alumni of the Albany Medical College, was held in Alumni Hall, on Wednesday, April 1, 1891. The usual informal reception was held in the library, where coffee and sandwiches were served, photographs exhibited and greetings exchanged, between the hours of 9 and 11 A. M. The meeting was called to order by the president, Dr. Matthew H. Burton ('53), of Troy, N. Y., at 11 o'clock.

The following members of the association, together with invited guests, medical students, and others interested, were present: W. H. Snyder ('39); I. I. Buckbee ('41); W. H. Bailey, M. H. Burton, P. I. Stanley ('53); H. Bendell, A. Vander Veer ('62); A. B. Husted ('63); H. L. Bower, D. D. Drake, B. R. Holcomb ('64); L. Hale ('68); W. H. Murray ('69); D. C. Case, W. Hailes, R. H. Neefus, W. G. Tucker ('70); J. K. Thorne, G. L. Ullman ('71); A. V. H. Smyth ('75); S. A. Russell ('77); G. P. K. Pomeroy ('78); E. A. Bartlett, W. J. Nellis ('79); C. B. Herrick ('80); A. E. Abrams, F. L. Classen, C. M. Culver, C. C. Duryee, N. Everest, T. W. Nellis, J. O'Connor, E. P. Van Epps, W. B. Webster ('81); H. R. Powell, W. W. Scofield ('82); J. V. Hennessy, C. G. Hickey, W. C. Marselius ('84); T. L. Carroll, S. C. Curran, A. Marsh ('85); J. F. Fitzgerald ('86); W. G. McDonald ('87); G. E. Lochner, R. F. Macfarlane ('88); A. H. Bayard, A. M. Burt, A. G. Losee, C. C. McCullough ('89); W. H. Happel, F. W. Loughran, G. P. Moston ('90); M. W. Brown, J. H. Cobb, W. H. Conley, C. E. Davis, F. E. Dean, F. E. Deuerlein, J. W. Droogan, J. Freedman, E. L. Johnson, J. W. Joslin, J. E. Kelly, W. N. Knowlton, R. B. Lamb, L. LeBrun, S. LeFevre, W. A. Miles, L. R. Oatman, J. C. O'Haire, G. H. Reynolds, W. B. Saltsman, W. O. Scott, A. B. Simmons, H. A. Staley, J. H. Timmers, A. B. Van Loon, G. J. Van Vechten, G. A. Williams, J. W. Wiltse ('91); J. P. Boyd, H. Hun, F. Townsend, S. B. Ward (honorary).

The president introduced Professor Samuel R. Morrow, M. D., who delivered the following address of welcome to the alumni on behalf of the faculty of the college:

### ADDRESS OF WELCOME.

*Mr. President and Gentlemen of the Alumni Association:*

A pleasant fate has assigned me the duty of extending to you the hearty greeting of the faculty and their invitation to the fullest enjoyment of the good things provided to-day, mental, material and social.

The exactions of a busy life afford so few opportunities of social intercourse among professional brethren, that occasions like this are treasured up in memory among its dearest

possessions. And as the questions we most often ask one another here relate to our success and prospects, the faculty desire to anticipate your inquiries as to the way in which they are discharging their obligations, by a full statement of what they have accomplished and propose to attempt. We feel that it is your right to know what we are doing, and the increasing attendance on these meetings shows the interest you have in the old college that gave you birth and your desire that the advantages she offers shall be enjoyed by a steadily increasing number of students.

The past year marks a distinct epoch in the progress of medical education in our state and an equally decided advance in the methods pursued in the college to meet the new conditions. My chief object, this morning, is to excite anew your interest in the vital subject of more thorough training in the subjects of undergraduate study.

During the past year a few changes have been made in the faculty. After fifteen years of valuable service, which has impressed the students with a deep sense of his earnestness and enthusiasm, Dr. Balch has resigned his chair and has been made Emeritus Professor of Anatomy. Dr. H. Van Rensselaer has been made Lecturer on Materia Medica and Drs. J. D. Craig and H. C. Gordinier, Lecturers on Anatomy and on the Anatomy of the Nervous System, respectively. It is proposed to add lecturers on special subjects and so give the students the benefit of the latest advances in the more practical applications of our science.

The changes in the curriculum, foreshadowed in Dr. Hun's address a year ago, have been largely carried out and have been found to commend themselves to both faculty and students, as is attested by their regular and interested attendance.

Perhaps the most radical of these changes have been made in regard to the first-year course. It has long been felt that the pressure of work bore with increasing severity on the more advanced students and that time was wasted in the early part of the course and habits of indolence fostered by the absence of any provision to enforce study, save by requiring attendance upon lectures. Accordingly, the experiment has been made the past year of requiring a final examination for first-year men in a part of their primary subjects, namely, histology, materia medica and inorganic chemistry. As a preparation for this examination, a full course of weekly recitations has been conducted, and the result has been so encouraging that the new plan will become a permanent feature of the course. An annual or test examination has also been held for the same class, on the remaining portions of the primary studies, and next year a similar examination will be required of the second-year men, on their senior studies.

In every department, additional lectures and clinics have been provided and a system of weekly recitations in each subject has been kept up. Furthermore, an effort has been made to increase the opportunities for acquiring practical information by a series of weekly conferences, at which the students reported before the class cases previously examined, which reports were then criticised both by professors and the class. Practical lessons in bandaging and the application of surgical dressings and in physical diagnosis have been given to the upper classes; and laboratory work, both in chemistry and histology, has been required of all first-year men, instead of those only who paid a special laboratory fee. Most of this extra instruction has been well and faithfully done by a corps of instructors chosen from our own recent graduates, to whom the thanks of the faculty are heartily given.

In this connection, it gives me much pleasure to mention the very great generosity of Dr. Hailes, who has just presented the college with his entire laboratory outfit of microscopes and accessories, to the value of \$2,000. The sole condition attached, which the faculty were only too glad to accept, is that the college shall purchase such an additional number of microscopes as shall give each student the use of a separate instrument. This munificent gift puts us in possession of one of the most completely equipped laboratories in the state, and makes it still easier to answer the question so often asked, whether medicine can be well



taught in a city no larger than ours. Some twenty of the famous universities of Germany, all with fully organized medical faculties, are in towns of much smaller size than Albany, and in this list are found such notable schools as Bonn, Göttingen, Halle and Heidelberg.

Another action of the faculty promises to add greatly to the importance of Albany as a center of medical instruction. I refer to our gift of the library of the college to the State Library. This has been made with the understanding that it will be kept as a separate and distinct department, as the law library has always been, where the books can be freely consulted by physicians from every part of the state and from which they may perhaps be taken or sent by mail, under special arrangement. The exchange list of our Alumni journal, the ALBANY MEDICAL ANNALS, includes many of the most important periodicals of our own and foreign lands, and during the past four or five years these journals have accumulated so rapidly that they form a considerable library by themselves. These, also, are to be turned over to the State Library, and it is the purpose of the director of the library to complete and to add to these files of journals, as well as to purchase all the new and standard works as fast as the appropriations which may be made by the legislature will allow. I am happy to say that the bill authorizing the State Library to accept our books and appropriating a handsome sum for the purposes mentioned will quite certainly be favorably reported and acted upon.

About the only alterations to be observed in the old building are seen in our meeting-place to-day and have grown out of the changes in the course of instruction just referred to. New chairs, suitable for an examination-hall, have been provided, and a number of convenient tables for the use of the workers in pathology and histology.

A reference to the valuable list of dates of commencement published in the catalogue for a year or two past, will show that during the last five years the length of the lecture term has been increased by one month, and it is proposed to lengthen it still further, so as to bring it up to the full limit of seven months.

The preliminary examination of students for admission to the college has been taken out of the hands of the faculty and has been assumed by the Regents of the University, by the law of 1889.

It was apprehended that these various changes, all in the nature of an increase in the rigor of our requirements, would result in a diminished attendance, but we are gratified to be able to report as large a number of students here the past year as in any year for a long period and that the last entering class was the largest ever matriculated in the history of the college.

The last change we have to report is the abolition of the thesis as a requirement for graduation. An examination of the catalogues of the medical colleges of the country shows that all the leading institutions have given up exacting a thesis, on the ground, no doubt, that its value as a test of the acquirements of the candidate for the degree, and of his fitness for practical work, has been exceeded by the modern method of clinical examinations.

Believing that these modifications of our course of instruction are in the line of genuine improvement and that the body of alumni will sustain and cooperate with the faculty in their endeavors to enlarge and dignify the opportunities we offer, I have again to bid you welcome and to assure you of our heartiest wishes for your personal and professional prosperity.

On motion of Dr. H. Bendell, the reading of the minutes of the last annual meeting was dispensed with, and the minutes as printed, adopted.

The report of the executive committee and recording secretary was then presented. It stated that two meetings had been held during the year. At the meeting held April 24, 1890, the printing

of the Alumni proceedings was authorized, and 1,200 copies were subsequently printed and distributed to the members of the association. The recording secretary presented a statement of the Alumni dinner account, from which it appeared that the receipts from tickets sold had been \$163.75; and disbursements as follows: Lunch at college, \$12, and for the Alumni dinner and cigars, \$241.25, total, \$253.25 (exclusive of printing, etc.), leaving a deficiency of \$89.50, which has been paid by the faculty of the college, as was also the postage upon the Alumni proceedings, amounting to \$24. At the meeting held December 18, 1890, the distribution of the proceedings was reported. A copy had been sent to each of the Alumni, together with a college catalogue and treasurer's blank. The following resolution, offered by the recording secretary, was unanimously adopted:

"*Resolved*, That the executive committee, acting for the Association of the Alumni, adopt the ALBANY MEDICAL ANNALS as the official journal of the association; Dr. W. G. Macdonald to be editor of the same."

The following class historians, on nomination of the historian, were appointed: '51, Dr. G. W. Pope, Washington, D. C.; '61, Dr. Thomas Beckett, Albany; '71, Dr. S. A. Ingham, Little Falls, N. Y.; '81, Dr. C. A. Chaloner, Stephentown, N. Y. The order of exercises for the annual meeting was discussed and the following committees were appointed: Arrangements of meeting, Drs. Tucker, Russell and Hale; lunch and dinner, Drs. Tucker, Bartlett and Nellis; speakers and toasts, Drs. Vander Veer, Bendell, Culver and Stillman; reception, Drs. Cook, Mereness, Babcock, Schoolcraft, Allen, Craig and Willard. The recording secretary reported that the number of names with addresses upon the Alumni list was 1,200, and the total number of graduates to date, 1,865. On motion of Dr. Ullman, the report was received, adopted and ordered placed on file.

Dr. Bendell moved that the president appoint a committee of five to nominate officers for the ensuing year. Carried. The president appointed as such committee, Drs. H. Bendell ('62), G. L. Ullman ('71), C. B. Herrick ('80), W. W. Scofield ('82) and R. F. Macfarlane ('88). The committee retired.

The treasurer, Dr. S. A. Russell, submitted his report for the year, from which it appeared that the balance on hand at the time of making the last annual report was \$66.55; receipts during the year, for dues, \$131, and for interest, \$2.86; total, \$200.41. Disbursements during the year, \$94.55, leaving a balance on hand of \$105.86. Following is a list of members who paid dues for the year:

Allen, W. L.	Entwistle, J. G. W.	Loughran, F. W.	Reynolds, T. B.
Abrams, A. E.	Eccleston, A. H.	Muller, H. F. C.	Swartwout, L.
Austin, H. N.	Ensign, E. L.	Martin, Leslie.	Smith, M. R.
Bailey, W. H.	Fitzgerald, J. F.	Maben, H. B.	Sloan, George A.
Bartlett, E. A.	Fleischman, D.	McCabe, C. P.	Strope, M. H.
Brumagim, P. A.	Fivey, R. E.	Mitchell, J. H.	Somers, L. J.
Burton, M. H.	Felter, M.	Marselius, W. C.	Smith, J. E.
Bendell, H.	Frisbie, C. M.	Moore, C. H.	Snow, F. S.
Burton, S. C.	Fish, W. B.	Macdonald, W. G.	Strickland, R.



Brooks, H. T.	Falk, J. W.	McLean, Le Roy.	Scollard, James I.
Bissell, J. H.	Gorham, F. C.	Moston, George T.	Stevens, F. J.
Barker, J. F.	Greene, F. S.	Munson, G. S.	Tefft, Charles B.
Beardsley, D. S.	Grant, C. S.	Morehouse, E. W.	Townsend, F.
Barnes, Edwin.	Harter, F. L.	Niver, E.	Terry, C. H.
Crawford, C. H.	Hennessy, J. V.	Nellis, T. W.	Tygert, M.
Cutter, John A.	Herrick, C. B.	Nellis, W. J.	Tucker, W. G.
Cotter, John H.	Hale, L.	Nellis, Jr., Alex.	Ullman, G. L.
Comfort, J. E.	Huested, A. B.	Newcomb, G. H.	Van Rensselaer, J. H.
Case, D. C.	Hickey, C. G.	O'Connell, R. S.	Vander Veer, A.
Curran, S. C.	Hailes, W.	O'Connor, J.	Van Allen, T. F. C.
Cook, D. H.	Hogan, G. L.	O'Flaherty, J.	Van Woert, Charles.
Crombie, W. C.	Hunt, R. M.	Powell, H. R.	Van Dyck, C. DeW.
Classen, F. L.	Hance, F. S.	Pendleton, L. W.	Veeder, L. T.
Clark, R. D.	Keenan, M.	Pomeroy, G. P. K.	Wicker, C. F.
Carhart, G. L.	Kenyon, J. D.	Poucher, J. W.	Wade, D. W. C.
Cotter, P. G.	Kimball, James P.	Prendergast, J. P.	Wey, W. C.
Culver, C. M.	Knapp, C. R.	Paine, N. E.	Wood, W. C.
Crothers, T. D.	Karner, E. B.	Perry, Jno. L.	Williard, T. H.
Clowe, C. F.	Laning, Henry	Powell, H. R.	Williams, R.
Drake, D. D.	Lewi, M. J.	Race, G. H.	Woodruff, R. A.
De Baun, C. W.	Lyon, Caleb.	Reilly, J. F.	Wilcox, T. E.
Dixon, J. C.	La Moure, U. B.	Ray, F. H.	Whitehorne, H. B.
Dana, Henry T.			

The report was referred to a committee consisting of Drs. W. G. Macdonald, T. L. Carroll and L. Hale, who examined the same, compared the disbursements with the accompanying vouchers and subsequently reported it correct. The report was then accepted, ordered filed and the committee discharged.

The president's address being the next order of business, ex-president Bailey was called to the chair, and President Burton delivered the following address :

#### PRESIDENT BURTON'S ADDRESS.

##### *Associate Alumni :*

From many places, from near and distant homes, we have come together at this happy occasion to mingle in friendly communion and to exchange such greetings as the day may call forth. It has devolved upon me to offer you the salutations and cordial congratulations which are now due, and also to offer to our young friends such words of counsel as my ability will permit me to utter. We come here to-day with the varied experiences of years. Here are the young upon whose brows the newly-won honors of Alma Mater will soon be placed, those honors brightening the vista of the future, adown which their mental gaze is now directed. Here are those of middle age, upon whom the meridian sun of life has cast his beams, illumining the dark spots in the past, and burnishing the coming days with the bright golden light of hope, health and happiness. Here are the aged, crowned with their wealth of days and rich with the fruits of well-spent lives. We all, from youth to age, meet to-day with a common sentiment of brotherhood. With deference and respect we greet those whose years of noble toil have brought them merited honor and renown, while we also offer wishes for the success of our young brothers who, to-day, flushed with the ambition of youth, begin in earnest the work of life. We are as brothers met under the roof-tree of home, solicitous, kindly, affectionate.

In the days elapsing since our last assembling as alumni, there may have come to members of this great family the crosses, disappointments, losses and cares incident to life and harassing to the ablest members of our chosen art. If there be some among us to-day who have suffered, they have our kindest sympathy, and we feel that, having cast their

cares and anxieties to the background for to-day, they will join us all in our determination to do our parts in manifesting interest in Alma Mater and in offering a welcoming hand and encouraging words to those now entering our profession.

I am aware that, upon occasions of this kind, a custom prevails for those addressing you to choose for discussion a theme of a character tending to enlighten or interest the profession. I am further aware that in the years long past our younger brothers have had, and in the years to come will have, a sufficiency of the "isms" and the "ologies" which attach to the struggle for knowledge in the medical profession and that our older brothers are even now upon the verge of impatient waiting for

"The moments when silence, prolonged and unbroken,  
More expressive may be than all words ever spoken."

Therefore, you will permit me, with right good will, I fancy, to skip the ground paved with Greek and Latin nomenclature, and in its stead pass off on your patience such plain, short speech as I can command. While having no design to dwell at length on any topic, I deem brief reference to the progress made in the science which we profess a part and fitting one at this time. Although progression has—some pessimists to the contrary notwithstanding—marked every stage of man's existence from the beginning, and though the light of civilization has steadily grown greater in the pathways of human progress, it is not upon the past, but upon the present age of improvement, advancement and invention, that a prophecy may be based, *that* the sum of all improvements gone before will, in the approaching years, be deemed insignificant and crude in comparison with what will then be present to man in his home here beneath heaven's dome.

The struggle for advancement, the progress made in all the arts and sciences has been great, but that made in medicine and its kindred sciences has been marvellous. The uncertainties of the practice of medicine have been reduced until, in the present day, we walk in a bright light, where formerly the shadows were so dense that we scarce could recognize the objects and surroundings when we sought them. The physician of to-day is not compelled, as of yore, to grope blindly for the source of and path followed by disease. He now knows its cause and can find means for its prevention. The powerful aid of the microscope has shown us the active agents causing disease, and consequently the means for eliminating or avoiding those causes. The same instrument has taught the surgeon that, in order to avoid the long train of life-destroying consequences which formerly threatened all of his operations, his instruments, bandages, sponges, even his hands, must be treated antiseptically; and the micro-organisms, the transmitters of disease and the organizers and disseminators of all the trouble following the work of the surgeon, must be sterilized and rendered innocuous, or totally destroyed.

Thus by aseptic surgery the skill of the operator is rendered effective, and the micro-organisms, which in less scientific work would follow to destroy his efforts for cure or elimination of disease, are destroyed or deprived of their evil powers.

Through the advance made in medicine the curse handed down from Eden has been raised. "In sorrow thou shalt bring forth thy children" is no longer an anathema on humanity. In the master lines of surgery there are now no attendant terrors. Operations once deemed fraught with imminent danger or regarded as too dangerous to life are now daily performed under little, if any, risk. Pain is not present and results are not uncertain.

Violent diseases are powerless to send their victims to death by the exhaustion of pain. Even death throes are painless—yes, peaceful—when the physician seeks to rob the great destroyer of his previously undisputed power of pain and contortion. There are diseases which disfigure and disgust, diseases whose mysterious sapping of vitality terrorized its victims by its sudden, fatal work; but, through the agency of the skilled and scientific physician of to-day, these terrors do not now accompany the disease.

Yet, again, there were many diseases abandoned to work their fell results on poor



humanity—being once deemed as belonging to the catalogue of incurable evils—that are now, through the physician's discoveries, not only susceptible to treatment, but in a great measure entirely preventable.

In man's early struggles for existence, he met with force his visible antagonists and measured his danger by the size, strength, ferocity or cunning of his foes. The invisible agencies for evil he at once and unhesitatingly attributed to that overburdened agent and principal in all evil—the devil. Later in years, and greater in wisdom, he knew that far more dangerous foes than immaterial and invisible ones assailed his life successfully. Search for a visible or demonstrable cause was without result, and he was prone to deem his disease a manifestation of our Creator's will—a punishment for transgressions of divine law. A time came when the microscope, chemical science and other aids which men of genius have employed in their investigations and inquiries, have shown us that the Divine Hand has fashioned matter far better than we deemed it fashioned, and has shown us a new world teeming with material and destructive, as well as destructible, agents. The same scientific agency has shown us that what was regarded as results of laws of nature, unchangeable and unalterable, is but the work of a crowded sub-world of infinitesimal wrigglers, named, ticketed and known to us, now, by family, tribe, and even its importance in the society in which it wriggles and squirms. We have now learned how to eat, to drink, to sleep, to wake, to *live*, by the light of science. We may say, as said Euripides, "Time will discover everything to posterity. It is a babbler, and speaks even when no question is asked." In the scientific and progressive age in which we live, the medical profession occupies a leading and honorable position. A constantly advancing, ever-increasing light, year by year, emanates from its theories and practice, illumining the hitherto dark spots in human lives, and forwarding and helping mankind in the dearest of his earthly wishes, lengthening and saving the lives of those whom he loves, and bidding him to live and enjoy. Not alone has the science of medicine progressed; its disciples have followed the majestic march of the profession, and are to-day a class who obey the rules of honor and uprightness which are laid upon them by their calling. In the noble profession in which we have the honor to be enrolled, there is no cavilling, no wavering judgment passed for any one who betrays his trusts, or loses sight of the obligations which are laid upon him. We have reached a high standard of morals, ethics and intellect, and yet the struggle for advancement proceeds noiselessly, but swiftly and surely. There was a time, gentlemen, in this world's history, when brutal strength and the merciless exercise of it were alone the means for calling forth the plaudits of the world, when not alone the Sir DeBracys, but, I fear, even the Ivanhoes were little else than brutal Hercules. When advancing civilization threw a glamour of refinement on the world, these giants disappeared, but in their stead remained a society in which splendid debaucheries threw a dim halo of glory about the characters who formed the society. From the days when Charles II. and his troop of splendid debauchés formed "the four hundred" of the universe, until the march of intellect, and the consequent raising of the standard of morality forced the degenerate race to die as the days died, success was not the reward of honor and virtue, but of chicanery, deceit, immorality and untruth. But with the dawn of the present century that condition of society and the world passed away forever. Never again in successful struggle for fame will brutality or debauchery win praise or afford honor acceptable to enlightened man. The strongest bar to the attainment of fame or honor, to-day, is the manifestation of those base characteristics which once were honored. The road to honor and fame is now open to all who will follow the paths which are marked as leading to it. The physically weak and the physically strong may have equal chance, but the man of vile character, the debauché, the faithless friend, can never attain the goal. The memory of his deeds may seem to fade, but it dies not, and in the hour of his ambition will follow him to his destruction. To attain honor and fame in any profession—especially is it so in our own—we must not only

use the talents God has given us, but we must obey the rules of a good conscience. Wealth, family, influence, will count for little in such a struggle. Our judges show no favor; by our deeds are our merits awarded. Probity, manhood, adherence to honor and faith, are the levers that will move the earth for us. In the grand efforts for enlightenment and superior knowledge that are transpiring as they are made, in the due recognition of the aid and improvements made in our science, it beseems us, as members of a learned profession, to enter and remain as champions for progress. Let us be careful, critical—conservative, if you will—but all prejudice and jealousy must be thrown aside, and in our own sphere—wherein too often, it is true, advance in thought is, by a spirit of combative conservatism, opposed and delayed—let us, while carefully searching for the truth, reject nothing which will advance our science or ameliorate the ills that are the heritage of humanity.

Gentlemen of the graduating class, in extending to you a welcome into the honored and honorable profession of medicine, I claim the right, in virtue of my many years of service, to assume, for the occasion, the paternal rôle. Skipping the vast opportunity to tire you and our older brothers with dissertations on technical and professional topics, I will address you plainly, briefly, *pointedly*, if I can.

You are about to receive your degree as Medical Doctors, and with that degree you get the full indorsement of this college that you are fully and ably equipped to begin the work of your profession. Having, during your years of study in this institution, had the benefit of the exceptionally brilliant, capable and conscientiously faithful services of the corps of professors and assistants who form the faculty of this college, you are prone, notwithstanding the advice of those teachers, to feel yourself almost a professor in your science, whereas you are but at the threshold of that great temple wherein is stored the knowledge which you must possess to be expert and capable in your profession. The keys which fit the store-rooms of that temple are diligence and assiduity. Your present knowledge admits you to the temple, but once within its walls it is then that work or waiting—as your habits may be—will avail you much or nothing. There is, with the single exception of the legal profession, no other which equals our own in the number of sciences which are auxiliary and necessary to our practice, and of which a knowledge must be obtained. Do not discontinue your studies when you believe you have mastered them. Keep close to the progression which you will find ever opening new paths.

“Drink deep, or taste not the Pierian spring.”

“There, shallow draughts intoxicate the brain.”

When you have begun your battle with the world, let not the hardships and disappointments incident to professional life deter you from renewed and added effort. It is not less true because trite, “There’s room at the top.” Jeremy Collier wrote, “Perpetual effort and assurance put a difficulty out of countenance, and make a seeming impossibility give way.” You will find the axiom true. Shrink from no professional responsibility that your conscience will allow you to assume. Success under difficulties means immediate reward in fame and prospective reward in that gross but necessary, recompense—your fee. If your case has many “cases,” take thou unto thyself many thereof. “Get to live, then live.” On the other hand, do not refuse to do in charity what you would for gold. “A doctor who can help a poor man, and will not without a fee, has less sense of humanity than a poor ruffian who kills a rich man to supply his necessities,” says Addison, and he conveys a truth. Do not be tempted to depart from the principles of practice which have been inculcated. Many specious and unsound theories have been developed in *my* day, more may develop in your day. Give them no time or attention. The duties and responsibilities of a physician are great; his temptations numerous and recurring. The discharge of those duties and resistance to temptation will always be a charge upon our conscience; the memory of our work as physician and man will rest with us when, in that hour of deep and solemn reality, the spirit is bidding adieu to mortality, and the interests and honors of the world are



fading forever. Let us so live that the vanishing world will hold no dark or damning spot to which our conscience may direct our vision when error and repentance are of the past.

“Auf Wiedersehn.”

The members of the class of '91 were present in a body and rose when the president addressed them and received them into membership in the association.

On motion of Dr. Craig, the thanks of the association were tendered to Dr. Burton for his interesting address. President Burton then received the cheer.

The historian, Dr. E. A. Bartlett, presented the following report :

REPORT OF HISTORIAN, DR. E. A. BARTLETT.

It is with great satisfaction the historian presents his report this year, because it tells of progress made. Every one feels a pride in his Alma Mater, and when a measure is adopted which improves facilities for doing work, it is a matter for congratulation among us. Enlarging the teaching force by the addition of lecturers and instructors, additions to the laboratories, the introduction of new departments of study, all furnish improved facilities for teaching and learning.

Within the past year a plan has been inaugurated, which, if successful, will give to physicians all over the state a free medical library, a department of the State Library, as is now the law library. To further this end the trustees and faculty of the A. M. C. have offered the State of New York five thousand volumes, beside files of many valuable medical journals, now comprising the Medical College library, provided a law is passed establishing such a department. Thus the circle of influence for our dear old college widens.

The trustees and faculty are indicating to us their determination to give the very best. Shall we, members of the Alumni, do less? Let every one help by gifts of time or money or influence.

The historian presented the following preliminary report from the class historian of '81 :

REPORT OF THE CLASS OF '81—DR. CLARENCE A. CHALONER.

*Mr. President and Fellow Alumni :*

There have been, so far, twenty-four responses to letters of inquiry. Each man gives a good account of himself; all have been successful and some have secured a large and lucrative practice. Forty, out of forty-nine whose address is known, have chosen the Empire state as their field of labor; there are three in Dakota, two in Massachusetts and one each in Connecticut, Nebraska, Wisconsin and Kansas.

Many, in their responses, refer in affectionate terms to those of the faculty who have died in the decade just passed—Drs. Mosher, Vander Poel, Gray and Swinburne. It is a cause for congratulation that in a class so large as this there should have been only three deaths in the ten years of our history—Drs. Frank Potter Johnson, Edward C. Kennedy and Marshall E. Nellis have passed beyond the veil which shuts from mortal ken the mysteries of eternity.

With bowed heads we pay a tribute of affectionate regard to the memory of those who have left us, both from the faculty and from our class.

No reports were received from the class historians of '51, '61 and '71.

The corresponding secretary read the following

NECROLOGY.

- Dr. William H. Biggam ('41), at Fort Plain, N. Y., December 11, 1889.  
 Dr. Thomas Millspaugh ('43), at Walden, N. Y., March 21, 1891, æt. 70.  
 Dr. Julius D. Munn ('44), at Van Hornesville, N. Y., May 5, 1890.  
 Dr. Daniel D. Bucklin ('46), at Lansingburgh, N. Y., April 19, 1890.  
 Dr. George T. Foster ('47), at Pittsfield, Mass., October 22, 1890, æt. 80.  
 Dr. Roger Keyes ('53), at Philadelphia, Pa., June 10, 1890, æt. 61.  
 Dr. Cornelius D. Mosher ('59), at Albany, September 26, 1890, æt. 61.  
 Dr. William S. Cooper ('61), at Troy, N. Y., May 26, 1890.  
 Dr. Justus E. Gregory ('63), at Brooklyn, N. Y., October 25, 1890, æt. 49.  
 Dr. Pierson Rector ('63), at Jersey City, N. J., January 22, 1891, æt. 52.  
 Dr. Richard H. Cameron ('70), at Johnstown, N. Y., April 26, 1890, æt. 45.  
 Dr. Herbert R. Starkweather ('71), at Albany, November 27, 1890, æt. 40.  
 Dr. Henry V. Hull ('74), at Coeymans, N. Y., March 27, 1890, æt. 38.  
 Dr. James C. Healey ('77), at Albany, March 30, 1891.

Dr. C. B. Herrick, secretary of the nominating committee, presented the following report :

*For President,*

Dr. HORACE R. POWELL ('82), Poughkeepsie, N. Y.

*For Vice-Presidents,*

- Dr. HORACE L. BROWN ('64), Greenville, Mich.  
 Dr. DAISAN D. DRAKE ('64), Johnstown, N. Y.  
 Dr. CLINTON B. HERRICK ('80), Troy, N. Y.  
 Dr. ALVA E. ABRAMS ('81), Hartford, Conn.  
 Dr. WALTER W. SCOFIELD ('82), Dalton, Mass.

*For Recording Secretary,*

Dr. WILLIS G. TUCKER ('70), Albany, N. Y.

*For Corresponding Secretary,*

Dr. CHARLES M. CULVER ('81), Albany, N. Y.

*For Treasurer,*

Dr. SELWYN A. RUSSELL ('77), Albany, N. Y.

*For Historian,*

Dr. EZRA A. BARTLETT ('79), Albany, N. Y.



*For Members of Executive Committee (term three years),*

Dr. DANIEL H. COOK ('73), Albany, N. Y.

Dr. WILLIAM J. NELLIS ('79), Albany, N. Y.

Dr. CHARLES C. DURYEE ('81), Schenectady, N. Y.

Dr. ROBERT F. MACFARLANE ('88), Albany, N. Y.

On motion of Dr. F. W. Loughran, the report was accepted and adopted, and Dr. W. H. Snyder was instructed to cast a ballot on behalf of the association for the gentlemen named therein. This having been done, those named in the report were declared by the president duly elected officers of the association for their respective terms.

The corresponding secretary, Dr. C. M. Culver, read letters from the following members of the association, unable to be present: Drs. A. H. Cochrane ('57), Solon Briggs ('69), W. H. Fox ('88), and presented a list of those who had responded to the notice of the secretary. He also read letters from the Hon. George William Curtis, Rev. Dr. A. V. V. Raymond and David Murray, LL.D., regretting their inability to be present at the Alumni dinner and reported the receipt of photographs from the following alumni: Drs. S. W. Austin ('54), Solon Briggs ('69), A. J. Brooks ('60), P. G. Cotter ('87), E. D. Huntley ('52), C. B. Mallery ('86), G. T. Moston ('90), H. R. Powell ('82), W. W. Scofield ('82) and C. B. Tefft ('64).

Brief impromptu speeches were made by the president-elect, Dr. H. R. Powell, Dr. W. H. Snyder, class of '39, and others.

No further business appearing, the meeting adjourned.

## COMMENCEMENT EXERCISES.

The sixtieth annual commencement exercises of the Albany Medical College were held at Harmanus Bleecker Hall, on Wednesday afternoon, April 1, 1891, at 3 o'clock, in the presence of a large audience. The president of Union University, Harrison E. Webster, LL.D., presided, and upon the stage were seated the president of the board of trustees, J. W. Russell, Esq., the members of the faculty, curators of the college, officers of the alumni association and prominent citizens. The order of exercises was as follows:

OVERTURE—"Golden Fleece,"	Lavallee.
PRAYER,	REV. G. T. DOWLING, D.D.
SELECTION—"Grand Duchess,"	Offenbach.
ESSAY,	JAMES WESLEY WILTSE.
MUSIC—Polka, "On the Hudson,"	W. J. Holding.
CURATORS' REPORT,	S. H. FREEMAN, M.D.
CONFERRING DEGREES,	By the President of Union University, HARRISON E. WEBSTER, LL.D.
MUSIC—Saxophone Solo, "Nazareth,"	Gounod. Mr. E. COFFIN.
ADDRESS,	WILLIAM J. MILNE, LL.D.
MUSIC—Idylle, "Loin du Bal,"	Gillet.
VALEDICTORY,	FRANK KELLY ROARKE.
MUSIC—Plantation Sketch, "Darkies' Dream,"	Lansing.
REPORT ON PRIZES AND APPOINTMENTS.	Prof. A. VANDER VEER, M.D.
BENEDICTION.	
MARCH—Waltz, "Tout Paris,"	Waldteufel.

The following is a list of the graduating class :

WILLIAM SAMUEL ACKERT, - - -	N. Y.	ROBERT BROCKWAY LAMB, Ph.G.,	N. Y.
JOHN MOLYNEAUX BOWMAN, - - -	"	LOUIS LE BRUN, Ph.G., - - -	"
MERTON WHEELOCK BROWN, - - -	"	SHERWOOD LE FEVRE, - - -	"
JOHN HUNTING COBB, - - -	"	WARNER ABBOTT MILES, - - -	"
WALTER HENRY CONLEY, Ph. G., - - -	"	LEWIS RYAN OATMAN, - - -	"
CHARLES EDMOND DAVIS, - - -	"	JOHN CLEMENT O'HAIRE, - - -	"
FRANK EDWARD DEAN, - - -	Vt.	WILLIAM JAMES PENNINGTON, - - -	"
FRANKLIN EDWARD DEUERLEIN, - - -	N. Y.	MICHAEL FRANCIS PHELAN, - - -	"
JOSEPH WILLIAM DROOGAN, - - -	"	GEORGE HENRY REYNOLDS, - - -	"
WILLIAM JOHN FLEMING, - - -	"	FRANK KELLY ROARKE, - - -	"
JOSEPH FREEDMAN, - - -	"	WARD BEECHER SALTSMAN, - - -	"
NATHAN DAVID GARNSEY, A. B., Ph.G.	"	WILL ORVIS SCOTT, - - -	"
EDWARD ALTON HOFFMAN, - - -	"	ABRAM BAKER SIMMONS, - - -	"
EDWARD LEE JOHNSON, - - -	Va.	HARMON ARTHUR STALEY, - - -	"
HENRY WARNER JOHNSON, A. B., - - -	N. Y.	JAMES HENRY TIMMERS, - - -	"
EDWARD JOSLIN, - - -	"	EVERT EVERTSEN TRACY, - - -	"
JOHN WHITMAN JOSLIN, - - -	"	HARVEY WARD VAN ALLEN, - - -	"
SHERMAN S. KATHAN, - - -	"	ARTHUR BURTON VAN LOON, - - -	"
JOSEPH EUGENE KELLY, - - -	Mass.	GEORGE JOHN VAN VECHTEN, - - -	"
WILLIAM JAMES KERNAN, - - -	N. Y.	GEORGE AUSTAIN WILLIAMS, M.D.S.,	"
WILLIAM NEWELL KNOWLTON, - - -	"	JAMES WESLEY WILTSE, - - -	"

The registrar announced that Mr. Frederic Allen Williams had successfully passed the examinations, but lacked a few months of the age essential to graduation, and that he would receive the degree of Doctor of Medicine at the next commencement.

The president announced that Dr. Lewis Balch, having resigned the chair of medical jurisprudence, had been appointed by the trustees emeritus professor of anatomy.

Dr. Vander Veer presented the prizes. He first read a report on the Vander Poel prize endowed by Mrs. Gertrude W. Vander Poel, in memory of her husband, the late S. Oakley Vander Poel, M. D., for many years a professor in the college, consisting of a practical working microscope and awarded to the senior student passing the best bedside examination in practical medicine. The competitive examination for hospital appointments took place in connection with the examination for this prize, as stated in the report :

Stating that this prize, consisting of a microscope and accessories, offered to the senior student passing the best bedside examination in general medicine, had been awarded to Dr. Edward Joslin; and, at the same competitive examination, the following hospital appointments had been made: St. Peter's Hospital, Drs. Edward Joslin and Frank K. Roarke; Albany Hospital, Drs. William S. Ackert and Walter H. Conley.

The prize offered by Dr. Vander Veer, for the best report of the surgical clinics, was awarded to John C. O'Haire, and the prize offered by Drs. Hailes and Morrow, for the second best report of these clinics, was awarded to Frederic A. Williams.

The prize, consisting of an ophthalmoscope, offered by Dr. Merrill, for the best report of the eye and ear clinics, was awarded to William N. Knowlton.



The prize offered by Dr. Townsend, to the student passing the best examination in physiology at the end of his first year of study, was awarded to William H. Laughlin.

Dr. Boyd's prize, to the student passing the best final examination in obstetrics, was awarded to James W. Wiltse.

Dr. Bigelow's prizes, for the best dry preparations of the throat and of the nose, were awarded to Le Roy Becker and Harmon A. Staley, and a second prize, for a similar preparation, was also awarded to Mr. Staley.

The prize, consisting of a case of surgical instruments, offered to the senior student passing the best final examination, by Dr. T. W. Nellis, was awarded to William J. Kernan.

A prize, consisting of Gross' complete pocket case of instruments, offered by A. B. Husted & Co., to the junior student passing the best final examination, was awarded to Fred B. Casey.

The prize offered by Dr. H. R. Powell, to the senior student presenting the best thesis, consisting of a general operating case, was awarded to Merton W. Brown, for his thesis on "Rubeola."

#### ALUMNI DINNER.

The eighteenth annual dinner of the Alumni Association was held at the Delavan House, on Wednesday evening, April 1, 1891, at eight o'clock. Nearly two hundred were present, including members of the association, their guests and members of the graduating class. After the tables had been cleared, cigars passed, and the "Alumni Ode" sung, the following toasts were responded to, Dr. Herman Bendell acting as toastmaster:

1. "Our Alumni Association," Dr. Horace R. Powell, president-elect.

2. "The Day We Celebrate," Dr. M. H. Burton, the retiring president.

3. "The Clergy," Rev. Walter Laidlaw.

4. "The Legal Profession," Hon. T. J. Van Alstyne.

A song was then sung by the glee club.

5. "Education in the State of New York," Hon. Andrew S. Draper.

6. "The Antiquity of the Profession," Hon. A. T. Clearwater.

7. "The Legislature," Hon. Walter E. Ward.

8. "Union University," President Harrison E. Webster, LL.D.

9. "The Orator of the Day," President William J. Milne.

20. "The Press," Rev. Dr. George T. Dowling.

11. "Our Ex-Presidents," Dr. William H. Bailey.

Another song was then sung.

12. "The Faculty," Dr. A. Vander Veer.

13. "The Medical Press," Dr. W. G. Macdonald.

14. "The Class of '91," Dr. Arthur B. Van Loon.

The "Parting Ode" was then sung to the tune of "Auld Lang Syne," and President Burton, in a few remarks, declared the reunion of '91 at an end.

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No. 5.

EPIDEMIC INTESTINAL DISEASES IN ALBANY  
AND VICINITY.\*

BY JOSEPH D. CRAIG, A.M., M.D.,

ALBANY, N. Y.

*Lecturer on and Demonstrator of Anatomy in the Albany Medical College.*

*Mr. President:*

I desire to offer in this address, in fulfillment of my obligation as vice-president of this society, the results of a collective investigation into the causes of epidemic intestinal diseases, which have prevailed in Albany and vicinity during the months of December, 1890, and January, February and March, 1891. In response to a circular letter (see appendices Nos. 1 and 2) sent by me to known members of the medical profession in the counties of Albany, Rensselaer, Schenectady, Columbia, Greene, Schoharie, Saratoga, Herkimer, Fulton and Montgomery and to others living in the counties of Clinton, Essex, St. Lawrence, Erie, Onondaga, Oneida, Otsego and Washington, *one hundred and eight* replies were received.

From the information contained in these replies and from information obtained by means of personal investigation and inquiry from other sources the conclusions formulated in this address have been derived. It was also my purpose to tabulate the answers returned, but owing to the difficulty in deciding upon a convenient and simple basis of classification this has been found to be impracticable. A number of facts, concerning like epidemic diseases occurring in England, which pointed very strongly to contaminated water as an efficient cause, have been excluded from consideration. Investigations in other places contributing to the support of other theories of causes have also been excluded as foreign to the purposes of this paper. It has not been my object to study either abstract propositions or general theories of causes, but the more simple

\*Semi-annual Address delivered before the Medical Society of the County of Albany, May 12, 1891.



purpose, of considering only those facts which gave indications of the sources of disease in the epidemic just past, has alone engaged my attention.

I have sought for an expression of professional opinion and have endeavored to make what seem to me to be reasonable inferences therefrom. It is an estimation of probability only, and it is reasonably certain that no method of scientific investigation into a subject of the character of the one to which our attention is drawn to-night can do more at this present time. At least, I do not know of any records which show with the exactness of science the relations of cause and effect in any epidemic like unto the one through which our people have just passed. Bacteriological studies and chemical analyses have contributed many valuable facts to the elucidation of the problem of the relation of water to the public health, but have failed, so far, to do more than to indicate the probabilities of the case. Such studies and analyses do not fall within the limits of this paper. Others are working along these lines and in due time will make public their results. By any method of investigation then, at present available, we can do no more than estimate probability. As the inductive method more often than the scientific one is, from necessity, the clinical method and produces valuable and approximately correct results, it is practicable for the purposes of this paper.

It has sometimes seemed to me as if the greater number of the profession had committed themselves to some *one* theory of cause of the epidemic just past, whereby they had become partisans and biased in their belief and had lost sight of the fact that either the severe gastro-intestinal inflammation or the typhoid fever might owe their origin in different cases to any one of a number of independent or contributing causes. It is, by reason of the multiplicity of these independent or contributing causes, acting separately or in combination, that this problem has become so complicated and so difficult of solution.

I think it is fair to say, so far as the purposes of this paper are concerned, that we have had prevailing in Albany and vicinity during the past winter

#### I. TYPHOID FEVER :

(a) *Running a typical course*, the proportion of these cases being to the whole number less than the average in other epidemics.

(b) *Running an atypical course* with one or more of the prominent symptoms of the disease absent. These cases comprise the greater number.

The case of Miss T. illustrates this type. In this case the fever wave of the first week was not typical of typhoid fever. There were no petechiæ; neither was there gurgling nor tenderness in the right iliac fossa. She died between the third and fourth week, and at the autopsy well-marked ulcerations of the patches of Peyer and enlargement of the mesenteric glands were found.

(c) *Of abortive forms*, with fairly typical onset and fever wave, but quickly receding about the second week.

## 2. MALARIAL FEVERS:

Almost exclusively prevalent in places away from the Mohawk and Hudson river centres of population.

## 3. OTHER FEVERS:

Not typhoid—probably due to sewer gas poisoning the specific cause and course of which are unknown.

## 4. LA GRIPPE:

The abdominal form of which principally concerns us in this address.

## 5. DIARRHŒAS:

With or without gastric or hepatic symptoms; of all grades of severity; owing their origin to well known causes, being

(a) *Irritative*—due to improper food, impure water, etc.

(b) *Symptomatic*—particularly of typhoid fever, acute enteritis and la grippe.

(c) *Vicarious*—from exposure to cold and wet and from sudden changes in temperature.

## 6. CATARRHAL ENTERITIS:

With or without gastric symptoms—especially prevalent in Schenectady and in other places among people who had contracted the disease in Schenectady.

The type of this variety of enteritis is somewhat different from the ordinary form. The disease is more chronic, more angry, more severe than usual. I have called it for convenience the Schenectady type. In these cases, as a class, there are these peculiarities:

1. Subnormal temperature.
2. Resistance to the treatment usually effective in this class of cases.
3. Marked tendency to persist.
4. Liability to recurrence, and
5. Perhaps spreading by contagion.



The following cases, briefly reported, will illustrate this type :

I.—Fred D., of Albany, age eighteen, a strong, healthy young man of good habits, went to work for the Edison Company in Schenectady on January 12th, 1891. He secured board first on Union Street and afterwards on Nott Terrace. Drank copiously of the Mohawk river water at both places, but especially drank the Mohawk water at the Edison works. This water was always dirty and of bad odor, and increased rather than diminished thirst. Had more or less diarrhœa until January 21st, when he was suddenly attacked with marked and severe gastro-intestinal symptoms, suffered great pain, was greatly prostrated and had almost constant vomiting and purging. The discharges were thin, mucous, and very offensive. Reached home the same day in a state of profound collapse. From this date to January 27th, just about a week, it was impossible for him to retain even a few drops of water on his stomach. Remedies usually effective in these cases were useless with him. The temperature taken every morning and evening was subnormal during the entire time. On two afternoons there appeared to be a slight rise in temperature, but of this I am not certain. After the more acute symptoms had subsided and he began to get about again, his diarrhœa still persisted and continued for weeks, marked by several periods of frequent and painful discharges. The stomach only resumed its full physiological activity after a period of several weeks.

This case well illustrates the Schenectady diarrhœal disease among those who drank of the Mohawk river water, irrespective of other conditions.

II.—William D., Albany, age seventeen, also a strong and healthy young man, went to work for the Edison Company and drank freely of the Mohawk river water. Suffered from profuse, painful, long-continued and rebellious diarrhœa, but of less severe character than Fred D. in Case I. There was the same marked persistency and tendency to recurrence. All symptoms gradually subsided after a number of weeks following his return to Albany.

III.—Ralph S., Albany, age seventeen, another perfectly healthy young man, went to work for the Edisons about February 1st, 1891. Boarded first on Union street and afterwards on Hulett street. Drank well water at Hulett street, none at all at Union street. Drank Mohawk river water at the Edisons on the same days on which he drank well water in Hulett street. States that the Mohawk river water was always dirty, and increased rather than diminished thirst. Two days after going to Hulett street was taken sick. Sickness began with headache followed by profuse and painful diarrhœa of very offensive substances. Had rise in temperature with accompanying thirst. The next day vomited greenish, bilious material. Acute symptoms rapidly subsided, but diarrhœa persisted for some time. With the exception of the rise in temperature the other characteristics of the disease were present.

Cases I and II seem to point to the Mohawk river water drunk by these young men as a cause. Case III is valueless in the estimation of causes. The Hulett street well was known to be infected, as a man living in the same house and drinking well water exclusively had been sick with typhoid fever for two months, and a woman also living in the same house, also using this well water, was taken sick shortly afterwards. There was no sewer connection in these cases.

IV.—A large number of cases, reported verbally by Dr. Pearson, of Schenectady, whose accuracy as an observer none of us will question, all showed the same tendency to persistency, rebelliousness and subnormal temperature, and in one of which the prostration was so profound that death resulted.

V.—A case reported at Broadalbin, imported from Schenectady, kindly furnished by Dr. Finch. "This case," to use the doctor's own words, "has been a very severe and protracted form of diarrhoea, with attacks of vomiting once or twice a week. He has had no fever during the attack. He drank the Mohawk river water at Schenectady."

VI.—A case reported at Saratoga Spa.—"A locomotive engineer, whose duty kept him between Saratoga and Whitehall, used drinking water at various stations. The diarrhoea was severe, also had pains in his bowels. Great prostration followed first attack, with a tendency to return of bowel trouble if strict attention to diet and rest was not adhered to. \* \* \* This patient's wife also had a slight attack. No other cases in Saratoga."

VII.—Dr. Rivenburgh, of Middleburg, reports three cases imported from Schenectady, "severe in form, with vomiting and purging. Cases of local origin, mild."

VIII.—Cases reported by Dr. Chas. McCulloch:

1st. "J. S. W., employee on Schenectady branch of D. and H. C. Co., drank a large quantity of Mohawk river water and in a few hours was attacked with diarrhoea, which has persisted until February 20th, 1891, a period of two weeks."

2d. "A large number of Italians, similarly affected from the same source, mostly acquired in Schenectady. *In any event, all drank Mohawk water.*"

IX.—Cases reported by Dr. J. C. Still:

*Mild* cases of diarrhoea occurred in his practice of *home* origin and some imported from Schenectady. *Every one* of a number of young men who went to Schenectady suffered. *Cases protracted, convalescence slow.*

X.—Four cases reported by Dr. J. F. Wheeler, of Chatham:

"These cases were imported from Schenectady among young men who went to work for the Edisons and drank Mohawk river



water. They recovered rapidly under treatment and change. All returned to work again. Three drank distilled water from the exhaust and remained well. *One drank the old water, relapsed and recovered again on returning to Chatham.*"

XI.—Dr. R. H. Morey has observed in his cases "great weakness and lassitude and the unusual length of time in convalescing." Three or four of his cases were imported from Albany.

XII.—From Kinderhook the following was obtained:

(a) "Mrs. W., of Kinderhook, visited Schenectady for two days. Came home and was confined to bed with diarrhœa."

(b) "Mrs. H., from the West, stopped in some of the lower towns on the Mohawk, then at Hudson. Had profuse diarrhœa."

(c) "Nephew of Dr. W. came from the West and stopped at Schenectady about the middle of September. Had diarrhœa, which persisted as long as he remained in Schenectady. Yielded rapidly on coming to Kinderhook."

XIII.—Dr. Jesse Crouse, of Altamont, sends the information that in his cases the "type of diarrhœal disease is different from the usual." "Several cases imported from Schenectady."

It has been stated by several that this type of disease is contagious. The following cases point in that direction. The evidence, however, is not very strong.

I.—Case 6 above.

II.—Case reported by Dr. Ross Wilson, of Sandy Hill, to whom I am especially indebted for his great interest in this investigation. (Dr. Wilson sent out over two hundred circulars and his reply is of great value.) He reports the following facts as bearing upon the contagiousness of this diarrhœal disease: "A son, his wife and child visited his mother here. The first three contracted a painful diarrhœa in Albany. His mother was prostrated with the same disease a few days later."

III.—Cases of Dr. Rivenburgh, of Middleburgh:

1. "Mr. B. contracted diarrhœa while on a visit to Schenectady. His whole family suffered." "The cases imported from Schenectady were the most marked."

2. "Mr. O. went to Schenectady to seek employment, returned with diarrhœa and gave it to his wife, but of milder form."

3. "Mr. A. contracted diarrhœa in Middleburgh and his family escaped."

In other words, cases that came from Schenectady were followed by other cases in the families of those affected. Cases of local origin did not spread beyond the persons originally attacked.

There is one other fact which seems to bear out the theory of a specific contagious principle as the cause of this diarrhœa. Whenever the cases were treated with antiseptics, particularly bichloride

of mercury, then there was the most rapid recovery. This was noticed by several observers.

In considering the expressions of opinion contained in the replies, it is convenient to group the returns under the following heads:

1. Direct contagion.
2. Atmospheric influence.
3. Drainage and sewer gas.
4. River and other waters.

### I.—DIRECT CONTAGION.

The question of the contagiousness of the Schenectady type of the diarrhœal disease has already been considered. The following has reference to the contagiousness of typhoid fever.

If the replies received are at all an indication of professional opinion, it is certain that the great majority of physicians either do not believe in the propagation of typhoid fever by direct contagion or treat such a means of communication with great suspicion. Of the one hundred and eight physicians who replied, *forty* expressed an opinion. Of these, *twenty-seven* do not believe in direct contagion as a cause of typhoid fever, while two were doubtful. Eleven considered direct contagion as an occasional cause, but in as much as three of these were from Schenectady, a city which is now well known to be in an extremely unsanitary condition, some allowance must be made for the accuracy of the observation. From perfectly reliable observers, however, information comes that some cases have been so traced. In one of these cases the patient had nursed a typhoid fever patient and was herself attacked with the disease. Causes other than direct contagion were excluded. It is very probable that in occasional instances typhoid fever may be thus acquired. A very few of the cases in the epidemic under consideration may be so accounted for, but direct contagion has not entered in any large degree as a causative factor.

### II.—ATMOSPHERIC INFLUENCE.

The replies to the question of the influence of atmospheric conditions as a cause, do not furnish us much of interest or importance. *Forty-nine* expressed the results of their observation. Of these, *eleven* did not trace any connection between the atmospheric conditions and their cases, while *two* regarded such conditions as the sole cause. *Two* others regarded the atmosphere as loaded with



miasma and believed such a condition to be the cause. The remainder, *thirty-four* in number, were fairly united in the belief that sudden changes in temperature, particularly from extreme cold to warmer weather, with falling barometer and much dampness or rain, were immediately followed, not only by an unfavorable course in those already affected, but also by a marked increase in the number of new cases. These observations apply to both the diarrhœal disease and typhoid fever. As the action of such changes on the course and in the causation of disease is already well known, and as nothing especially new or conclusive was obtained on this point, it will hardly be profitable to spend more time in its consideration.

### III.—DRAINAGE AND SEWER GAS.

The relation of drainage and sewer gas to the prevailing epidemic has excited considerable professional interest. Forty-three expressed an opinion. Of these, the physicians of twenty-three places in which there is surface drainage and the cesspool system, but no sewers, state that there was

Diarrhœa alone in fourteen places.

Typhoid fever alone in two places.

Diarrhœa and typhoid fever in three places.

Neither diarrhœa nor typhoid fever in four places.

Of thirteen places in which there were public sewers, there was diarrhœa alone in one place.

Typhoid fever alone in one place.

Diarrhœa and typhoid fever in seven places.

Neither diarrhœa nor typhoid fever in four places.

These figures mean practically nothing, and from them practical deductions cannot be made.

In addition the following facts were obtained :

1. In Little Falls, where the sewers are new and privies abound, there has not been an unusual amount of either typhoid fever or diarrhœa. Almost every case of typhoid fever was imported from Albany or Schenectady. The drinking water is obtained from springs.

2. One case of typhoid fever is reported from Gloversville as caused by an untrapped sewer emptying into a creek.

3. One case of typhoid fever out of seven in Greenwich was due to a country drain.

4. Dr. Willard, of Catskill, reports "one case of typhoid fever in a family in which a broken sewer was found under the house."

5. Dr. Nellis reports two cases of typhoid fever as due to sewer gas.

6. Dr. Burton, of Troy, "has found that whenever the streets of that city are torn up to relay broken sewers, along the line of such sewers much typhoid fever always prevails."

7. Dr. Hennessey reports *two* cases in which defective drains were apparently the cause, while on the other hand he also reports *five* cases in houses in which there were no sewer connections at all.

From this information it is reasonable to infer that some of the cases, at least in the epidemic we are considering, were due, directly or indirectly, to sewer gas. I do not know that attention has ever been drawn to one strong argument against the theory of sewer gas as a prime factor in the causation of the epidemic. It has been abundantly substantiated that wherever there is a broken drain or improperly trapped or ventilated, or in any way defective system of plumbing, there there will be found a vitiated and poisonous atmosphere. Any human being inhaling such contaminated air will suffer in greater or lesser degree from its debilitating influence, and a proportion of these will be in such a non-resistant condition as to readily acquire any of the specific diseases, from whatever source derived, when brought within the range of their influence. I believe, in view of the strong evidence which follows, pointing to the drinking water as the great causative factor, that this is the best explanation of the fact that in so many houses in which typhoid fever has been found, the inspectors of our board of health have discovered incompetent drainage systems.

#### IV.—WATER.

The facts obtained in relation to water supply are of vastly more importance. There were fifty-nine returns in all, which can be fairly classified as follows:

1. Wherever spring or lake water was used exclusively (ten places in all), irrespective of sewerage system or drainage and irrespective of atmospheric conditions of the most diverse kinds, in every one of such places there was neither diarrhœal disease nor typhoid fever.

2. Wherever the water supply was derived from wells, there there was found either diarrhœa or typhoid fever or both.

3. Wherever river water was used from head waters, or only slightly contaminated as shown by chemical tests, there there was neither diarrhœa nor typhoid fever.



4. Wherever there were centres of population placed near together, using river water contaminated largely with sewage from places above, there there was both diarrhœa and typhoid fever.

Three other factors in the water problem were also developed from this investigation.

1st. That rivers, and particularly wells, filled with the water that had been washed from the surface after abundant rain, the soil being so thoroughly frozen as to prevent absorption, were most active agents in causing an irritative diarrhœa. This diarrhœa was of the ordinary character and was not of that severe, chronic and rebellious nature which distinguished the Schenectady type. The water contaminated with the decomposing animal matter of barnyards and fertilized and manured farm lands, was a more active agent than water polluted simply with the products of vegetable decomposition. Diarrhœas thus caused made their appearance in January, immediately after the warm weather and heavy rains of that time. Through December the weather was continuously cold enough to prevent thaws. The Schenectady type of diarrhœa began about the first of December and continued until about the middle of March, and did not seem to be influenced in any marked degree by any atmospheric changes.

2d. That the statement that rivers, filled to overflowing after heavy rains and great thaws, contain the germs of disease diluted in a great degree, is found to be fallacious. These rivers do not contain large volumes of water with a proportionately less number of germs, but as shown in 1st, above, are filled with large volumes of water, polluted with a proportionately larger number of germs, washed from the soil.

3d. That rivers contaminated with sewage and covered with ice, were more dangerous as sources of water supply, through insufficient aëration of the contained water, than when open. Among men engaged as boatmen during the summer and as ice cutters during the winter, and drinking river water at all seasons, it was distinctly observed that such men were free from diarrhœal disease in the summer, but were largely affected in the winter.

#### IMPORTED CASES.

One other important factor deserves careful but brief consideration before gathering together the facts obtained from the returned circulars. In very many of the places reporting cases of severe diarrhœa and typhoid, there were none, or few, of home origin, but all, or nearly all had been imported from other places. The cases

of diarrhœa of home origin were of ordinary and mild type. The cases of diarrhœa from Schenectady, Albany, Cohoes and West Troy were of that severe and angry form which characterized the Schenectady type. *Thirty-six* physicians reported such cases. The figures are decidedly suggestive. There were imported from

1. Albany, *seventeen cases*, with *two* others reporting some (number not stated).

2. Schenectady, *forty-four cases*, with *seven* others reporting some (number not stated).

3. West Troy, *three cases*.

4. Cohoes, *three cases*.

5. Hudson, *one case*.

In addition, cases were reported

1. Among railroad men using water at Albany, Schenectady or Cohoes.

2. Among broom makers, using river water at Schenectady.

3. Among men engaged in ice cutting on the Hudson river in the neighborhood of the Abbey and Van Wie's point, both places being situated on the Hudson river just below Albany. Three physicians in three different places observed such cases. These men drank Hudson river water. At least forty per cent of the men cutting ice and drinking the river water at Van Wie's point had either typhoid fever or severe diarrhœa. The greater number had diarrhœa of the Schenectady type.

From *all other places* only *nine* cases were reported as imported. At least one hundred cases, of which sixty-seven are actually known and the rest conservatively estimated, were from Schenectady, Albany, West Troy or Cohoes. Considering the entire number of returns, this is a very large number, and there is something very suggestive in these figures.

#### THE FOUNTAIN AND ORIGIN OF THE EPIDEMIC.

It has been suggested that Schenectady was the fountain and origin of the epidemic under consideration, and that the pollution of the waters of the Mohawk river, by the sewage of that city, acting with other contributory causes, was the source of the epidemic diseases prevalent in Cohoes, West Troy and Albany during the past winter. There are very many facts which point to the truth of this suggestion.

Along the Mohawk river, Rome, Utica, Little Falls, Fonda and Amsterdam now use spring water almost exclusively as a source of



public supply, except the city of Rome, which derives its supply from the head waters of the Mohawk, where pollution is not likely. In all these places there has not been even the usual amount of diarrhœa and typhoid fever. At Utica, Little Falls and Amsterdam the sewage empties into the Mohawk river. At Rome and Fonda the drainage is the surface and cess-pool system. Sewer gas and defective drainage has certainly not caused either of the prevailing epidemic diseases in these places.

From Amsterdam, the city next above Schenectady, there could have been no pollution, as there have been but few cases of the epidemic diseases which have afflicted the lower cities. Moreover a flow of seventeen miles would be amply sufficient to purify the waters of the very slight sewage contamination through aeration, oxidation and precipitation. In fact, chemical analysis of the Mohawk river water, just above the city of Schenectady, has shown that it is comparatively free from chlorides and albumenoid ammonia.

In this connection, an instructive lesson is taught by the history of the water supply of the city of Amsterdam, kindly furnished me by Dr. Charles Stover. The sewerage has not been of the best until recently. The surface water has collected in places, owing to the inequalities of the roads and inefficient grades, and the sewers have been broken and incompetent. There are also some cess-pools. In spite, however, of the sewage system, the waves of contagious disease, particularly typhoid fever, have risen and fallen with the changes in the water supply. During the use of water derived from the old water system, there were only a small number of cases of typhoid fever; but there were some. The water so supplied was derived from a water-shed, and flowed along a natural creek, through pasture and farm lands. This water was analysed by Dr. Tucker and found to be polluted by animal matter, though not to a great extent. This water was not very pleasing to the eye, but, during its use, only a moderate amount of fever prevailed. In 1890, the reservoirs failed and the water commission shut off the supply from that source. Old wells, known to be contaminated, were now resorted to, when there was an immediate and alarming increase in the number of cases of typhoid fever, amounting to an epidemic. Soon after water from a new source became available, and its introduction was followed by a steady and marked decrease in the number of new cases until this fever became infrequent and, practically, disappeared. This new source is from springs supplied by the

gravity system, in addition to which there is also a supply from a lake near Ballston Spa. This is a fairly conclusive history of typhoid fever due to contaminated water, the sewage system remaining practically the same during the entire time.

The Mohawk river towns, as far as Schenectady, were thus found to be free from the epidemic diseases we are considering. The Hudson river towns from the north, as far as West Troy, now demand attention.

Sandy Hill, Fort Edward, Lansingburgh, Waterford, Green Island and Troy have been free from the prevailing epidemic diseases.

Fort Edward and Sandy Hill are supplied with water from springs. In both places the drainage is by means of the surface system. In neither has there been unusual diarrhœa or typhoid, except four cases which were imported to Sandy Hill and one to Fort Edward.

Green Island (which is subject to the same atmospheric conditions as West Troy, lies contiguous to it, and is drained by the surface and cess-pool system) has also been free from prevailing diseases. This town derives its water from a basin on an island in the Hudson, after percolation, which practically excludes contamination.

Waterford and Lansingburgh, just above the city of Troy, have been also free from epidemic typhoid fever and diarrhœa.

The sanitary condition of the city of Troy is well known and needs only suggesting in this place. The water supply is from the Hudson, immediately above the state dam. The sewers are of all conditions and kinds, while the house drainage is of the many degrees of perfection or imperfection found in modern American cities. The atmospheric conditions are, practically, the same as those existing in West Troy, directly across the river, and in Albany, six miles below. The Hudson, with overflowing banks, has furnished, part of the time at least, the same mechanical conditions for the forcing of sewer gas into the houses as found at Albany. Yet, with the exception of imported cases, there has been, practically, neither diarrhœal disease nor typhoid fever in that city.

The chain of cities and towns beginning at Schenectady and ending at Catskill present a suggestive history.

The city of Schenectady, in which endemic typhoid fever has prevailed for years, takes its water supply from the Mohawk river, immediately below the entrance of a tributary creek known as the



Beinekill, the intake being situated just in front of the upper end of the city. This source of supply is used by only a portion of the inhabitants. A very large number of houses having no connection with the water mains are still supplied by the old wells, which are fearfully contaminated with sewage, and are in near relation to the privies. The soil surrounding these old wells is thoroughly saturated with decomposing animal waste.

The systems of drainage are four in number :

1. The "Memphis" system of sewers running through all the principal streets, and discharging their contents into the Mohawk, below the water-works intake. Only part of the houses, however, along the line of these sewers, drain into them. The system is flushed automatically at intervals during the day, and, as far as it is utilized, contributes largely to the public health. All evidence seems to point to the completeness and thoroughness of part of the system. Part of the system, however, unfortunately is incomplete, owing to irregularities in the grades thereby allowing the sewage to accumulate in places. In other places the sewers are reported to be broken. Houses draining into these sewers are relatively free from typhoid fever, though not from diarrhœa.

2. The cess-pool and surface systems, largely used in portions of the city, a source of pollution of the wells, and, together with the old privies, a constant menace to public health.

3. The sewage system of the Edison and Westinghouse companies, which is common to the two works, is complete and thorough in itself, but discharges its sewage into Beinekill creek, above described as a tributary of the Mohawk, at a distance of half a mile above the intake of the Schenectady water-works. This sewer, together with Cow Horn Creek, presently to be described, is a direct and absolutely certain source of contamination of the Schenectady drinking water. It appears to me to be morally certain that it is just here that the source of the epidemic of last winter is to be found.

It is only just and fair to say that the Edison Company is entirely free from responsibility for directly or indirectly contributing to the large amount of sickness among its employees. Through the kindness of Mr. Kreusi, superintendant of the works, I was permitted to inspect all the buildings of the company, and to study their sewage system. Of the thirty-six buildings, comprising the works at that time, only four have any relation to the drainage system. All their closets, except in the four buildings just mentioned, are outside the main buildings, and there are no sewer pipes running through or under

any of them. These closets are trapped and ventilated, and flushed at regular intervals. The four buildings in which closets were found were those used by their female employees. Each of these closets is flushed automatically whenever used, and their waste pipes are trapped and ventilated. The sickness among their employees seemed proportionally large, but, when it is remembered that from a third to a half of the working population of Schenectady are employed in these works, it is evident that the relative sickness was not larger among them than among Schenectady people of the same class employed in other places. Early in the epidemic, the Edisons, from necessity, supplied the same water to their employees as that supplied to the people of the city generally. This water was from the city water supply, drawn from the Mohawk, was dirty, of bad odor, positively contaminated with sewage, and was the certain cause of the severe diarrhœal disease among their men. Now, these men are supplied with clear and comparatively pure water, from a system of driven wells. The Edison Company has done its full duty to its men and to the public, and should be free from all responsibility.

4. The fourth system of sewage is the most dangerous of all. Running through the centre of the city, starting from the cemetery at Nott Terrace, in the western portion, is Cow Horn creek, which empties itself finally into the Beinekill, at a distance of only a quarter of a mile above the water-works' intake. Its course is winding; it is not covered in any way; and into it flows the sewage of perhaps a twelfth of all the houses in Schenectady; its water is contaminated and foul, shown to be charged with chlorides and albumenoid ammonia by chemical tests, and finds its way along the quarter-mile flow into the Mohawk almost directly above the Schenectady water-works' intake. It needs neither bacteriology nor chemistry here to prove a certain contamination.

It is not possible for me to lay all the evidence before you within the limits of this paper. But whoever goes over the ground with ordinary care will, I think, find the statement of Dr. Duryee, of Schenectady, to be true; that the Mohawk river water, polluted as above described, has been the cause of most of the diarrhœas, while the old wells have been the cause of most of the typhoid fever. It is not to the discredit of Schenectady to make these statements now, as its people are actively seeking reform in sanitary affairs.

Out of 85 cases of typhoid fever in Schenectady, in 84 well water was used. Among the Edison employees, who drank the river water, diarrhœas were almost universal, irrespective of other conditions.



Among five cases of the Edison employees who left Schenectady suffering from profuse diarrhœas and who recovered, *four*, on returning to work, drank only water from the exhaust and remained well; while the *fifth*, who also returned, but drank of the Mohawk water again, was again afflicted with severe diarrhœa. This is fairly conclusive evidence. It has been also reported that in some of the houses having the most approved system of drainage, but using river water, many cases of diarrhœa occurred. Most of the cases of typhoid occurred in houses with no sewer or water connections and in which well water was used.

As a still further proof of the firm conviction among all those who speak honestly upon the subject after a careful investigation, the following extract from the report of the water commissioners on the new or Van Slyke island supply is offered.

“In view of the experience of the past few years, it would seem to be a work of supererogation to set forth the necessity of a change in the city’s water supply.

Whether it is considered as a muddy liquid, unfit for drinking, washing or culinary purposes, filling up the mains and service pipes with sediment and lessening their capacity, or whether it is considered in its sometimes tolerably clear and far more dangerous condition, contaminated to a greater or less degree by the sewage which is emptied into the Frog Alley river\*—a constant menace to health, an injury to the prosperity of the city through the impression which has gone abroad and is steadily gaining ground of the unhealthfulness of the city (and which impression will not be removed by mere denial) from whatever point of view it is regarded, the necessity of a radical and immediate change is generally conceded.”

Diarrhœal disease and typhoid fever became epidemic in Schenectady about the first of December, and numerous cases appeared in Cohoes, West Troy and Albany a week or two later. It would seem probable from this sequence of time, together with the other evidence, that the river water, contaminated at Schenectady, reached the lower centres of population, and after the usual period of incubation made itself felt.

The sanitary condition of Cohoes, so far as it relates to the subject under consideration, is briefly told as follows: The water supply of Cohoes is obtained from the Mohawk river in the neighborhood of Crescent, two miles above the city, and is furnished to the public through two resevoirs, known respectively as Nos. 1 and 3. The water from reservoir No. 1 was examined by Dr. Tucker on February 26,

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\* Frog Alley river is another name for Cow Horn creek, before described.

1891, and found to be contaminated. The water from reservoir No. 3 was also examined by the same analyst at the same time and found to be in such condition as to be positively unfit for use. As frequently happens when water is stored in reservoirs, in addition to any primary contamination, secondary pollutions from vegetable growths in the reservoirs themselves may occur. This happened in reservoir No. 3 in Cohoes. In addition to the original contamination of the Mohawk river water, still greater pollution occurred after this water had remained for a little time only in this reservoir. Clinically, also, it was observed that the portion of the city supplied from reservoir No. 3 was much more numerous affected with prevailing epidemic diseases than the portion supplied from reservoir No. 1.

The sewers of the city of Cohoes are ventilated and empty into the Mohawk below the falls. Their mouths are exposed, except at high water. Some of the houses in which cases of fever and diarrhœa occurred have no sewer connections. Others are known to be well plumbed, trapped and ventilated. Of fifty-eight patients reported by Dr. Featherstonhaugh, fifty-seven drank unboiled water and the other drank boiled water. These cases following are of interest: (1) "Mr. J., of Cohoes, uses boiled water. There are three young people in his house. One of these goes to school at Albany, drinks the water and promptly has typhoid. The others escape." (2) "At Northside, a suburb of Waterford, where there have been no cases of home origin, two imported cases occurred there, one, a boy, goes to school in Albany, and the other a school teacher, lives in Waterford but teaches in Cohoes. Both drink river water. Both have fever, their families escaping." Dr. Featherstonhaugh, who communicated the above facts, kindly furnished them during a very busy season and states that he could give more examples if he had the time.

The facts from West Troy bearing upon this matter are few in number, but most decidedly to the point. West Troy has a double water supply—the Hudson above Troy, and the Mohawk at Dunsback Ferry. After the first fifty cases of typhoid fever had been reported, the Board of Health ordered the Mohawk river water to be shut off; within thirty days the disease almost entirely disappeared. The superintendent of the water-works, at the end of that time, surreptitiously turned the Mohawk water on again. There followed a prompt and wide-spread reappearance of the disease. Ninety-five per cent. of all cases in West Troy, as reported by Dr. Van Vranken, used river water, and occurred irrespective of drainage of any kind. There are some sewers in West Troy, some cesspools,



and some surface drainage; the sewers empty into the Hudson.

The factors of the problem in Albany are well known, so far as local conditions are concerned. Albany has two sources of water supply—one from the Hudson, furnishing river water to all that portion of the city west of North Pearl street, and a second supply from Tivoli lake, the water flowing into which is collected through Patroon's creek. Arising from springs, Patroon creek is augmented as it flows through farm lands, by a water-shed. Almost all the cases of typhoid fever in Albany were found in the section of the city, west of Pearl street, using river water. The section east of Pearl street, using the Tivoli lake supply, was comparatively free from the disease. Out of 406 cases of typhoid and symptomatic fevers occurring during this epidemic, as reported by the health officer of Albany, 334 used unboiled and unfiltered river water, while 72 used either boiled or filtered water. About eighty per cent. of the cases used unboiled or unfiltered river water. Of the returns from Albany, all but three expressed themselves as believing the river water to be the chief cause. Of the three who expressed themselves otherwise, one said he had no opinion on the subject; one said water is positively not the cause; and one said, frankly, he "didn't know." Two other statements were made in this connection, "St. Agnes' school, where plumbing and drainage is perfect, and where the water has been boiled with great care (so that both the drinking water and sewer gas can be excluded as a cause), there were a very great many cases of diarrhœa, but there has not been a single case of typhoid fever. On the other hand, in the Albany Orphan Asylum, where the water was not boiled, there has been neither diarrhœa nor a single case of typhoid."

The diseases under consideration did not appear in epidemic form in Hudson, Coxsackie or Catskill. These places are all situated on the Hudson river. There is a flow of about twenty miles between Albany and Hudson. Catskill is still further down the river. In Coxsackie river water is not used generally for drinking purposes.

At Hudson, river and well water are used as a source of supply. Drainage is good into sewers emptying into the Hudson river. There were diarrhœas, beginning after the January thaw, but scarcely a case of typhoid fever.

At Coxsackie, where cistern and well waters are used, there was neither unusual diarrhœa nor typhoid fever, except among the ice cutters drinking river water.

At Catskill river water is mostly used, with some cistern and well water. Drainage is by means of public sewers in part, and in part by means of the surface system. There have been many diarrhœas following sudden changes in temperature, but no typhoid fever.

From the foregoing statements of facts, together with other facts, for the presentation of which there has not been time in this paper, all largely contributed through the kindness of the profession, I am led to the following conclusions. Excluding from consideration the abdominal type of la grippe and the diarrhœas caused by bad food and sudden changes in temperature, I believe the epidemic diseases prevalent during the past winter to have been due—

1st. To the following contributing causes :

(a) An ice-bound condition of the Mohawk and Hudson rivers, whereby contaminated water was not sufficiently aerated, and the destruction of such contamination by oxidation was prevented.

(b) Additional contamination occurring after thaws and rains, the earth being frozen and preventing absorption, and the surface accumulations of decomposing animal and vegetable materials being washed directly into rivers and wells.

(c) Non-acclimated persons drinking for the first time water to which they had not been accustomed.

(d) Polluted milk supply.—I am informed that a number of cases of typhoid fever, in Albany, occurred among people using milk obtained from the same milkman.

(e) Sewer gas acting as a debilitating agent, and, in occasional instances, as a direct cause.

2d. And to the following as a chief cause :

(a) Typhoid fever and diarrhœas endemic in Schenectady, caused by the use of either the polluted city water or private wells, or both.

(b) The water of the Mohawk contaminated by the city sewers of Schenectady, polluting the water supply of the city of Cohoes at the intake at Crescent above the Cohoes falls.

(c) The water of the Mohawk again contaminated by the city sewers of Cohoes below the falls and polluting the drinking water of both West Troy and Albany.

If I had any bias at all at the beginning of this investigation, it was in favor of the river water as a proper and healthful source of public supply. It is to me at least a most convincing argument that the above conclusions were forced upon me by the powerful logic of the facts obtained.



I thank you, gentlemen, for your interest in and attention to this somewhat lengthy address. My thanks are also due to my professional colleagues, whose responses made this address possible, and to personal friends in Schenectady, Cohoes and Albany, who generously supplied me with valuable information.

#### APPENDIX I.

No. 12 TEN BROECK STREET,  
ALBANY, N. Y., *February 16, 1891.* }

DEAR DOCTOR—There have been prevalent in Albany and vicinity, since the first of January last, many cases of severe irritative diarrhœa and catarrhal enteritis with or without gastric symptoms. The same intestinal disturbance has been called, in some places, "Winter cholera." This form of disease has become so frequent as to amount almost to an epidemic, and, as a consequence, there has arisen great public and professional interest in the subject. At the same time typhoid fever and an anomalous variety of fever, accompanied by irregular chills, neuralgia, and gastric and intestinal symptoms, have become epidemic in this section of the state.

It has become a matter of importance, both to the public and the profession, to ascertain, if possible, the causes which have produced such diseases.

I have, therefore, volunteered to make a collective investigation of the subject and invite an expression of opinion from the profession in this section of the state. Full information is particularly desired from places using potable water derived from other sources than the Hudson and Mohawk rivers. The opinions expressed will be properly tabulated and presented at an early date in a paper to the profession in Albany. A copy will be furnished you, if you desire.

Your coöperation is desired, and the favor of an early reply to the questions in the enclosed blank earnestly requested.

Very truly yours,

JOSEPH D. CRAIG.

#### APPENDIX II.

COLLECTIVE INVESTIGATION AS TO THE CAUSES OF EPIDEMIC  
INTESTINAL DISEASE IN ALBANY AND VICINITY.

A—1.—Do diarrhœal diseases prevail in your practice to an unusual extent?

- 2.—What is the source of the drinking water in these cases?  
River, well or other water?
- 3.—What unfavorable atmospheric conditions have these diseases followed?
- 4.—Were any of the cases contracted in other places? If so, where?
- 5.—What kind of drainage system have the houses in which these cases occurred, and into what does it empty?
- 6.—What is your opinion as to the cause of such diseases, particularly in reference to—
- (a) Drinking water?
  - (b) Atmospheric influences?
  - (c) Other causes?
- B—1.—Have you had, to an unusual extent, in your practice—
- (a) Typhoid fever?
  - (b) Anomalous or other fevers?
- 2.—If so, what cause did you assign?
- (a) Drinking water?
  - (b) Importation from other places?
  - (c) Direct contagion?
  - (d) Local sources of infection, as privies, cess-pools, sewers, etc.?
- 3.—Is there any known relation in your cases, or do you suspect any relation to exist between drinking water and drainage system?
- C—Can you remember a previous epidemic of like intestinal disease, where like atmospherical conditions prevailed? If so, will you give particulars?
- D—Will you kindly report any case where the relation of cause to the disease has been POSITIVELY ascertained?
- E—Remarks:
- From
- 

## EPIDEMIC OF ASIATIC CHOLERA IN TRIPOLI, SYRIA.

BY IRA HARRIS, M.D.,

BAIROUT, SYRIA.

During the summer and autumn of 1889 Syria was visited with a fearful epidemic of dengue, hardly a city or village being exempt. The last two months of the year and the first two of the following, when Europe and America were ravaged by *la grippe*, this disease



was still raging. Then *la grippe* appeared in a mild form, no doubt modified by the presence of dengue, which disease it simulated in many of its symptoms.

In looking up the literature of *la grippe*, I learn that without an exception it was followed the next summer by Asiatic cholera, and this year has not proved an exception to the rule. Early in June, rumors came from Mecca that a severe epidemic of Asiatic cholera had broken out among the pilgrims. In July the disease was carried to Mardin by a band of Gipsys supposed to have contracted it from an encampment of returning pilgrims. The first week in September some government troops were sent from Aleppo some hours to the east to collect the sheep tax of some Bedouins who were making their way southwestward from the vicinity of Mardin. Some days later the soldiers were attacked by a "mysterious disease," and sent back to their quarters in the city. It was very soon discovered that the disease was cholera, and it became epidemic. In October the soldiers were sent to assist the Quarantine at Hamath, a city of about 30,000, sixty miles south of Aleppo. Two days later the cholera appeared, and for about twenty days it raged, it being reported that nearly 4,000 deaths occurred, or 90 per cent. of those attacked. After this the mortality became very much less. Refugees fled in all directions, carrying the disease to the surrounding villages, and in some the death-rate was appalling. In one, a village of 500 inhabitants, 145 died in two days. The next city of importance south of Hamath is Hums, with nearly 45,000 inhabitants. A determined effort was made by a double cordon to prevent the appearance of the disease, and they were aided by a natural barrier in the way of a deep, swift-running river crossed by only one bridge, and this was guarded day and night. Here again the government unconsciously aided in carrying the disease, for a soldier from the infected district was ordered to Hums, and with him went the dread disease. Here the death-rate soon reached 100 a day, and in five weeks the mortality reached 2,500. On December 3d it was reported here in Tripoli that the cholera had disappeared from Hums, which was not true. On the 4th the quarantine doctor, for a consideration of \$125, it is said, permitted a flock of sheep, with their shepherd, to pass the quarantine lines. On the 5th the shepherd died; on the 6th two men who had been to look at the sheep sickened, and in the afternoon a negro who lived near where the sheep were kept was carried to the city hospital, where he soon after died. A consultation of native doctors was called, and they could

not agree as to its being "true cholera." On the 7th there were five new cases and five deaths. It became known that the best native physician had fled from the city, and the city physician attempted to, but was stricken with the disease. Then the authorities (four days after the cholera appeared) informed the world that it was here.

I will now give briefly a few points which have impressed themselves upon my mind in connection with the disease here in Tripoli:

1st. That quarantine can be made so effective that cholera can be confined to a given locality. The line of the Mount Lebanon Government runs from a point on the seashore one mile south of the city, thence running in a northeasterly direction over the mountains. This line was so effectually guarded by a strong cordon of police, selected from the most reliable men in the district, subject to the severest penalty upon the betrayal of their trust (for instance, the government doctor, for attempting to receive a bribe to give a man a clean bill of health to pass through to Beyrout, was sentenced to a heavy fine and three years imprisonment), that not a person succeeded in crossing the line, and not one case of cholera appeared in the whole Lebanon country, with its great population, or Beyrout, with its 100,000 or more inhabitants. From the sea the quarantine was all that could be desired. So, a strong cordon composed of resolute men, in sufficient numbers so that one can watch the other, with the penalty for receiving a bribe such that it would preclude the possibility of the betrayal of their trust, is one of the best means at our disposal for preventing the spread of the disease.

2d. That the water-supply offers the best medium for the spread of the disease, especially if so illy guarded as that of Tripoli from contamination. Here in the port, of the thirty cases of death by cholera, all but three used the city water. I should say that the port is separated from the city by two miles of gardens. The water-supply is partly from city water carried in pipes buried in the ground and partly from cisterns, and, as the larger number use the latter, it may account for the small number attacked with the disease as compared with the city. Another interesting fact is that every family, so far as I can ascertain by patient investigation, who ate cooked food and drank boiled water were exempt from attack.

3d. Cleanliness is of the utmost importance.

4th. Opium in any form is still the sheet anchor in any stage.

5th. If we expect to lessen the mortality of cholera, we must use some antiseptic remedy or remedies combined with an astringent.



gent. At the present time we are almost helpless when the disease has passed into the alga stage.

6th. I *emphatically deprecate* the usual custom of scattering broadcast newspapers, tracts or pamphlets recommending a number of remedies whose base is immense doses of opium, thus putting into the hands of a frightened, ignorant public a drug that is quite as deadly in its nature as the worst case of cholera. I have reason to believe that many of the fatal cases here in the East are caused by opium poisoning.

7th. The greatest mortality from cholera (nearly 90 per cent.) is among the Moslems, because of their fatalistic tendencies. They, as a rule, either leave the case to God or send for a physician when it is too late.

The native physicians are handicapped by an absurd law that explicitly states, and is rigidly enforced, except in the case of quacks, that a physician must not prescribe a drop of medicine from his pocket or office. He must give a prescription to the patient, which must be put up at the drug store. So, during an epidemic of cholera, the doctor is not permitted to give medicine, and, as the drug stores are closed nights, you can understand what this means to the many cases occurring during this time. By morning many are past help.

9th. Treatment: At the beginning of the epidemic "Pasteurs Antictolarique," which, as you know, contains Hydrarg. bichlor., was given a fair trial, and was found sadly wanting. Of all the remedies used the following gave the greatest degree of success. If the case is seen before the collapse has set in, give from 15 to 30 drops of tinc. opium. In a half hour give a second dose of from 5 to 10 drops, according to the urgency of the symptoms; then in fifteen minutes, if no impression has been made upon the action of the bowels, give tannic acid, 10 grains; tannate of quinine, 1 grain; salicylate of bismuth, 2 grains; Dover's powder, 1 grain. This is for one powder. Repeat every half hour until six powders have been given, then, if the diarrhœa is not checked, inject into the bowels 2 drachms of tannic acid in a solution of warm starch. This has not failed in any case in which it has been given before the stage of collapse has set in. The city physician told me after the epidemic that he was pleased with the action of five grains of salol given every hour. As for treatment in the stage of collapse we have been almost powerless to give relief. They would die in spite of the most vigorous efforts. Mustard, whiskey, camphor, hot water and friction, applied locally, seem to give the most benefit.

MEDICAL PROGRESS.

REMARKS ON FIVE HUNDRED CASES OF STRICTURE OF THE URETHRA.—Desnos (*Annales des Maladies des Organes Génito-Urinaires*, Jan., 1891) records his observations upon the etiology and treatment of stricture of the urethra, derived from 500 cases.

In the immense majority of the cases the strictures were of gonorrhœal origin; in two instances they were caused by the cicatrization of urethral chancres; and four cases resulted from urethral traumatism, such as falls and kicks. He draws attention to what he calls "slight traumatism of the canal," which sometimes takes place during coitus, and sometimes follows a prolonged erection during the course of an attack of gonorrhœa. He believes that these little ruptures of the mucous membrane are more frequent than one would suppose, and that they play a considerable part in the genesis of stricture.

His experience goes to show that gonorrhœal strictures are of slow development, having never seen one in which a year and a half, at least, had not elapsed since the beginning of the urethritis. A traumatism, on the contrary, whether slight or extensive, leads to the rapid formation of a contraction.

He points out as a remarkable fact the degree to which a stricture may attain before the patient experiences functional troubles. Many patients do not seek relief for difficulties of micturition, but for such complications as cystitis, fever, digestive disturbances, etc.

As to the locality of the stricture, an analysis of the cases showed that almost all the constriction was in the bulbous portion of the urethra. In nearly one-half of the cases the strictures were multiple, the tightest ones being in the bulbous region. He never met with an instance in which the stricture was impassable, but always, even in the most difficult cases, after patient and repeated efforts, has succeeded in passing a bent filiform bougie:

The methods of treatment employed by him, and the number of cases treated by each, were:

	CASES.	DEATHS.
Gradual dilatation.....	387	1
Internal Urethrotomy.....	78	0
External Urethrotomy.....	3	1
Electrolysis.....	32	0
	500	2

With regard to gradual dilatation, he insists upon the necessity of proceeding with extreme slowness and patience, avoiding all violence, rapidity of movement, and pressure, however slight. Of the employment of cocaine in the urethra, he says that he rarely uses it. Outside of the dangers inherent to the drug, he has found a disadvantage in the fact that the cocainized urethra offers a certain degree of resistance to the passage of sounds. He insists in a most positive manner upon the association of antiseptic and aseptic measures with



the instrumental treatment of the urethra, cleansing the external parts with a boric acid solution, and irrigating the urethra with it as well. The instruments to be employed should be sterilized. To the patient he administers salol or biborate of sodium. His experience goes to prove the value of these precautions, since he met with urethral fever in but two per cent. of the dilatations.

As to the question whether dilatation really leads to the cure of stricture, the writer is unable to adduce a sufficient number of facts, less than one-half of his patients having remained long enough under observation.

Passing on to the operation of internal urethrotomy, Desnos expresses his preference for the Maissonneuve urethrotome, having employed it in all but two of his seventy-eight cases. He uses a small blade, and thinks that a division of the stricture to a calibre of twenty-one or twenty-three is quite sufficient. He thinks that when it can be easily introduced, a catheter should be left in the bladder after the operation, for the purpose of preventing contact of the urine with the wound; but when difficulty is met with, he believes that the attempts to pass the catheter will be of more serious import than the omission of its use.

External urethrotomy he regards as an operation required only in exceptional cases. Of the three patients upon whom he performed it one had multiple perineal fistulæ, another had a calculus impacted behind a tight stricture, and a third suffered from stricture resulting from rupture of the urethra.

Desnos's conclusions as to the several methods of treatment show that he strongly favors gradual dilatation as being applicable to the greatest number of strictures. He calls attention to the advantage which it possesses of not confining the patient to bed, and its freedom from serious risks, and believes that it should undoubtedly be employed if the dilatation progresses regularly, and no complication arises. If, during the course of treatment, cystitis, prostatitis, fever, or hemorrhage, should be met with, or if, after dilatation, the contraction speedily returns, the operation of internal urethrotomy is indicated. He is of the opinion that the final results of the operation will advantageously bear comparison with any other mode of treatment.—*Univ. Med. Mag.*

THE QUANTITATIVE ESTIMATION OF SUGAR WITH ROBERTS' FERMENTATION TEST.—For clinical purposes we are thus reduced to the methods of Einborn and of Roberts. Einborn's method being too well known to need description here, we shall at once proceed to consider the test proposed by William Roberts of Manchester; and so well has its distinguished author done his work, that, although thirty years have almost elapsed, the method stands practically as originally proposed. The only requisites for the test are a sufficiently wide cylindrical urinometer-jar of about two or three ounces capacity, and two good urinometers, one reading from 1.000 to 1.025, the other, 1.025 to 1.030; large subdivisions of the

scale are essential. Urinometers with thermometers are desirable, but by no means absolutely necessary. The tests of a good instrument are that in distilled water at the temperature for which it is corrected the instrument should stand at 1.000, and in a dilution of any salt solution with an equal volume of distilled water the reading should be one-half of the gravity of the original salt solution.

The procedure is carried out as follows: Having accurately taken the specific gravity of the specimen of urine, and noted the temperature, about four ounces (if quantity is small, one-half this amount will suffice) are poured into a twelve ounce bottle, "a lump of compressed yeast about the size of a walnut" (half a cake will be found sufficient) is added and thoroughly stirred up; the bottle is then closed with a nicked cork to prevent the escape of the CO gas generated. A standard is then prepared by filling a two or four ounce bottle with some of the same urine, and is securely corked without having added anything. The two bottles are now put aside in a warm room for eighteen to thirty-six hours, when the fermentation will have been completed, as is shown by the cessation of the formation of bubbles in the fluid, and also by the clearing off or subsidence of the scum. The bottles are removed to a cool place so that they may acquire the same temperature as at the beginning of the test; a portion of the fermented fluid is decanted and the specific gravity and temperature are again noted. It is also well to note the gravity of the "standard," to see if it is identical with the original reading. The difference in the two readings of the specimen, before and after fermentation, multiplied by 0.23 will give the percentage of sugar in the specimen. Or we may express it thus: Each degree of specific gravity lost in fermentation represents one grain of sugar to an ounce of urine. The total amount for twenty-four hours being known, the total amount of sugar can be calculated.

Roberts gives two examples. A specimen showed 11.36 per cent. sugar by titration with Fehling's solution (=49.64 grains to the ounce). The specific gravity was 1.0535; after fermentation it fell to 1.0045; it lost 49°, *i. e.*, 49 grains to the ounce; or,  $\times 0.23 = 11.27$  per cent.

A second specimen had 5.68 per cent. sugar (=24.82 grains to the ounce) as shown by titrating with Fehling's solution. The original specific gravity was 1.03032; after fermenting it fell to 1.01356; the difference was 24.76°, *i. e.*, 24.76 grains to the ounce; or,  $\times 0.23 = 5.69$  per cent.—*The Medical and Surgical Reporter.*

METASTATIC ABSCESS AND CELLULITIS OF THE ORBIT FOLLOWING DOUBLE SUPPURATING CHANCROIDAL BUBOES IN THE INGUINAL REGION.—Dr. V. H. Würdemann, of Milwaukee, Wis., reports this case in full (*Amer. Jour. Ophth.*, May, 1891), with the statement that he has been unable to find a similar case on record. A young Englishman had chancroids, followed by suppurating buboes in both groins, which were opened, antiseptically dressed, and pus ceased to form after a couple of dressings. In a few days,



Dr. W. found irido-cyclitis; anterior chamber swollen; pupil irregular from synechiæ; considerable flocculent deposit in anterior chamber; pain and photophobia intense; vision reduced to perception of hand before face. Panophthalmitis set in a week later. Scarification of chemosed conjunctiva and canthotomy gave temporary relief. Axillary glands became painfully swelled, but did not suppurate. Exploratory incisions failed to show pus in the orbit. Two days later, pus presented near insertion of the external rectus, when the globe was enucleated, releasing a large quantity of pus from a retro-bulbar abscess in the capsule of Tenon. Pus discharged freely for several days. Symptoms rapidly improved; patient left hospital two weeks later—gaining in flesh and in health until an artificial eye was well born in a month. There was no syphilis in the case. The orbital affection was not of a chancroidal nature, but the doctor thinks that it was due to the deposition of a mycotic thrombus from one of the other structures more directly implicated in the orbital veins, which caused suppuration and extension of the disease to the other parts. All of the systemic symptoms were septic in character, and the orbit seemed to be the principal focus of infection, for all dangerous symptoms ceased after operation.

ALOPECIA NEUROTICA—(S. Askanazy, *Arch. f. Derm. u. Syph.*, XXII., 1800, p. 523). Two cases are described. A man thirty-one years old developed partial facial paralysis on the right side in consequence of the removal of a tumor of the right submaxillary region. Soon after, hyperidrosis and alopecia of the same side appeared. The scalp was unaffected. In the second case the baldness affected the face, temples and pubes. The patient was hypochondriac and melancholic, and suffered from severe headaches and insomnia.

POPULAR FAITH IN ALTERATIVES.—Since the nature of the action of this class of remedies is to some extent as yet undetermined and obscure, they are necessarily prescribed empirically. To this fact is perhaps due the promiscuous use by the public, not infrequently with the indorsement of physicians, of a host of nostrums of no real medicinal value. Many of these have had an enormous sale—indicative not so much of their worth as of the general belief in the necessity for the use of what are popularly termed “blood purifiers.” Spring is the season when these are most generally resorted to.

When we consider that is no condition of disease at some stage of which tonic alteratives are not indicated, it will be appreciated that next to agents, such as opium and quinine, the action of which is specific, no class of remedies are more frequently demanded.

Messrs. Parke, Davis & Co. supply, under the name of Syrup Trifolium Compound, an alterative formula containing red clover, stillingia, cascara amarga, burdock root, poke root, prickly ash bark, berberis aquifolium, all valuable vegetable alteratives, either with or without iodide. This has been used by physicians with much success in all conditions requiring alterative treatment.

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W. G. MACDONALD, M.D., EDITOR.

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ELECTRICITY IN GYNECOLOGY.

The employment of electricity in the management of diseases of women has for many years received more or less attention. Cutter was a pioneer in this field, and we are not sure that better work has been done since by any other operator. But the early reports from the clinic of Apostoli, followed by the endorsement of so eminent a surgeon as Thomas Keith, gave a new impetus to the employment of electricity, since which journals and reports have contained a large number of contributions relative to its value. Recently a number of gentlemen have given clinical testimony that electricity has not done all that many of the glowing accounts of its advocates would have us believe.

It afforded us much pleasure to present in THE ANNALS for January a paper by Dr. Franklin Townsend, giving the results of his experience, which, we may add, were not favorable to electricity. The editor of the electro-therapeutical department of the *Medical World* did him the honor of a review, in which he concludes that the author is not an expert "*electro-gynecic surgeon*," to which, beyond any reasonable doubt, can be attributed his ill-success. We are willing to admit that the paper did not specify the *precise instruments, method and dose*, nor the frequency of administration, yet we can affirm that the treatment was carried out according to the methods which have been so carefully and repeatedly described in papers detailing so many brilliant successes. The ignorance of the operator has grown of late to be the subterfuge of the enthusiastic electro-gynecic



surgeon when contradictory evidence confronts him. Dr. Homans has met this objection by employing an electro-therapeutist to assist him in his treatments. If a sound knowledge of electricity and its application is all that is necessary, we can see no serious objection to employing an electrical engineer for our therapeutist; but there are yet physicians who believe that there are other qualifications equally as necessary.

It has been asserted, unkindly, that many electro-gynecic surgeons know no gynecology. We would not go so far as that, but assert that many of them might know much more. For example, we do not believe that any surgeon can honestly treat a multilocular ovarian cyst by electricity until the case is beyond all human aid, nor an ovarian abscess for extra-uterine pregnancy unless his diagnosis be at fault. Surely, no electro-therapeutist who is a competent gynecologist would recommend, "If a cyst (ovarian), *it may be tapped, or, probably* better still, removed surgically," or that abdominal section performed after delivery are especially liable to be followed by dangerous inflammations.

Electrical apparatus is now so precisely adjusted, methods are so minutely described, dosage so easily measured and varied at will that for us it is unthinkable that men of reasonable ingenuity cannot use electricity with all the advantage there is to be derived from it. On the other hand, diagnosis in gynecology presents many difficulties, which can only be overcome by much experience. Only the rudiments can be taught; the rest is learned by careful study and at the post-mortem and operating table, and by comparison.

We are convinced that the safer man in the community is the gynecologist with little knowledge of electricity, rather than the electro-therapeutist with little knowledge of gynecology.

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WITH the object of advancing scientific study and settling a now mooted question, Dr. J. B. Mattison, of Brooklyn offers a prize of \$400 for the best paper on "Opium Addiction as Related to Renal Disease," based upon these queries:

Will the habitual use of opium, in any form, produce organic renal disease?

If so, what lesion is necessary?

What is the rationale?

The contest is to be open for two years from Dec. 1, 1890, to either sex, and any school or language.

The prize paper is to belong to the American Association for the Cure of Inebriety, and be published in a New York medical journal, *Brooklyn Medical Journal*, and *Journal of Inebriety*.

Other papers presented are to be published in some leading medical journal, as their authors may select.

All papers are to be in possession of the Chairman of Award Committee, on or before January 1, 1893.

The Committee of Award will consist of Dr. Alfred L. Loomis, Pres. N. Y. Acad. of Medicine, Chairman; Drs. H. F. Formad, Phila.; Ezra H. Wilson, Brooklyn; Geo. F. Shrady, and Jos. H. Raymond, editor *Brooklyn Med. Journal*.

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## REVIEWS AND BOOK NOTICES.

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PRACTICAL TREATISE ON ELECTRICITY IN GYNÆCOLOGY. By Egbert H. Grandin, M.D., Chairman Section on Obstetrics and Gynæcology, New York Academy of Medicine; Obstetric Surgeon, New York Maternity Hospital; Obstetrician, New York Infant Asylum, etc., and Josephus H. Gunning, M.D., Instructor in Electro-Therapeutics, New York Post-Graduate Medical School and Hospital; Gynæcologist to Riverview Rest for Women; Electro-Gynæcologist, North-Eastern Dispensary. Illustrated. Octavo, 180 pages. Muslin, \$2.00. New York: William Wood & Company.

This volume appears at a very opportune time. Much has been written, much has been said, in the discussion of the subject, in our medical societies, relating to the use of electricity in gynæcological practice. That it is an agent capable of doing much good there can be no doubt, that it has been sadly abused is equally true, and that it has been overestimated in its value there can be no question. The authors have endeavored (and one simply speaks the truth in saying that they have succeeded) in presenting to the profession a work that is to be commended in every respect. It is clear, concise and thoroughly conservative. They have expressed their views and practical experience in language that cannot be misunderstood. The work is certainly one of the most valuable that has been presented on this subject in a long, long time, in any language. The illustrations are very practical and clear. The profession will undoubtedly appreciate and make use of the work as it deserves.

The publishers have done their work in an elegant manner. A.V.



TREATISE ON DISEASES OF THE NERVOUS SYSTEM. By William A. Hammond, M.D., with the collaboration of Graeme M. Hammond. Ninth edition, re-written and revised. Cloth, 8 mo, 932 pages. D. Appleton & Company, New York.

It is now twenty years since the first edition of this valuable treatise appeared. It has always been popular with the profession, not only on account of its intrinsic merit, but because of the pleasing style in which it is written. There is no difficulty in digesting the contents. Yet another advantage possessed by Dr. Hammond's treatise is that more space is devoted to treatment and indications for the administration of remedies than in many other text-books. After all, our patients are much more interested in relief and cure than in the more purely scientific studies of etiology and pathology.

This edition has been re-written—a necessary labor—with the addition of much new material, which has added greatly to the value of the book. We are sorry that the authors lost sight of the valuable clinical and pathological report of Prof. Henry Hun, of Albany, on Myxœdema.

The publishers have left nothing to be desired in the make-up of the book, and we are sure that it will not only be a welcome guest to its old readers, but will find many new ones.

MASSAGE: A Primer for Misses. By Sarah E. Post, M.D. Lectures before the Training School for Nurses connected with Bellevue Hospital, Mt. Sinai Hospital, St. Luke's Hospital and Charity Hospital, New York. Second edition. Illustrated. The Nightingale Publishing Company, New York. Price, \$2.00.

Dr. Post says very much in the first sentence of her interesting monograph: "The way to learn massage is to do it." The art of massage is manual, yet requires intelligent appreciation. The same mechanical dexterity that makes the successful mechanic is necessary in those who will give massage well. Books, lectures and observations will never make a good operator. Practice, only, can. Yet books, lectures and observations are all valuable as assistants in acquiring the art, giving general principles, pointing out the best methods, describing faulty positions and detailing accidents incident to its application. Dr. Post's little book is singularly compact, containing much more material than many larger works.

The book must be of much interest to physicians and is well adapted to their wants. They may order often more intelligently this most valuable therapeutic agent, we are sure, after a careful reading of this series of lectures.

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THE RELATION OF THE BOARD OF HEALTH TO  
THE PUBLIC.\*

BY ALBERT VANDER VEER, M.D.,

ALBANY, N. Y.

*Mr. President and Gentlemen :*

The history of every nation, the development of every government, has exhibited a desire and determination, an actual carrying out, of ideas relative to the care of the public health. From the time of the development of the admirable system of sewers in Rome to the present time, sanitary matters have claimed the attention of scientists, and the subject of legislation, on these subjects, has kept fully abreast of all that has gone to make up modern civilization. Beyond a doubt the English-speaking nations have, up to within a few years, led in much that appertains to the care of the public health, and this reference is especially applicable to England and her colonies. In the United States it has been an intelligent, constant and progressive work. It is true, some states are far in advance of others in the sanitary care of the people, but it may be truly said that our state has been of the number which have occupied an advanced position, having been among the first to organize a Board of Health, and leading, as she has done in many instances, in this progressive work. The Board of Health of this city was created by Chapter 431 of the Laws of 1881, in which Albany was under the supervision of the State Board of Health, and was organized January 31st, 1882, with the following members :

Hon. M. N. Nolan, city mayor ; Jacob S. Mosher, M.D., chairman *pro tem.*; A. Vander Veer, M.D., John Boyd Thacher, Thomas H. Dwyer, John McKenna, Wm. H. Keeler, with Daniel V. O'Leary, M.D., health officer. May 25th, 1885, a law was passed (Chapter

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\* An Address delivered before the Albany Institute, May, 1891.



297, Laws of 1885), exempting Albany from the provisions of the State Board of Health (Senator Thacher's bill).

Of the work that has been accomplished by this Board, I desire to speak somewhat briefly, and yet when I come to look into and investigate the record that has been preserved in its archives, I am somewhat embarrassed to know just how much to select that will repay you for listening—a recital of what I believe to be the honest, earnest administration of one of the best bureaus of our city government. It seems somewhat singular that in the care of our neighbors' health, not less than our own, it has been found necessary to enact some of the most rigid laws that are to be found upon the statute books, and while authority has been given quite to the fullest extent to the Board of Health of the city of Albany, yet I believe it has seldom, if ever, been abused. There have been complaints and statements made at times by parties—it may with charity be said—in the heat of discussion, yet the Board has never failed to do its full duty, and it must be understood that sometimes these duties are of the most exacting and difficult. There are perhaps very few actions or conditions that seem to antagonize human thought so much as for one person to charge another with being negligent in the sanitary care of his premises. To be thought the source of creating a nuisance or nuisances immediately arouses the indignation of the party accused, the latter looking upon it, not unfrequently, in the light of a disgraceful or insulting accusation. To be told that their cesspool, drain or vault is creating a nuisance at once arouses a spirit of antagonism and illy fits the mind for the performance of justice to the parties who feel injured, and who are certainly being injured in many instances. Therefore, it is shown beyond a doubt, on many occasions, that the wisdom of our law-makers in establishing Boards of Health is surely among the wisest of their acts. In a city of this size, were it not for the authority of the Health Officer, there would be many evidences of absolute neglect, on the part of many worthy citizens, of preventing the spreading of preventable and contagious diseases.

Take, for instance, the subject of vaccination. You may establish dispensaries, you may offer the services of your hospital staffs to vaccinate without charge, and yet it would be impossible to protect the city from the spread of small-pox, were it once to enter, without the Health Officer seeing that every so many years the city is thoroughly vaccinated. The health officer has, on several occasions, found it necessary to employ a corps of physicians to go over the

city and vaccinate from house to house in order that the city might be properly protected. Notably was this the case in March, 1882, when Dr. O'Leary had the western part of the city thoroughly canvassed in this manner. The wisdom of this action was soon shown later on. Small-pox *did* reach Albany, but found no lodgment; that is, not more than four or five cases developed. Later on, our neighboring city, Troy, which had been somewhat negligent in the matter of vaccination, had a decided epidemic, resulting in the loss of thousands of dollars to the business men, occasioned by the isolation of the city that followed for some weeks before the loathsome epidemic was controlled. Money thus invested is well invested by the tax-payers. There are citizens who make an honest effort to correct nuisances when their attention is called to them, and who spare no expense to put their houses and premises in the best sanitary condition, but they are often ignorant of the manner in which they should proceed, and their best efforts are not always attended with success, until aided by more experienced persons. Let me illustrate:

Mrs. A., living at 124 Blank street, was surprised to have members of her family becoming ill in a manner that evidently was due to some imperfection in the drainage. She was told by her physician that the drains of her house should be thoroughly examined. This was done by a competent plumber, he making such tests as he was accustomed to, but assured her that her drains were in good condition; that he had thoroughly attended to them but a few years previous, and that she had no cause for alarm. However, the sickness continued, the physician became more emphatic, and Mrs. A. requested her neighbor, Mr. B., living at 126 Blank street, to examine his drains, stating that she believed there was a leak in his house drain, and that her premises were being poisoned by it. Mr. B., a man of wealth and a thorough gentleman, was surprised to know his house was brought under suspicion, had his drains tested immediately and was told that they were in good condition. In order to convince Mrs. A. that the offensive water, that found its way occasionally into her basement, particularly in the vegetable cellar, did not come from his premises, he took up the floor of his basement the whole length of the partition wall, dug a long ditch, and showed conclusively that there was no leakage in that direction. Still the difficulty continued on the premises of Mrs. A. Thus far an effort had been made to get at the cause of the difficulty in a quiet, harmonious manner. Now the physician advised Mrs. A. to



consult the Board of Health. This was done. An inspector was sent who made careful tests and found that the plumbing of each house was in a fairly good condition, although he did discover a break in the pipe leading from the premises of Mr. B., opposite the basement wall and under the sidewalk. This was connected, but the trouble was not relieved. The inspector was again sent for. The vegetable cellar connected with Mrs. A.'s house was the source of the trouble beyond a doubt, but how did the nasty, disagreeable water get there? A well was dug a few feet deep and it was found that it would fill with water of an unpleasant odor, sometimes much faster than others, especially after a rain. After much study, the inspector felt that there was something wrong in the block, and began to inspect the buildings, first-class in every respect, and occupied by the best citizens. Nos. 128, 130 and 132 were all found in good condition, but on examining 134, a fine residence that had changed hands about eighteen months previous, he discovered that an alteration had been made in the plumbing, and that a cistern, no longer used, had been made use of to connect direct with the water closets of the house; evidently the family being of the belief that this cistern communicated with the drain in some mysterious manner. It did have an over-flow, but this over-flow was far from being perfect. In the course of a few months this cistern became filled, to a certain extent, with fecal matter. It still had its connection with the roof of the dwelling, and it was also found that the over-flow had become stopped, changing its current in such a manner that now through the front walls of the houses and basements the sewage had formed a channel and worked its way down under the foundations of the different houses, not making its escape into any of the cellars until it reached the house of Mrs. A. Here was a solution of the entire question. When the plumbing of 134 was corrected, the cistern closed, the proper connection made with the street drain, the premises became sweet and pure again.

Think you that the best of people, residing on any street, would have worked in harmony with each other to have found this source of trouble? Think you but for the law and authority of the Board of Health that the owner of No. 134 would have allowed his neighbor to have made the charge that he was using an old cistern as a vault for his water-closets? This is but one illustration of many that I might call your attention to.

Of the work that has been accomplished by the Board of Health, the abatement of stagnant ponds and the correction of worthless

drains has been among the most important. Time will not permit me to refer to the different instances where the Board of Health, either as a whole or through their Sanitary Committee, have inspected and recommended to the Common Council the putting in of drains and sewers and the making of such repairs and corrections as were absolutely necessary. It would be impossible to abate such conditions as the stagnant ponds that existed at the head of Van Woert street, at Allen street, at Quail street, Myrtle avenue, west of Dove street, and others I might mention, but for their being condemned as nuisances by the Board of Health. But for their persistent and continuous efforts (it is true their attention being called to it constantly), Martinville to-day would be far worse than it is, and yet there is much to be accomplished in the way of improvement there still. All along the line of the stream that passes through this unfortunate part of our city, can we see the improvements that have been made, and which had their origin in the absolute, positive recognition and recommendations of the Board of Health. One of the best things done by this Board, a few years ago, was the directing of the Health Officer to ascertain the sanitary condition of emigrants arriving in the city to work on the West Shore railroad. In several instances the spread of contagious diseases was, beyond a doubt, arrested. One good result following a resolution adopted by the Board of Health in August, 1882, was notifying the Secretary of State as to the nuisance situated in the basin between Columbia and Lumber streets, a copy of the same being transmitted to the Board of Public Works, and which notification resulted in the relief and abatement of the nuisance for that time. From a study of the condition of the basin the Board, later on, felt that it was their duty to know more about the intake of our water-supply, and on December 15th, 1884, a resolution was passed authorizing Prof. Mason, of Troy, to analyze the water of the Hudson river above Albany. This report contained many valuable points suggestive of the condition of the water at the intake, with which most of us are now familiar. Said report was presented to the Board May 28th, 1885, and accepted. This report was the means of demonstrating that at certain times the flood tide carried our own sewage back to the intake.

The removal of night soil from privy vaults and the method and manner of doing it, has been very much improved under the Health Officer. Privies and urinals in our public schools have received proper attention and have been greatly improved by suggestions



and orders from the Health Officer. In August, 1883, a very able report was presented by the Sanitary Committee on the condition of Beaver creek, the Penitentiary grounds, the Martinville sewer, and again in June, 1884, called the attention of members of the Common Council to the nuisance that existed along the line of Beaver creek.

Also in July, 1884, Patroon's creek was condemned as a public nuisance, the Board requesting the Common Council to pass a law to have proper drainage secured along the line of this system from the river to Tivoli lake, owned by the city, also through West Albany through lands under the control of the Board of Water Commissioners, also suggested repairs to Fox creek sewer.

It is astonishing to look over the work done by the Board of Health and see how many stagnant ponds have been either properly drained or condemned in such a way that the owners of the land were obliged to have them put in proper sanitary condition, either by filling or draining.

On May 25th, 1885, the Board very reluctantly accepted the resignation of Dr. O'Leary, who had been a very faithful and efficient Health Officer. In June, 1885, Dr. Balch was appointed Health Officer by Mayor Banks, and has certainly proven himself a very worthy and admirable official.

June 29th, 1885, the Sanitary Committee, with Commissioner Bingham and Health Officer, made an examination and recommendation for the disposition of sewage emptying into Tivoli lake; also directing the secretary to correspond with the Board of Water Commissioners and ascertain if sufficient water could not be obtained without Tivoli lake for the months of July, August and September, 1885. This communication was answered immediately by the Board, stating that the whole flow of Patroon lake, Rensselaer and Tivoli lakes was now taken into the city's consumption, therefore the supply could not be cut off.

Knowing for some time that the city wells had been the cause of producing certain local troubles, such as cerebro-spinal meningitis, diphtheria and typhoid fever, the Board directed Dr. Willis G. Tucker, of this city, to examine the public wells and report upon their condition. The report, which I here submit, was presented to the Board of Health July 14th, 1885, and is very instructive. Dr. Tucker clearly stated that many of the wells were in bad condition, some doubtful, some fair, and not more than two out of the thirty-six were found in good condition. The report was accepted and a

resolution was passed directing the Health Officer to close up forthwith the condemned wells mentioned in the report. It was found difficult to close only the bad; to close all the doubtful was almost impossible, and it will probably remain the case until the city supply of water becomes pure and wholesome. It is astonishing to see with what tenacity the people hold on to the use of these wells. It is true the water is found clear, being cold and pleasant to the taste, yet contains some of the most serious forms of disease germs. In time it is to be hoped every well will be closed and this source of water-supply shut off entirely. The inspectors of the Board have demonstrated that there are situated within the city certain areas in which springs are to be found, which have given very much trouble at times in the laying of foundations and the controlling of leakage from one house into the other. Noticeably so is this in the case of sections where Jefferson street is the centre, also State street and Portions of Arbor Hill, but these springs are in themselves dangerous and should not be used by the people for drinking purposes. The annoyance of building where these springs exist, and the error of digging sub-cellars deeper than the adjoining property, is very well illustrated by the following report of the inspectors in a complaint made during the past year:

“The case has up to the present time baffled the inspectors. It is situated at 148 Blank street; it is occupied and has a sub-cellar under the basement about seven feet, which is much lower than any house in the neighborhood. When first complained of a test was made of 146 Blank street; the drain was found defective and leaking into 148. A new iron drain was put in at 146 and the leak stopped for about six months, when another complaint was made. The house No. 144 Blank street was tested, found very defective and leaking into 148. This old drain was removed and replaced by an iron drain. The leak stopped for about four months when another complaint was made. No. 142 Blank street was then tested, that was also found defective and leaking into 148. A new iron drain was put in there and the leak stopped for a short time. Another complaint was made, and from last October up to the present time the inspectors have been unable to find the leak, although every house from 146 Blank street to 130 has had new iron drains put in, except No. 140, and that house has been tested as well as all the houses in the adjoining block from No. 2 Blank street to the corner of Blank street, also the alley drain. The water that comes into 148 Blank street is clean and cold, but has an odor of sewage and when the house is closed up the cellar smells very badly. The inspectors have spent eight weeks on the case with the above results, the cellar being so low that it is likely to draw all the water from



around the foundations in the row of houses north. No doubt this condition of affairs is due to some spring furnishing the water, that becomes more or less contaminated as it comes in contact with old drains, cesspools and covered vaults. These conditions are only remedied by an extra iron drain, well trapped, taking the water from a well dug at the most dependent point in the sub-cellar, carrying it far enough out into the street to connect with the sewer sufficiently low to ensure good drainage."

This is very expensive. This form of leakage from one cellar to another causes more angry feeling between neighbors than can be imagined, and the trouble can only be settled by the Board of Health.

In August, 1885, the city having expended much money from time to time in the repairing of Fox Creek sewer, the Board recommended that this sewer be condemned and a new drain be laid in Canal street, but this has not yet been fully carried out.

In June, 1886, District Attorney Herrick appeared before the Board, and said that he had a communication to make. He desired that the Health Officer, who was familiar with the state of affairs, should make a public statement regarding the trouble at the Penitentiary. The Health Officer reported that on December 26th, 1885, he was requested by the District Attorney to inspect the Penitentiary, as he had been informed that day that several cases of typhoid fever existed there, and ascertain if the sanitary condition of the prison was imperfect. A thorough inspection was made, the disease was found to be typhus, and the Penitentiary put in a state of quarantine. But for the prompt action of Dr. Balch in this matter, the city would probably have suffered a severe epidemic of this dreaded disease.

A very comforting communication was presented by the Health Officer in 1886, declaring the city free from small-pox, typhoid fever, and diphtheria.

To save expense in repairs and to put the property in a more healthful state, the Board also recommended that the Ruttenskill sewer be condemned and the same be filled; that to take its place a drain be laid in Beaver street, from Green street to Broadway, in Broadway from Hudson avenue to Beaver street, and also in Dean street from Hudson avenue to State street, doing away with much of the use of Ruttenskill sewer.

The Board have found much trouble in keeping the present hospital for the reception of small-pox cases and other contagious diseases in proper condition. The Health officer has, on several occa-

sions, presented very excellent reports for the construction and maintenance of a hospital for all contagious diseases, but the Board have felt that they could scarcely afford the expense at the present time.

The Board have found much difficulty in having proper drains constructed in the many alleys that are to be found in the city, on account of the irregular contour of the ground in many cases. Noticeably so was this the case in the alley between First street and Clinton avenue, and which tested the power of the Board to its fullest extent, but the nuisance and trouble was thoroughly treated and disposed of.

The Board has always found much trouble in the enforcement of the rules regarding physicians reporting contagious diseases, and I feel embarrassment in apologizing for members of my profession for their not taking more interest in this matter; but the Health Officer has been glad to announce, and has at last presented the law so forcibly to physicians living within the city, that they have met him in the spirit he desired, and are now very punctual in reporting such cases. In order to facilitate this work the health officer has furnished them with postals, with blank spaces, that can be filled within a minute and dropped in the mail boxes, giving the physician very little trouble, so that now a fair return is made to the Health Officer of such cases as the following: Small-pox, scarlet fever, diphtheria, measles, chicken-pox, typhus and typhoid fever, membranous croup and cholera.

In May, 1885, the Health Officer called the attention of the Board to the subject of disposing of horses suffering from glanders. He was directed to employ a veterinary surgeon, and since then some very excellent work has been done in this direction, lessening the danger among animals to the minimum.

The Health Officer and Inspectors have been very much annoyed in the past by the imperfect manner in which plumbers were allowed to do their work. Some very serious errors were committed by the latter, their workmen sometimes not connecting the house drain with the sewer at all, and in other instances using such poor material and doing their work in such a manner that within a year new houses became unsanitary. The health officer, with the Mayor and Corporation Counsel, succeeded, in the winter of 1888, in securing a law (Chapter 399, Laws of 1888, entitled "An Act to secure registration of plumbers and a plan of the plumbing, drainage and ventilation of dwellings in the city of Albany"). This law was put



into effect June, 1888, by the appointment of R. T. Gorman an inspector of sanitary plumbing, and who has proven himself a most efficient and competent officer.

September, 1888, rules and regulations for plumbing, drainage and ventilation of buildings were adopted, and some extracts are taken, as follows:

“It is the duty of the inspector of plumbing to pass upon all plans submitted, to keep a daily record of his work, including violations, to make quarterly reports, inspect all houses in course of erection, alteration or repairs, and see that all work for plumbing, drainage and ventilation is done in accordance with the provisions of the regulations.”

“To inspect all sewer connections and external house drains within twenty-four hours after notification, all waste and vent pipes and other inside plumbing within three days. Under no consideration will any boss mechanic be granted a permit to use the street until an order from this office is procured.”

No plumber is allowed to do any plumbing in this city unless he is registered in this office.

At this meeting the Board passed a resolution requesting the Health Officer to visit Montreal, Canada, to ascertain what method they had of disposing of the garbage of the city.

In his report, October, 1888, the Health Officer said of his visit to Montreal that he examined the garbage and night-soil crematories, and recommended that Albany make use of the same. This has not been done. It was also recommended at this time that an examination of the public schools be made by the inspectors, and recommendations sent to the School Board to put them in sanitary condition.

In September, 1889, occurred the outbreak of typhoid fever in the western part of the city and at West Albany. The Health Officer visited the locality, and found those who had been taken ill had all used water from a certain well, formerly a spring, which had received drainage from Third street, Livingston avenue, and leakage from privy vaults near by. The well was closed, and about 250 cases of typhoid reported as the result of the epidemic. Complaints have been made about the water from the reservoirs (Bleecker and Prospect Hill) having a fishy taste, and the Superintendent of Waterworks has been more than once advised to seine the reservoirs, but so far the advice has not been followed.

December, 1889, the Health Officer was directed to make a careful examination of the theatres of the city, recommending to the owners that they be placed in a condition not dangerous to life in case of a panic. This recommendation was thoroughly complied with. Recommendation was also made to the Common Council to lay proper drains in North Albany, which was soon done and carried out.

The Board have found much trouble in having the slaughter houses situated at Allen street, and other portions of the city, conducted in a proper manner, but, on recommendation of the Board, their instructions have been complied with, and the work is now carried on in the latest and most improved manner.

One of the most troublesome problems that has come before the Board is the removal of vaults from the yards of dwellings and the substitution of proper water-closets. The leakage from these vaults creates frequent serious annoyance to adjoining property owners, and yet it is astonishing to see how unwilling people are to have them removed, particularly the owners of the property, and substituting better sanitary arrangements.

The matter of testing drains is one that requires the most careful attention, and those making such tests must be very careful in doing it, so that no injustice will be done the parties owning the property. In some cases all testing fails to show the defects. I will cite two instances where the tests failed, although the inspectors were satisfied that the drains were defective. The cellar of premises on the north-west corner of Blank street was found to have several inches of sewage water in it. Complaint was made and the inspector examined and tested several houses around the place complained of, without success, until he visited No. 33 Blank street, which they tested with both peppermint and blueing, found the drain defective, but could not find any traces of the tests on the premises complained of. The occupant was induced to make a complaint, and when the old drain was removed and an iron one put in, the leak in the cellar stopped and is now perfectly dry. The reason the tests did not show was the amount of water under the floor, making a water seal against the test.

Another instance when the test failed was at 120 Blank street, the drain of this house being one of the worst that has come to the notice of the inspectors. The parties living next door west were troubled with bad odors, so much so that the man's wife was sick all of the time. They had their drain tested and it was found



defective. A new iron drain was put in and after that the odors were very bad, more so than ever. Complaint was first made to the owner, who sent his plumber to test it, but who could find nothing wrong. Then complaint was made to the Board of Health and the inspectors made a test, but could discover no odor from same. The smells continued to enter the house next door; the inspector had the front of the house dug up to the drain, and when the opening was made the water came running from under the house, and it took about two hours for it to run out. When the drain was reached it was found all broken down. Since this drain was taken out and a new drain put in the odor disappeared from the house next door. The same cause prevented the test showing as at 33 Blank street.

Of the attack of typhoid fever in this city during the past winter I have not the time to speak. The subject has been thoroughly discussed, and opinions pretty freely and positively expressed. Dr. Balch has presented two very able reports to the Board upon the subject, which have been printed in the daily papers.

The duties of the inspectors, in connection with the Board, are at times very laborious. They are obliged to give their entire time; they make reports to the Board; they examine into all complaints, no matter what kind; they notify owners or agents to abate nuisances, fumigate, disinfect, etc., remove small-pox cases, when necessary; also have an inspector in the Public Market every day in the year; look after wholesale houses where poultry and fruit are sold; see to vaccine supply, etc.

The principals of public schools are notified when a case of contagious disease exists in the house in which a scholar is attending his or her school.

The average number of complaints yearly is about 2,500, of which 80 per cent. are found necessary for correction, and proper attention to correction made.

Each member of the Board serves without pay. It ought to be pleasing to the tax-payers to know that this Board has always worked within its appropriation, and has some years carried over from \$500 to \$1,500 to next year's budget.

The following is a list of the gentlemen who have occupied these positions: M. N. Nolan, Jacob S. Mosher, M.D., John Boyd Thacher, A. Vander Veer, M.D., Wm. H. Keeler, Thos. H. Dwyer, John McKenna, Rob't Bryce, Albert Gallup, Sam'l B. Ward, M.D., John V. L. Pruyn, Thos. F. Corcoran, R. H. Bingham, and Elmer E. Larkin, M.D.

The present Board is made up of Mayor James H. Manning, A. Vander Veer, M.D., F. C. Curtis, M.D., L. C. B. Graveline, M.D., Max Kurth, P. E. McCabe, Horace Andrews.

The names of the employés are, at present, as follows: Lewis Balch, M.D., health officer; Edward H. Long, secretary and registrar; Edward Brennan, inspector; Geo. F. Backman, inspector; John Hannigan, inspector; Richard T. Gorman, inspector of plumbing.

For most of the material that I have made use of in presenting this incomplete report, I am indebted to the very efficient, courteous and gentlemanly Clerk of the Board, Mr. Edward H. Long.

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## OBSTETRICS AND GYNECOLOGY AT THE AMERICAN MEDICAL ASSOCIATION.

BY E. S. McKEE, M.D.,  
CINCINNATI, O.

*The Pathology and Treatment of Chronic Ovaritis, by Alex. J. C. Skene, M.D.*

The pathology of ovaritis is characterized by changes of structure brought about chiefly by areolar hyperplasia first, then by atrophy of the normal tissues, and finally by a condition of cirrhosis. Deranged innervation is the first variation from the normal towards the pathological. This ovarian hyperæmia may subside and complete recovery follow. The morbid appearances which enable a surgeon to determine when to remove an ovary are these:

Follicles, which from their number, size and dark color are evidently diseased and should be removed. Enlargement, congestion and softening from œdema, and patches of induration, with irregular distention of the vessels, and the evidence of small blood clots, are conditions favoring removal. Cirrhosis, indicated by abnormal size, induration and rough surface, when found in a young subject, can be easily passed upon. But when in a case near or after the menopause, this appearance of the ovary does not decide with certainty whether there is cirrhosis or simply senile atrophic degeneration.

Dysmenorrhœa is often present, and in some cases the menses are retarded and scanty, in others too frequent and profuse. The effect upon the nervous system is marked. Pronounced depression and irritability, epilepsy and mental disorders result from chronic ovaritis. The cause which most frequently obtains is imperfect



menstruation. The strumous diathesis predisposes, and inherited or acquired syphilis likewise.

*Treatment.*—The removal of the ovaries has been regarded as the most prompt and effectual treatment of chronic ovaritis, but the facts are that many of the cases are not improved; even those who are nearing the menopause sometimes suffer from nervous disturbances which follow an abrupt menopause, and have to endure pelvic pain. The assured cases are those operated upon at or near the menopause; those improved are generally those suffering from complicating affections, as dysmenorrhœa, while the unimproved are the younger subjects in whom the disease was uncomplicated. The author advocates the removal of the ovary only when there are structural changes from inflammation and prolapsus at the same time. Prolapsus can be relieved by fixing the ovary to the upper border of the broad ligament. The indications for general treatment are to lessen the blood supply and relieve pain by correcting the deranged innervation. This demands rest in the early stages in the recumbent position. The condition of the digestive organs should be carefully watched. By keeping up a free elimination by the bowels and kidneys much benefit is obtained. To relieve the pain and lessen the hyperæmia, the bromide of sodium, twenty to twenty-three grains, and fluid extract of hydrastis canadensis, ten to twenty minims, given in combination three times per day, are efficacious. Much larger doses of bromide are required in some cases, and it fails entirely in others. Ten grains of salicylate of soda and five of antipyrine given between meals and in the night answers for some, while others do better on full doses of aromatic spirits of ammonia, camphor and chloric ether, with small doses of cannabis indica. Direct or local treatment should be adapted to the social state of the patient. Local treatment is often injurious in the married; any disease or displacement of the uterus which co-exists should be managed in the usual way. A small tampon of cotton or wool, saturated with equal parts of the tincture of belladonna and glycerine, applied behind the cervix uteri for forty-eight hours; after its removal a hot douche is used during the first days of treatment, followed by applications of iodine. Recently the sulphur ichohyolate of ammonium, five parts in ninety-five of glycerine, applied in the same way as the belladonna, has given good results. Constitutional treatment should be modified with improvement, and patience and careful watching are most essential to avoid relapses in this long and tedious disease.

*The Uses of Cocaine in Gynecological Surgery, by Wm. H. Humiston, M.D., Cleveland, O.*

In dilating and curretting, the method of use is as follows: Ten minutes before using, give a tablespoonful of whiskey or brandy; place patient in left lateral position, and with Sims' speculum expose the cervix; steady the uterus with a tanaculum inserted in anterior lip; take a hypodermic syringe with fine needle filled with a four-per-cent. solution of cocaine which has two minims of pure phenol in each half ounce of solution, and inject five minims into the posterior lip; wait two minutes, then secure a firm hold with bullet forceps, which will be painless; proceed to inject in several portions of the cervical canal an amount equal to about twenty minims. Dilatation is now commenced with the graduated hard rubber dilators until the cervix is sufficiently dilated to admit intra-uterine syringe, when ten minims of a ten-per-cent. solution is injected into the uterine cavity. Continue at once with the dilating of the cervix until completed to the desired extent and then thoroughly curette the entire uterine cavity.

The operation of trachelorrhaphy may be performed with the use of cocaine as a painless operation. Inject the angle of a wedge-shaped piece that must come away; more than one-half drachm of a four-per-cent. solution is rarely required.

Restoration of the perineum requires from thirty to forty minims of a four-per-cent. solution, and when the split flap method is adopted, one puncture of the hypodermic needle in the median line anæsthetizes the whole field of operation. Twice the author has dilated the urethra for fissure and irritable carunculæ with but slight suffering. The use of cocaine does away with the frequent and prolonged nausea and vomiting which occurs after chloroform or ether, and which frequently places gynecological operations in jeopardy.

*Treatment of Accidental Abortion, by Bedford Brown, M.D., Alexandria, Va.*

The author first gives hypodermically  $\frac{1}{4}$  gr. morphia,  $\frac{1}{60}$  gr. atropia, if much hemorrhage with depression,  $\frac{1}{60}$  gr. strychnia and twenty minims fluid extract of ergot. Then the vagina is douched with hot water containing permanganate of potash. If hemorrhage continues, a pint of hot water containing an ounce or more of alum is injected. If hemorrhage is not arrested by these means and life is endangered, the patient is placed in lithotomy position, a bivalve



speculum is inserted in the vagina, the roof around the os uteri packed with pledgets of iodoform gauze with cords attached, remainder filled with absorbent cotton, and a soft catheter inserted in the urethra. These conditions usually complete the expulsion of both foetus and secundines into the vagina. If the placenta is retained, ergot is of some value, but removal of the secundines or tampon is the final resort. The fingers surpass hooks, forceps or curettes. The placenta and its relation are the causes of more trouble and anxiety than all other questions. The resultant hemorrhage, sepsis, local inflammations, organic changes, subinvolutions and septicæmia arising from its retention, render its early and thorough removal a matter of first importance. The uterine contractions of abortion are spasmodic and of neurotic origin, and are best allayed by thirty grains of chloral given per rectum and twenty grains of bromide of lithia with one drachm of fluid extract of viburnum prunifolium every two or three hours. This, with entire rest of mind and body in the recumbent position, are the most effectual preventives. In managing the retained placenta by the expectant plan, the use of instruments or the use of fingers, the author gives the decided preference to the latter, and has found that anæsthesia greatly facilitates these operations.

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## MEDICAL PROGRESS.

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NERVE-GRAFTING.—Atkinson has recently reported a number of successful cases of nerve-grafting to the British Medical Association. It is important to bear in mind that the substitution of a new piece of nerve for a piece that has been lost (nerve-grafting) is a totally different thing from the uniting of a nerve (nerve-suturing). In one case the median nerve has been divided in an operation. Two and one-half inches of the tibial nerve, from an arm that happened to be amputated at the same time, was transplanted to the forearm of his patient. Healing occurred by first intention, and sensation began to return in thirty-six hours, and in five weeks was complete. The muscles partly recovered their power. A number of other cases were reported with similar results. Strict asepsis is important, though union may occur following suppuration. Return of sensation occurs before motion. Better results are obtained when the grafting is performed *immediately after the injury*.—*The Medical and Surgical Reporter*.

UTERINE CYSTS BEARING CILIATED EPITHELIUM.—Dr. Pfannenstiel (*Centralbl. f. Gynäk.*, June 6, 1891) describes a case where a woman, aged 51, suffered from a hæmorrhagic inflammation of the endometrium with great thickening of the uterine wall. The uterus was removed through the vagina, together with the left ovary and tube. Its serous coat was infested with minute cysts, in parts as dense as the ova in fish roe, which hardly touched the muscular coat. They contained a clear, watery fluid, and were lined with ciliated epithelium. The tube and ovary were covered with similar cysts. Each cyst was about as big as a poppy seed, but a mass of cysts, each of about the size of a pea, lay in the right parametrium. Dr. Pfannenstiel observes that these cysts could have no possible relation to the disease of the endometrium. The endothelium of the peritoneum cannot turn into ciliated epithelium. There can be little doubt that the ciliated cells rose from the ovary; their origin from that organ has been demonstrated by authorities. In cases of this kind, the peritoneum is usually infested with the minute cysts, but whether this occurred in Dr. Pfannenstiel's patient remains uncertain, as during the operation—vaginal extirpation of the uterus—the peritonem could not be explored.

THE DIFFICULTIES OF DIAGNOSIS OF SYPHILITIC REINFECTION.—(Dr. Brocq, of Paris (*Revista Especial de Oftalmologia, Dermatologia, Sifilografia y Afecciones Urinarias*, November, 1890.) Dr. Brocq, after consideration of a case where syphilitic reinfection was in question, makes the following deductions:

1. It is necessary to obtain all the facts required before publishing under the name of syphilitic reinfection an observation destined to prove the reality of this infection.
2. There may suddenly appear in syphilitic persons, a long time after the chancre has healed and they have been free from any specific eruption, a chancreform lesion with voluminous and indolent adenopathy, and multiple and unsystematised cutaneous eruptions, scattered here and there without order, simulating papulous and papulo-crustaceous lesions and cutaneous plaques of the secondary period.

A CASE OF PURPURA DUE TO A STREPTOCOCCUS.—(V. Hanot and C. Luzet, *Arch. de Méd. Exp.*, II., No. 6, 1890.) The infectious nature of some forms of purpura is now generally accepted; indeed, Cornill and Babes distinguish three forms of purpura of bacterial origin. The following case presents some unusual features:

A woman in an advanced stage of pregnancy is attacked by a purulent cerebro-spinal meningitis. Septicæmia follows. Purpuric patches develop on the lower extremities. The fœtus is expelled and is found to have purpuric patches on the endocardium and in the liver. In these patches the presence of the streptococcus pyogenes is shown, so also in the meningeal fluid, the spleen, liver and uterus of mother.



THE SEBORRHŒIC WART.—(S. Pollitzer, *Brit. Jour. of Dermat.*, II., 7.) The common senile or flat wart forms the subject of this clinical and histological study. The growths in question are shown to consist of a crust of epithelial scales, detritus, fat and dirt, beneath which more important changes have taken place. The horny layer is thickened and the rete Malpighii markedly hypertrophied. The papillary and subpapillary layers are more or less filled with epithelioid cells, which are arranged in clusters and groups, separated by bundles of connective-tissue fibres, and which terminate abruptly in a horizontal line at the level of the subpapillary plexus of vessels. This structure probably brings these growths into the class of what Recklinghausen described as lymphangio-fibroma. There is besides a marked infiltration of fat in extremely minute particles throughout the entire growth, extending even into the intra-epithelial channels of the epidermis; as to the source of this fat, the author can find no explanation. Incidentally he details some experiments on rabbits and man which demonstrate the impermeability of the skin to fat rubbed into it from without.

THE PATHOLOGICAL ANATOMY OF PSORIASIS—(E. Kromayer, *Arch. f. Derm. u. Syph.*, XXII., 1890, p. 557). The author develops some peculiar theories as to the anatomy of the skin—maintaining, for instance, that the papillary layer belongs anatomically and physiologically to the epidermis, for the details of which the reader is referred to the original paper. His account of the pathological anatomy of psoriasis adds nothing to our knowledge of the subject. He rediscovers the fact already noticed by Hebra, that the first changes occur in the papillary layer, and consist of a hyperæmia with some emigration of leucocytes. The process is nevertheless not an inflammation, as the cardinal features of inflammation are absent. It is rather to be regarded as a progressive disturbance of nutrition.

AN INTESTINAL CONCRETION.—Professor N. F. Mentin, of Warsaw, details (*Vratch*, No. 13, 1891) a very rare case of intestinal concretion, discovered *post mortem* in the cæcum of a woman who had been suffering from chronic intestinal catarrh, for which she had been treated by the internal administration (amongst other things) of subnitrate of bismuth. The concretion was bean-shaped, 1 centimetre long, of a dirty brownish-yellow color, odorless and tasteless (*sic*), light, porous, friable, and easily reducible to powder. It weighed 0.8853 gramme, but, after two hours' exposure to 100° C., the weight fell to 0.8575 gramme. Under the microscope the enterolith was found to consist of very minute amorphous granules. Chemical analysis showed that the concretion was composed of 85 per cent. of subnitrate of bismuth, with 15 per cent. of some organic substance (probably insoluble remnants of fæcal matter).

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W. G. MACDONALD, M.D., EDITOR.

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THE MEDICAL RECORD AND THE BOARD OF REGENTS.

An editorial in the *Medical Record* of May 9th, page 537, embodies misstatements of fact and unfounded charges of incapacity on the part of the Board of Regents, that merit an earnest and unanimous protest from the whole medical profession of this state.

The article pointedly illustrates the questionable methods so often resorted to in a heated political canvass, when the merest rumors, without regard to the truthfulness thereof, are made to subserve party purposes, the wholesome and restraining influences of editorial *liberty* being set aside, temporarily at least, by the pernicious exercise of editorial *license*.

It is not at all probable that the Regents were possessed with an overpowering desire to act in the capacity required by the law of 1890. The Regents, however, having accepted the trust, are entitled to the cordial and united support of the whole body of the profession in this state.

The law imposes upon the Regents certain duties; and if these have not been executed exactly to the liking of the editor of the *Record*, it is scarcely a matter of surprise.

Greater familiarity with the provisions of the law on the part of the Regents, and a better understanding of the important principles the law is destined to establish, will doubtless in a little time, with less and less friction, lead to more satisfactory and enduring results.

The severity of these criticisms strongly indicates, inferentially at least, that the editor was disappointed at being left out, his name being one of the *three* from New York city presented by the society



to the Regents ; and it would certainly appear that if he is possessed of a spirit of carping censoriousness, such as this article exhibits, the omission on the part of the Regents will be almost universally approved.

And doubtless if the subject is investigated without prejudice, and with a desire to promote instead of hinder a needed reform, it will be found that this attack upon the Regents is not well founded and is, to state the case mildly, fraught with more harm than good.

If, therefore, the members of the society from New York city feel that intentionally or through an oversight they have not been favored in the appointments, they have only to furnish additional names from year to year. The remedy is at hand. Let them use it at the proper time and in a proper manner.

The State Medical Society, by its failure to nominate more than *three* out of fourteen names, plainly indicates to the Regents that appointments to other parts of the state would be satisfactory, if not indeed preferable. If the society had nominated one-half the full number, or even a larger proportion, as it might and perhaps ought to have done, and then nominees from other parts of the state had been singled out by the Regents, there would have been more reason for censuring them ; as it is, there are no real or imaginary grounds for criticism.

Instead of usually flinging carping criticisms at the Regents, and instead of making an unbecoming exhibition of ill temper, how much better it would have been for the editor of the *Record* to have patiently waited until after the next annual meeting, for a selection by the State Medical Society of a larger number of New York nominees, since neither of the boards will, even for a year after that, be called on for the full exercise of their special functions.

Moreover, it is well known that jealousies and antagonisms exist between the two principal departments of instruction ; hence it is quite probable that the editor of the *Record* has heard only one side, and that the off side of a statement, the origin of which is traceable only to motives of a personal nature, having no relevancy whatever to ends and measures looking solely to the promotion of public interests ; motives too, the fostering of which will only increase unseemly wrangling for the qualification and furtherance of purely personal interests.

In the absence of any reasons growing out of favoritism or partisanship, would it not be advisable and courteous to a corps of distinguished and honorable educators to look for causes other than

“stupidity and weakness,” more particularly on account of the fact that the law was purposely constructed so as to enable the profession, through the state medical societies, to make needed changes in the membership of the examining boards from year to year?

The entire membership of each board can be changed every three years if the state medical societies so decide.

The statement that Secretary Dewey is in any way chargeable with the selections made by the Regents is pure assumption, and wholly without the least foundation in fact, as the editor of the *Record* can easily inform himself if so disposed. His work is wholly administrative, and it is the steadfast belief, by those personally acquainted with him and his work, that he has adhered strictly thereto, and has wisely and prudently maintained entire neutrality in the management of the affairs of his office.

The animus of this fault-finding editorial, however, is strikingly brought out by the statement to the effect that the appointments made by the Regents are defective in “very inadequately representing the profession of the state, and not representing the city of New York at all, where the *chief part of our medical education is done.*”

In these words the impression is evidently intended to be made, that *because* a larger proportion of medical students are educated in the city of New York than elsewhere in the state, *therefore* the number of New York members of the examining board should be proportionately greater.

This frank announcement is grossly inaccurate and glaringly misleading. There is not, at least ought not to exist, any association or relationship between the teaching and licensing interest, such as is fairly implied by this statement.

It is held by the profession that the functions of these two teaching and licensing bodies shall be distinct and separated one from the other. The main object designed to be secured by the law of 1890, in view of good and wise reasons, is that of providing a *licensing* body entirely independent of, dissociated from and *uncontrolled* by teaching medical faculties and interests, embracing, in a broad application, even post-graduate courses of instruction.

At the informal meeting of representatives of boards of medical examiners, held at Washington, May 6th, Professor P. H. Willard, of Minnesota, although dean of a medical college, expressed most emphatic declarations in favor of entire separation of the teaching from the licensing interests.

Dr. Willard had taken this position and had framed the Minnesota law, by which the *license* is made the standard test instead of



the *diploma*, and by doing so had practically, to use his own words, "legislated himself out of office."

In all reason, therefore, why should New York city have a representation in the board of examiners *proportionate with the number of students graduated* in that city, unless this reason and this statement reveal ulterior motives?

The assertion, in effect that the amendment releasing the senior classes of 1892 from the provisions of the three-board examiners' act of 1890 was made because of the "unpopularity" thereof, is also wholly misleading and far from truthful.

The law was not intended to be retro-active. It was intentionally designed to take effect eighteen months after its passage, so that its provisions would not be considered a hardship by students who had already entered upon the three years course of study.

Representatives of the classes of 1892, however, on showing that the law would be made retro-active, as applied to themselves, and on showing also that at least two classes of law students had, under similar conditions, asked and secured similar exemption, the friends of the law, being unwilling to become parties to an act of seeming injustice, withdrew opposition thereto and permitted the amendment to acquire legal effect.

This action grew out of no antagonism of the law. Its accomplishment was secured not on account of any evidences of unpopularity, but wholly as a simple matter of justice to those who began the study of medicine prior to its enactment.

For these reasons, and these *only*, the bill to amend the law met "lukewarm opposition." Had the bill embodied provisions for nullifying, instead of simply postponing the application of the essential principles of the act of 1890, the evidences of antagonism thereto could not and would not have been classed as lukewarm.

The statement that "the profession in general ought to and will feel strongly indignant at the stupidity of the Board of Regents," is one so inappropriate, uncalled for and discourteous, as in an eminent degree to illustrate a condition of illiberal partisanship wholly unbecoming an honorable and fair-minded representative of impartial medical journalism.

The statement "that the Board of Regents was very neatly handled by certain gentlemen" and that it has been made a cat's-paw of by the astute politicians who run our medical colleges," embody sentiments so absolutely irreconcilable with truthfulness that any journal having ordinary self-respect could never permit such absurd and unfounded charges to tarnish its pages.

And here again the position of the medical colleges is associated with the matter of membership in the examining boards, as if there was and ought to be a closeness of relation one to the other.

The writer seems to be singularly unfortunate in the presentation of reasons for the non-appointment of New York members in the board of examiners; and, those who are honestly endeavoring to promote higher and more uniform educational standards have reason for thankfulness that his sinister purposes have miscarried.

For the credit of the medical profession in general, it is to be hoped that the *Medical Record* is not lost to all sense of decency, self-respect and gentlemanly manners.

H. M. P.

ALBANY, N. Y., June 15, 1891.

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## REVIEWS AND BOOK NOTICES.

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HEREDITY, HEALTH AND PERSONAL BEAUTY. By John V. Shoemaker, M.D., Professor of Materia Medica, Pharmacology, Therapeutics and Clinical Medicine, and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia, etc. Philadelphia: F. A. Davis, publisher.

Its title indicates that this is a book more for the leisure hour of the physician than one to which he would turn for a practical suggestion. It is a pity, one may reflect, that most of us take so few occasions to turn from the every-day work and, at the same time, from the study of every-day topics. In this volume we find more abstract themes presented, and the genus man presented in a different light from that of the potential possessor of one or another diseased organ; we find him discussed in respect to his relation to nature and the bearing upon him of the laws of nature; his spiritual place as well as his physical place in nature; his sentiment of the beautiful and its sources and expressions in the human form, and the method for its attainment. All of it is exceedingly well told. And in addition to the charm of novelty among medical books, for the reasons suggested, it has also a large fund of important information, especially on the healthful care of the body, regarding many details of which one would hardly find elsewhere. It is by no means to be inferred that it is a book lacking in practical material. The scope of the volume may be inferred from the titles of some of the chapters: "The General Laws of Health;" "Nature's Evidence of the Law of Life and Growth;" "The Phenomena of Evolution



in the present era;" "The Sentiment of the Beautiful;" "The Source of Beauty in the Fair Sex;" "The Effect of Environment and Training on the Physique;" "The Art of Walking;" "The Skin as an Organ of the Body;" "The Care of the Skin, of the Hair, and of the Face and Hands and Feet;" "Clothing, Ventilation." These are some of the subdivisions of the subject which the author has prepared for himself, and a perusal of them will very likely help the reader to a knowledge of how to lead others to the attainment of at least some elements of beauty, the lack of which, as ordinarily understood, we think of with reasonable philosophy, but the possession of the fundamental features of which is not unworthy the study of any of us, since it is largely the securing that which most to some degree lack, and that is perfect health.

F. C. C.

PRACTICAL NOTES ON URINARY ANALYSIS. By W. B. Canfield, M.D., Chief of Chest Clinic and Lecturer on Clinical Medicine, University of Maryland, etc. The Physicians' Leisure Library. George S. Davis, Publisher, Detroit, Mich.

This little volume is among the best of the Leisure Library, and will be welcomed as a practical addition to the literature of the subject with which it deals.

Regarding the estimation of albumen, urea and sugar, it is quite as clear and infinitely more useful than many of the more ambitious works. An excellent plate of colors is given for comparison.

The portion devoted to the microscopical examination of urine is unusually well written and illustrated by many valuable plates. It can be made, by the addition of a trifling expense for binding, an excellent guide to be placed on the table in all laboratories where urinary analyses are made.

THE POST-GRADUATE CLINICAL CHARTS: Designed for Use in Hospitals. Arranged and published by J. H. Lindsley, M.D., and Wm. E. Barley, M.D.

Clinical Charts are seldom satisfactory, save when used by their authors. The methods pursued by individuals in investigating cases are so various that the uniform use of any can hardly be hoped. The Post-Graduate, however, presents many advantages, and little could be added without making so cumbersome that its usefulness would be greatly diminished. They are peculiarly adapted for the registration of diseases of the lungs.

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THE OUTLINES OF INSANITY.\*

BY HENRY HUN, M.D.,

*Professor of Diseases of the Chest and Nervous System in the Albany Medical College.*

LECTURE I.

GENTLEMEN :

*Introduction and Definition.*—With this lecture we commence a short course of six lectures on the subject of insanity, two of which will be held at the Marshall Infirmary in Troy; for in insanity, as in other forms of disease, the most satisfactory method of study consists in the observation of actual cases of disease. The fact that we must go to an asylum for our clinical study, brings to our attention one great characteristic of insanity, for it implies that insane persons can neither properly perform their duty to society, nor properly support themselves in the struggle for existence, but must be protected and supported by their fellow-men, and must be confined in asylums or special hospitals in which they can neither harm themselves nor others. In consequence of this isolation of the class of insane persons, and in consequence of the fact that many insane persons do not show any characteristic bodily symptoms, but often merely exhibit very erroneous and whimsical ideas in regard to the world about them and their relation to it, insanity has always been considered as something special and distinct from other diseases, and it is only in very recent times that it has been regarded as a disease, or, rather, as a symptom of disease, and indeed a symptom of disease of that organ on which an individual's intellectual and emotional integrity depends—the brain. This fact, which has been discovered only at the end of many centuries, that insanity is disordered action of the mind, caused by disease of the brain, is the first and most important statement that can be made in regard to the subject, and

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\*A course of lectures delivered at the Albany Medical College during January and February 1891.



is the most satisfactory definition of insanity that has been formulated, although, unfortunately, it is very greatly lacking in precision. Just as the term sickness cannot be satisfactorily defined, because there is no sharp line to be drawn between health and disease, inasmuch as there are many conditions, such as the thickened skin of the hands of the laborer, or the presence on the body of moles and warts, which stand on the border-line of health and disease, and can be classed with neither, so no sharp line can be drawn between the insane and the sane, because there are many slight mental peculiarities in regard to which it is impossible to say whether they are within or beyond the limits in which a healthy mind may act, and, therefore, the persons exhibiting these mental peculiarities can be classed neither with the sane nor the insane. We must content ourselves with an average type, both of physical and mental health, and must allow for wide variations within it. Those persons who exceed this average condition of mental health we call men of strong minds, and those who do not attain it we call men of weak minds, or stupid people. Those men whose mental action is decidedly out of harmony with that of the average man, if in the way of excess, we call men of genius; if in the way of deficiency, we call insane. There must be, in every community, eccentric persons who stand on the border-line of insanity, where the physiological and pathological meet, and this border-line shifts its position in different ages and different states of civilization. In one century a belief (belief in witchcraft, etc.) may be physiological, which, in another, would be pathological. And not only does the human mind gradually develop from century to century, but each individual mind passes through a development, which sometimes takes place too rapidly, as in the case of very precocious children, sometimes too slowly, as in the case of adults who always remain childish or imbecile, and, in neither case, does the mind attain to its perfect development.

Disease of the brain, causing insanity, is always of a diffuse, not of a local, nature, and the resulting disordered action of the mind manifests itself in a disturbance of many or all of the mental actions: perception, voluntary movements, thought, memory, feeling, will and consciousness.

*Disorders of Perception—Hallucinations and Illusions.*—In a normal mental state, a perception has its origin in and depends upon some external object or force which acts upon a peripheral organ of sense, and thus gives rise to a nervous impulse which, traversing

the peripheral nerves and the lower nervous centres, finally gives rise to that molecular activity in the cells in the sensory regions of the brain with which a conscious perception is associated and upon which such conscious perception depends. But in the insane brain, cellular activity in the sensory region of the brain may spring into existence, and give rise to a perception without the mediation of any external force acting upon a peripheral organ of sense. Such a perception, referred to external causes which do not exist, is called an hallucination. It is very common for insane persons to be certain that they hear voices, that they see persons, animals and things, that they smell odors, taste savors, or feel blows and injuries, which have no existence in reality; that is, they have auditory, visual, olfactory, gustatory and tactile hallucinations. Another disorder of perception, common in the insane, is where there is really an external object acting upon an organ of sense, but the resulting perception does not correspond with the external object, as, for instance, where a person really sees the stump of a tree, but it appears to him to be a man. It is a false impression produced by a real sensory stimulus, and such a misinterpretation of what is really perceived is called an illusion; and illusions, just as hallucinations, may affect any of the senses, so that we may have visual, auditory, olfactory, gustatory and tactile illusions. Hallucinations and illusions possess a reality which is not present in a simple memory, no matter how vivid, and it has been assumed that this element of reality in an hallucination is due to the combined action of the cells both in the cortex and in the corresponding sub-cortical centres, such as occurs in an ordinary sensation; while, in the production of simple memories, only the cortical cells come into activity. We have no proof, however, that sub-cortical activity is associated with acts of consciousness, and the assumption that the sub-cortical centres are factors in the production of hallucinations is entirely unnecessary. I have pointed out in another place\* that each sensory cortical centre consists of two parts: one where the projection fibres terminate and where simple sensation takes place, the other where full perception occurs. In memory only the perceptive portion of the centre may be in activity, while in the production of hallucinations both the perceptive and the simple sensory portions may take part; the latter imparting the element of reality. In the production of an illusion, the sub-cortical cells are undoubtedly in activity. Just as hallucinations may, as we have seen, enter the mind spontaneously, so a false

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\*Hun: Cerebral Localization—American Journal of the Medical Sciences, January, 1887, p. 140



idea or belief, which is called a delusion, may arise in the mind spontaneously, and not, as is more commonly the case, by that process of faulty reasoning later to be described.

*Impulsive Actions.*—In the same way that the cells in the sensory area of the brain may spring into activity spontaneously, and give rise to hallucinations, so the cells in the motor area may spring into activity, and present to the mind impulses to muscular actions which are not the result of reasoning nor of the will power, but are involuntary impulses over which the insane person, with will power weakened by the disease, has but little control. Such involuntary or impulsive muscular actions are often seen in cases of mania, and frequently manifest themselves as great restlessness. (Analogous actions are often manifested in epileptic insanity, but as in such cases the patients are partially or completely unconscious, they can be conscious of no impulse and the will power cannot act at all.) Of the reasons why these cells, whether in the motor or sensory area of the brain, spring into activity spontaneously and give rise respectively either to perceptions or to impulses for movement, without the mediation of the organs of sense on the one hand or of the will on the other, we know nothing definitely, but it is not improbable that they are due to local changes of a hyperæmic nature in the blood supply of limited areas of the cortex, which local hyperæmias may in some cases be associated with the chronic meningitis so commonly found at the autopsy of cases of insanity.

*Disorders of Thought and Imagination.*—The logical processes of thought, in consequence of its complicated nature, are naturally greatly disordered in the insane. All thought depends upon the power of the mind, first, to retain memories of former perceptions; second, to recall by association memories and ideas that bear a relationship to each other, so that one memory recalls the others associated with it; and, third, to obtain concrete and abstract ideas by the comparison of memories of similar perceptions. Thought is, therefore, dependent upon memory, which latter power we know is subject to great abnormalities even in sane minds. These same abnormalities are met with in a greater degree in insane minds, and may be, in part at least, the cause of much of the faulty reasoning of the insane; especially of that reasoning by which delusions are based on events which happened in their lives months and years previous to the formation of the delusion. In health there is constantly taking place in the mind a succession of associated memories or of abstract ideas which are derived from and replace many associated memories, and this

succession of associated memories and ideas may take place without the active control of the will, in which case we call the process fancy or imagination; or the will may control a succession of memories, directing the play of the association along one line, rejecting many of the memories as irrelevant, and considering and comparing the other memories, in which case we call the process thought. There is no very absolute line to be drawn between thought and imagination, they merge into each other at many points. In many cases of insanity, in consequence of enfeebled will power, the process of fancy or imagination is very active and dominates the other mental acts, and in such cases it is often difficult to say whether the person is the victim of hallucinations or delusions, or merely has a very lively imagination, and such persons cannot carry on logical thinking for any length of time, because their will power is not strong enough to guide the associations in proper channels and to control the play of the imagination. Persons suffering from general paresis often exhibit this vivid imagination and resemble children in the way in which they surround themselves with a world wrought out of their own fancy.

*Disorders of Thought—Compulsory Ideas.*—The logical process in the insane may be altered in many ways. In some cases an idea takes possession of consciousness and is not soon replaced, as is the case in a healthy brain, by other associated ideas, but remains dominant in consciousness, and the person cannot free himself from this "compulsory idea," as it is called. Sometimes the compulsory idea is a question which keeps constantly recurring to the mind; sometimes it is a fear, as, for instance, of being poisoned, or of being contaminated by dirt (mysophobia), or of having at some time done some one an injustice, and sometimes it is an impulse to perform some act, often one of violence, as, for instance, to kill a helpless child. These compulsory ideas and impulses are so prominent in certain cases of insanity that they have been at times taken as a basis of classification, and thus have arisen the terms, homicidal monomania (impulse to murder), pyromania (impulse to burn), kleptomaniac (impulse to steal), nymphomania (impulse to inordinate sexual intercourse), etc. But a careful examination of any of these cases reveals a more wide-spread mental derangement than these names would imply. These compulsory ideas, whatever their special character in each case, are doubtless due to a certain group of cells of the cerebral cortex, whether in the sensory or motor area, getting into activity (thus presenting the corresponding idea to con-



sciousness) and the molecular activity is confined to these cells and does not flow out along association fibres as is usually the case, and the will power of the person is not sufficiently strong to inhibit the activity of these cells and make the activity of other cells of the cortex more powerful. It is not impossible that local hyperæmias may play the same part in the production of these compulsory ideas that they have been assumed to play in the production of hallucinations. In these cases, in consequence of the failure of the ordinary play of associations, the process of thought is very slow, or is brought altogether to a standstill. Cases of melancholia often exhibit both compulsory ideas and sluggishness of thought. It is to be remembered that these compulsory ideas (just as we will see later is true of the compulsory feelings in melancholia and mania) may rest on a physiological as well as on a pathological basis, and in the former case are not insane ideas at all. Thus, when the mind has received a severe shock, as, for instance, from the death of some one dearly loved, or stronger still when a sane man has committed a murder, then it is entirely physiological, that for a time at least this compulsory idea must be so constantly before the mind that the attention cannot be diverted from it. A compulsory idea is pathological only when there is no adequate reason for the mind to keep dwelling upon it, and the patient himself is usually entirely conscious of the pathological nature of the idea. This distinction between the pathological and the physiological keeps constantly recurring all through our study of insanity. By it we separate delusions from errors of judgment, insane acts from crimes, melancholia from a sadness for cause, etc.

*Disorders of Thought—Rapid Flow of Ideas.*—In other cases of insanity an exactly opposite condition to that of the compulsory ideas exist, the activity not remaining locked up in the cells but flowing off through the association fibres with abnormal ease, so that one idea scarcely enters consciousness before it is replaced by another, and this in turn by another, so that consciousness is bewildered by the great number of ideas which crowd in upon it. Sometimes words which sound alike are strung together in senseless rhymes and the patient's speech becomes incoherent from this crowding in of ideas upon the mind. In this case, too, there is a lack of will power sufficient to keep one idea in consciousness for a longer time and to inhibit the rapid flow of association ideas. This form of disordered mental action shows itself in a mild form in the rapid play of the imagination which we have already noticed as frequently

occurring in general paresis and other forms of insanity, and in a severer form in the rapid flow of ideas characteristic of mania.

*Disorders of Thought—Delusions.*—These two disorders of the logical process that we have just considered, viz., the too great cognizance by consciousness of one perception or idea, and the too slight and transient cognizance by consciousness of others, are, when present in a milder form, often the cause of the irrational method of reasoning exhibited by the insane. Thus, some illusion or hallucination, or even a true perception, obtains too great prominence in consciousness and cannot be corrected by other conflicting perceptions derived, perhaps, from some other organ of sense; so that the evidence presented to the mind is of a very one-sided kind, and, hence, false beliefs or delusions become firmly rooted in consciousness. Thus, an insane man, in consequence of an old facial paralysis, feels that one side of his face is longer than the other, and although he sees in a glass that the two sides of his face are equal, yet the perception of the feeling is so much stronger in his mind than the visual perception that it completely overbalances the latter, and he is convinced that one side of his face is really longer than the other, and, reasoning still further in this one-sided way, he comes to the conclusion that he has a horse's face on one side and a man's face on the other, and is an object of general observation and disgust to everyone that sees him, and so on through many delusions, as these false beliefs are called. When we add to this defect in the logical process a disordered memory, an abnormally active imagination, and the existence of many hallucinations, illusions, and delusions, it is easy to see on what an illogical basis the ideas and acts of the insane rest, and how impossible it is to predict in what manner an insane man will act in any given condition or emergency.

*Disorders of the Feelings and Emotions.*—There is another large sphere of mental activity which is often profoundly altered in the insane; that is the sphere of the feelings or emotions. It is extremely common to find the insane either profoundly depressed or extremely exalted, and this condition of depression or exaltation does not depend, as would be the case in a healthy mind, on the circumstances of life or on any process of reasoning, but springs spontaneously into consciousness and then dominates the whole mental activity of the insane person and completely masters his will power. The attempt has been made to refer these conditions of depression and exaltation to the condition of the cerebral cortex in regard to its blood supply, and to refer the depression to a condition of



anæmia, the exaltation to a condition of hyperæmia of the cerebral cortex, but this hypothesis has not been established.

In sane minds every sensation which enters into consciousness is double, in that the sensation of the external object (objective) is accompanied by a secondary sensation of pleasure or pain (subjective), which varies very greatly in intensity, frequently being so weak that its recognition is difficult, and the mind is scarcely conscious of any thing except the objective sensation, while at other times it is so strong as to overpower the objective sensation and the mind is scarcely conscious of any thing except the feeling; the sensation and the feeling are thus antagonistic—as the one becomes stronger the other becomes weaker. The intensity of the accompanying feeling of pleasure or pain varies much in the different senses; thus, in the sense of smell and taste it is strong, while in the sense of touch, sight, and hearing it is usually weak, although sensation of sight and hearing are in certain cases associated with the “æsthetic feelings.” Not only sensations, but also perceptions, and all mental actions, are similarly accompanied by feelings of pleasure or pain, which vary in general according to the ease or difficulty with which these mental acts are performed. In the insane brain these feelings of pleasure or pain, which are secondary to mental action, are greatly disordered. With mental depression there is frequently associated a condition of “psychical anhedonie” in which normally pleasant perceptions and ideas do not cause pleasant sensations, and a condition of “psychical hyperalgia” in which ordinary perceptions are painful, and painful perceptions are abnormally painful, and even a condition of “psychical neuralgia” in which there is mental pain spontaneous in its origin and not dependant on perceptions or reason. Among the forms of psychical neuralgia, a condition of great anxiety and agony is not unusual; another variety is “agoraphobia,” a condition in which the patient fears to cross a large open space, and another variety is “claustrophobia” the fear of small and enclosed places. In extreme forms of mental depression, and more commonly in cases of dementia, whether primary or secondary, there is “psychical analgesia,” in which the most painful and disgusting perceptions cause neither pain nor disgust. On the other hand, with mental exaltation there is frequently associated a condition of “psychical hyperhedonie” in which ordinary perceptions are pleasant, and pleasant perceptions and ideas are excessively pleasant, and a condition of “psychical hedonie” in which the patients are joyous spontaneously without reason or cause. In addition to these altera-

tions in the feelings, and in addition to a very rapid or a very sluggish play of the feelings, it is not uncommon to find in the insane a perversion of the feelings, so that friends and relatives that were formerly loved became repulsive, or there may be a perversion of the sexual feelings, etc.

*Disorders of the Will.*—As we have seen, the vivid imagination in the insane, the production of delusions by a process of faulty reasoning, the persistence of compulsory ideas and impulses, and the disorders of the emotions and feelings, may all be due in part to a want of sufficient will power to properly guide and control the mental processes, and although some insane persons may exceptionally exhibit a high degree of will power in enduring pain and hunger, and in concealing their delusions, yet the great mass of the insane exhibit a decided weakness in will power.

*Disorders of Consciousness.*—Finally the self-consciousness of a person may become altered in insanity. He cannot reconcile his delusions with the former conditions of his life, and his personality seems to him to be altered and he seems to be changed, it may be into an animal, or it may be into some noted character in history. Sometimes there is a double consciousness, a double personality. the patient may pass through alternate conditions in each condition, remembering only what he knew in the previous corresponding condition. A peculiarity of insanity in all its forms is the prominence of the patient's own individuality. A healthy brain, like a healthy stomach, muscle, etc., rarely calls attention to itself, but a diseased brain, like a diseased stomach or muscle, constantly forces itself and its disorderd activity upon the attention. An insane person is always thinking of himself, and all the events happening about him seem to him to have especial reference to himself, and his mind cannot be easily diverted from his own condition and consideration.

*Delirium.*—We have now briefly described those elementary disturbances in mental activity which we meet with in the insane, but which are not always characteristic of insanity; for not infrequently this disordered action of the mind occurs in the course of some disease other than cerebral, of which it then constitutes one temporary symptom. This temporary form of insanity is called delirium and is due to a change in the quality or quantity of blood circulating in the brain. In febrile diseases, as, for instance, in typhoid fever it is common to meet with disordered mental action. Such patients imagine that they see persons and things which have no



existence in reality. With these imaginary persons they carry on conversations which seem to the bystanders to be incoherent, but which in reality may not be so incoherent as they seem. At times the hallucinations which they have are so real to them and of such a startling nature that they become very violent, and, if not carefully watched, do injury to themselves or others. When such a state comes on in fever, we call it delirium, and say that the patients are delirious; but this delirium is, in its essential nature, only a form of insanity. In other and rarer cases, after the typhoid fever is over and the patient is convalescent, this delirium continues, or a very similar form of mental derangement comes on which may last for weeks or months, but from which eventually the patient almost invariably recovers.

*Delirium Tremens and Narcotic Poisoning.*—When a person has been indulging for a considerable time in excessive drinking, there ensues a condition called delirium tremens, in which, in addition to various bodily symptoms, such as complete inability to take food, restlessness, tremulousness of hands, tongue, and, indeed, of all the voluntary muscles, there is also great mental derangement, characterized especially by hallucinations of sight, which generally take the form of small animals, such as rats, bugs, etc. Not infrequently in delirium tremens the patients have other hallucinations; they hear voices saying abusive and threatening things to them, and often have the delusion that persons are pursuing and trying to kill them. Under the influence of such delusions, patients with delirium tremens often kill themselves in their efforts to escape from imaginary pursuers. In addition to delirium tremens, alcoholic abuse often produces other and more permanent forms of mental derangement, which will be described in a later lecture. Not only alcohol, but other narcotic poisons and drugs, such as morphia, atropia, cocaine, hyoscyamine, cannabis indica, chloroform, ether, salicylate of sodium and many others may cause attacks of temporary insanity.

Delirium of fever, delirium tremens, and transient attacks of delirium as a result of narcotic poisoning, you will probably all meet with many times in your practice. Although not generally considered so, they are really a kind of insanity, and from their study much light can be thrown on the other forms of disease of which insanity is a symptom. In all of these cases the insanity is transient in character, and is associated with numerous other symptoms. General usage has restricted the term insanity to more chronic forms of mental derangement which do not depend upon any

altered character of the blood, but rather upon a change in the brain tissue itself, although truly this change is not in all cases appreciable by any of our methods of examination. This is the kind of cases with which the insane asylums throughout the country are filled, and this is the kind of cases which we have especially to consider in this course of lectures.

*Amentia and Dementia.*—In visiting an insane asylum and examining the patients even superficially, there are two great classes into which they naturally fall. The first class comprises those who are dull and stupid, exhibiting either an entire absence or only a very slight degree of intelligence and incapable of expressing any ideas, either correct or incorrect, except the very simplest; while the second class comprises those who may exhibit a very considerable degree of intelligence, but cherish the most remarkable and erroneous ideas concerning their own personality and their relation to the rest of the world. When we examine the history of the patients of the first class, we find that some of them from their birth have exhibited the same defective intelligence. Born into the world with a defective brain, the result of hereditary influence or of intra-uterine disease, or having acquired a defective brain as the result of disease in infancy, the minds of these patients have never developed; they are called idiots or imbeciles (the latter being a less complete absence of mind than the former). This condition is called "amentia," signifying that there has never been any mental development in these cases. From the history of the other members of this class we learn that they at one time possessed a more or less perfectly developed mind, but that they suffered from an attack of active insanity from which they gradually passed into their present condition of more or less complete absence of mind. This condition is called "dementia," signifying that these patients once had a mind which they lost in consequence of disease of the brain occurring subsequent to mental development. In these cases the insanity may be said to have passed through the active stage, and they have been described as cases in which the cerebral disease causing the insanity has been healed with defect; all signs of active disease are past, but the defect left in the brain occasions the loss of mind. At the autopsy of these cases there is found an atrophy of the cerebral convolutions.

*Primordial Deliriums.*—The second class of patients includes those in which the cerebral disease is in an active stage and gives rise to most strange and curious delusions in the minds of these unfortu-



nate persons, which offer a most fascinating field of study. When the delusions which these patients present are carefully studied and compared, it will be found that, notwithstanding their strangeness and apparent lawlessness, they can all be arranged in a very few typical groups, and this is true not only for any one asylum, but for all asylums, and for all countries. It would indeed be hard to find a more striking argument in support of the position that all forms of insanity are attended with mental weakness than this: that with all the countless conceivable false ideas at their service, insane persons, as a matter of fact, never get beyond a few old stereotyped delusions that are so simple that a child might have chosen them. Two of these groups of "primordial deliriums," as they have been called by Griesinger, are especially important; they are the delirium of depression and the delirium of exaltation. In the former the patients are the subjects of the deepest melancholy or are the victims of persecution. They or their family are wicked. They are unworthy to live and must be killed. They are being poisoned. They are being tortured. They can endure it no longer and must put an end to their lives. In the latter the patients are greatly exalted. They are rich. They are rulers; whether kings, emperors, presidents or gods. Usually a patient who is either depressed or exalted continues in the same frame of mind throughout the entire course of the disease, but in some cases the patients may gradually pass from one condition into the other, although in such cases neither the depression nor the exaltation is of very extreme degree. In such cases the patients may at first feel that they are persecuted, and casting about in their minds for the reason of this persecution, they finally come to the conclusion that they are very important persons in the world and that their persecutors want to get them out of the way or else want to perfect their character by suffering to make them worthy of their exalted rank, and, hence, they gradually develop along with, and out of, the delirium of depression, the delirium of exaltation. These cases end in having one fixed idea, *i. e.*, that they are God, a great inventor, a great general, etc., and, therefore, at one time they were called cases of monomania. These three classes, the delirium of depression, the delirium of exaltation, and the so-called monomania, are the most important groups into which the abnormal feelings and ideas of insane persons can be divided. It is true that some less important groups, such as that of the hypochondriacal delirium, the sexual delirium, the delirium of altered personality, etc., can be made, but these can also be con-

sidered as sub-varieties of the three great groups already considered.

*Physiological and Pathological Melancholia.*—The multiplicity of abnormal feelings and ideas which insane persons present can thus be classified in a very few groups. If we examine now the patients which constitute one of these groups, as, for example, those exhibiting a condition of depression, we find that they can be still further sub-divided into two groups, according to the manner in which the depressed condition originated in their minds. Some of the patients who are in a depressed condition can give no reason for it. They felt a cloud come over their spirit, they became sad and could not shake off the feeling of depression, which grew deeper and deeper, so that it engrossed their whole attention, and they sank into the deepest melancholy, from which, in some cases, they cannot be roused enough to make them answer questions. The patients are simply melancholy; they present no delusions, or if they do exhibit any, these delusions are few in number and seem to spring from the feeling of melancholy; they feel so very sad that they imagine that they must be very wicked or have committed some terrible crime, and God is thus punishing them. In these cases the essence and primary element of the disease is the melancholy feeling. In the other cases of this class we find that the melancholy feeling was not the primary symptom, but that they had the delusions that persons were torturing and abusing them; that they felt electric shocks in various parts of the body and heard voices abusing them, etc. In these cases the delusions and hallucinations were the primary symptoms, and the melancholy was secondary to them. The delusions are the essence of the disease, and the melancholy is physiological and not a sign of disease. It is perfectly natural that a person should be melancholy when he has the delusion that he is being poisoned and hears voices telling him so. If he were not melancholy under such circumstances his mind would be diseased indeed, or rather destroyed. In general, in the study of insanity, the disordered feelings and actions are of less importance and interest than the reasons and motives from which they arise, and whether they rest on a physiological or a pathological basis.

*Former Classification and its Defects.*—Thus, from a very superficial study of patients in an active stage of insanity we learn that they can be naturally divided into three great classes—the condition of depression, the condition of exaltation, and the transition from the one to the other by a process of faulty reasoning. And



not very long ago such a superficial study was considered sufficient for purpose of classification, and there were the three corresponding divisions of insanity—melancholia, mania and monomania—in addition to amentia and dementia, previously mentioned. At the present day such a classification no longer suffices, in consequence of the fact, already mentioned, that melancholia, in the sense in which it was formerly used to include the entire group of depressed conditions, consists of a mixture of cases in which the melancholy depends on radically different conditions, in some cases being pathological and primary, in other cases being physiological and secondary and naturally resulting from the delusions which the patient has, the delusions being primary and the essence of the disease. To class all these cases together under the one heading, melancholia, is to confound the physiological with the pathological, and this, which is true in regard to melancholia, is even more true in regard to mania, in that the feeling of exaltation almost always is physiological and is the result of delusions.

The subject of the modern classification of insanity we reserve for the next lecture.

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## REPORT OF CASES OF HODGKINS' DISEASE.\*

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CASE I.—April 4, 1888. James C., æt. 10. Father and mother in perfect health. Has three sisters and two brothers, all of whom enjoy good health. No tubercular family history traceable. Parents noticed three years ago a swelling beneath right ear. This swelling gradually increased in size, and appeared as large as a cocoanut, and consisted of a number of cervical lymphatic glands, which were freely movable; glands in right axilla and groins as large as hazel-nuts and very movable; those of left cervical region size of horse-chestnuts. Patient has a waxed appearance from profound anæmia; eye-lids and conjunctivæ very pale; mucous surface of mouth, pharynx and tongue extremely anæmic; flesh soft and flabby; teeth serrated; pupils moderately dilated and responsive to light and accommodation; discs normal. Splenic dullness much increased, easily palpated, and having an elastic feel. Liver dullness extended from a line drawn midway between free border of

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\* Read before the Rensselaer County Medical Society at the February meeting.

ribs and umbilicus. A large, tortuous vein was seen to right of sternum and filled from above. Abdomen very protuberant; measured twenty-seven inches. Systolic apex and basic murmurs, with marked venous hum in neck; no ascites. Urine, specific gravity 1015, light porter, no albumen, sugar or casts. Blood contained about normal proportions of white corpuscles; actual count of red not made; blood appeared light and watery when running from finger; the red corpuscles presented many changes in form. Two spots of alopecia areata were observed. Temperature  $101.5^{\circ}$ ; pulse 120. Great general emaciation, and has a very peculiar corpse-like appearance.

April 20, 1888—Splenic dullness extended to umbilicus; no ascites; bronchial breathing in inter-scapular regions of both sides; dullness at bases posteriorly; legs œdematous. The skin and soft parts are generally hyperæsthetic.

April 30, 1888—Patient died from syncope. No autopsy permitted.

CASE II.—This case was remarkable from the combination of scleroderma and lympho-sarcoma. A similar case I have been unable to find recorded.

August 1, 1888—Male child, aged 3 years. Has had a cough during the summer, which still continues. Dysentery in spring. Mother and father robust and in perfect health, as are their other children, who do not present the slightest enlargements. Marked anæmia; child looks as if made of wax. Hair sparse, light, and sweats much about head and neck. Veins of forehead and vertex very prominent, as are those of chest and abdomen. Ears large, nose flattened and retracted at its root, face œdematous in upper portion. Skin over malar prominences about angle of jaws, as well as that about the mouth, presented a glazed appearance, with a decided erythematous blush, was much thickened, could not be pinched into folds, and was adherent to underlying tissues. Motion of lower jaw very limited; patient cannot protrude her tongue beyond teeth, and on account of the almost immobility of lower jaw, he has great difficulty in eating. This fixation gives a peculiar appearance, as if the whole lower part of face was in a mask. Tongue and all mucous surfaces very pale. Sub-occipital, mid-cervical, axillary and inguinal glands about the size of horse-chestnuts and freely movable on underlying structures. Heart's apex in normal position; marked thrill felt in right sub-clavian artery; soft systolic bruit at apex and base; decided venous hum; a few small râles at bases of



lung posteriorly, vesiculo-lymphatic percussion, prolonged low-pitched expiration. Liver dullness, its lower border not to be palpated. Spleen could be easily felt, having a semi-elastic feel and freely movable. Temperature  $101^{\circ}$ , pulse 140, respiration 48. Testicles are stony hard and about three times their normal size for the child's age.

September 10—Glands all on increase. Temperature  $102^{\circ}$ , pulse 120; blood pale, no increase of white corpuscles, red not counted.

Patient died a few days later. No autopsy.

CASE III.—Freddie H., *æt.* 8 years. Mother and father enjoy the best of health. Have had six children; one dead of meningitis at two years; rest living and well.

Freddie has had scarlet fever, measles, whooping-cough, chicken-pox and mumps. Present illness began two years ago with glandular swelling in the neck, on right side, glands being about the size of pigeons' eggs; no other glandular enlargements were noticeable. At this time he was apparently in good health, ate well, and presented no pallor whatever. Patient came under my observation August 14, 1890. The marble-like pallor first attracted my attention, and then, having him stripped, found that the cervical glands on right side were the size of small eggs and freely movable on structures beneath; those of left side smaller and freely movable; those of axillæ and groins the size of beans. Lung resonance normal; good vesicular murmur. Heart's apex in normal position; systolic basic murmur; anæmic hum in neck. Liver dullness three inches below costal border. Splenic dullness midway between free border of ribs and umbilicus, freely palpable, hard, semi-elastic feel, and freely movable. Abdomen prominent, veins distended, communicable with mammary, and filled from below. Tongue, mucous membrane of mouth, pharynx, vocal cords and larynx very pallid; no diarrhœa, appetite poor, no œdema about ankles. Examination of blood revealed no increase of white blood corpuscles; no actual count made of red; no deformity of red corpuscles; blood pale and watery. Temperature  $101.5^{\circ}$ , pulse 120. Urine, specific gravity 1018, and no casts, albumen, blood or sugar.

Three weeks later he was, to all appearances, the same.

October 14—Much improved under arsenic, iron and quinine. Splenic dullness diminished, and marked diminution of glandular enlargements.

January 14, 1891—Patient presents a cadaveric appearance and looks as if made of white wax. Dullness and sub-crepitant râles at

bases posteriorly; good vesicular murmur elsewhere. Examination of blood showed no increase of white corpuscles; a relative increase (leucocytosis) from marked diminution of red corpuscles. Actual count showed 9,000,000 per cubic millimeter. Venous hum in neck very loud; has no appetite; hair sparse; urine, specific gravity 1020, amber color, acid, no albumen, sugar, casts or blood. Marked tenderness of spleen and liver on palpation, and the skin and muscles are extremely tender on pressure; percussion of sternum and junction of ribs with cartilages and their external junctions showed great tenderness.

February 7, 1891—Great general emaciation; has the appearance of one in the last stages of phthisis; soft œdema of lower extremities, particularly of feet and ankles; hands puffy; purpura simplex well defined on extensor surfaces of fingers, and scattered patches on thighs and legs. Temperature  $101.5^{\circ}$ , pulse 120, resp. 32; bowels regular; urine normal; intercostal spaces sunken and ribs very prominent; veins of abdomen very prominent, filling from below, and inosculate with those of chest; girth of abdomen, 27 inches; fluid in peritoneal cavity.

February 10—Died at 7 A. M. Autopsy twelve hours later. Rigor mortis slight. Great emaciation; great pallor of surface. Subcutaneous adipose over abdomen and chest almost entirely gone. Incision wounds blanched and bloodless; free fluid in abdominal cavity. Liver mottled gray; cut with marked resistance, and appeared full of small islands of whitish lymphoid deposits. Kidneys very pale, as are all the internal organs. Normal relation between cortical substance and pyramids; capsules stripped without any loss of renal structure. Spleen weighed 12 ounces, was of a very dark bluish appearance, and very tough on section; its cut surface presented a granular appearance, from the multitude of enlarged malpighian corpuscles. Mesenteric and retro-peritoneal glands enlarged and very hard. Pleural cavities contained almost a pint of clear serum. Left lung adherent at base, with tender adhesions. bronchial glands enlarged and very hard; no cheesy deposit in any glands opened. Pericardium contained about a gill of serum. Heart normal size, very pale and flabby, orifices and valves normal. Lungs œdematous and very pale.

The above reported cases present typical clinical pictures of general lympho-sarcoma, pseudo-leukæmia, or Hodgkins' disease; and when one considers the gradual onset, the wax-like pallor, the characteristic lymphatic enlargement, usually starting in the cervical



regions, and in this region often attaining enormous proportions, with later general lymphatic infection, their mobility on underlying structures, the inadherent skin, splenic and hepatic enlargement, a marked diminution of red corpuscles, with no increase in white, save a relative, or leucocytosis, one has a clinical picture in mind which is hardly to be simulated by any other affection.

A form of leukæmia attended with general lymphatic enlargement and great increase of splenic dullness would naturally resemble the above affection, but an examination of the blood immediately dispels all doubts as to the diagnosis, as there is in any form of leukæmia a marked increase of white corpuscles. Apart from the examination of the blood it cannot by any other clinical means be differentiated from Hodgkins' disease. However, one rarely finds as great a splenic tumor in the affection under consideration as in the lympho-splenic form of leukæmia.

In tubercular lymphatic enlargements, the glandular enlargements are more local, and in some situation to be found adherent to underlying or surrounding tissues by periaderitic inflammation, and in most instances present, at some time during observation, caseation and necrotic softening, and in many instances are attended by other local or general forms of tuberculosis, as that of lungs, joints, mesentery or brain. An accurate diagnosis can always be made by extirpating the gland and examining its structure and for bacilli, or by inoculating animals which develop tuberculosis rapidly, as the guinea pig or rabbit.

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## TWO NEW VAGINAL SPECULA.\*

BY WM. O. STILLMAN, A.M., M.D.,

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In the use of bivalve specula, commonly employed in minor gynecological office work by the majority of physicians, several mechanical defects have annoyed me. The principal one of these has been that, in the case of virgins or with women with small vaginal openings, it is often difficult to expand the speculum enough to freely discover the os externum without causing undue pain or, perhaps, lacerating the hymen. In other words, in order to expand the wings of the speculum sufficiently for practical purposes, it is

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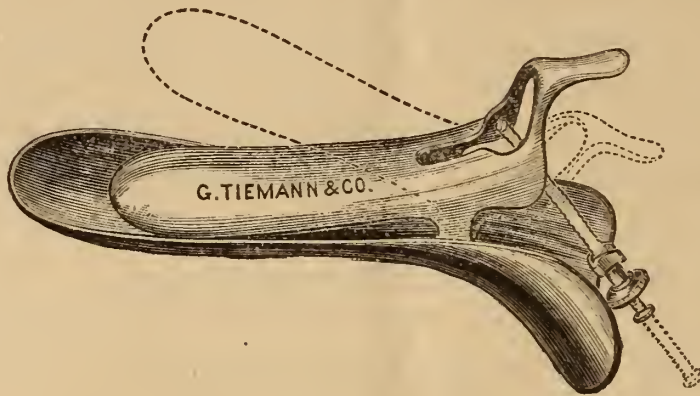
\* A paper read before the Albany County Medical Society, April 29, 1891.

necessary to dilate the ocular end of the instrument more than is really essential to see well, or secure room for such instruments as are ordinarily used in office work, as the uterine probe, curette, forceps, applicator, caustic, etc. It has seemed to me that the vulvar part of the speculum might be made of a moderate fixed size, and the blades be made to expand independently, or at least without affecting the selected calibre of the more external part. To do this I spent odd intervals for a couple of years devising machinery, but it was either too complicated or defective mechanically. Finally, it occurred to me that by simply carrying the joint working the blades an inch farther in, I could very readily accomplish my object. A double end was gained in this way, with the simplest possible mechanism. Not only does the external third, or fourth, of the speculum not enlarge with its dilatation, but a retracting motion is given to the upper blade as it opens, by its shorter radius, which seems to me a very important desideratum in constructing a speculum to be theoretically and practically a perfect instrument. This motion much more readily exposes the mouth of the womb.

It seems as if many of the designers of vaginal specula have labored under the delusion that the uterus is placed at the end and directly in the axis of a short straight tube fixed at right angles to the vulva. Their instruments, and they are common, open like a pair of dividers. The joint is directly in the line of junction of the two blades, and the upper blade is as long as the lower one, and usually pushes the uterus up out of sight, behind it, as it is opened. They ignore the fact that the womb is placed at about a right angle to the plane of the superior straight, while the vulva is nearly in the plane of the ischio-pubic rami, two planes separated by a very wide angle. Sections of the frozen cadaver, and clinical experience, have shown that the vagina is practically the segment of an arc, extending between the two planes just mentioned, and that the womb is frequently found at right angles to even the extremity of this arc, the posterior wall of the vagina being longer than the anterior. As a concession to these anatomical facts many specula are now being made with the upper blade shorter than the lower one, a very desirable feature. But the retracting motion is very rare, although it works extremely well usually when found. This motion is well shown in an English speculum, purchased in London, which has been a favorite of mine. The joint is peculiarly placed, as you will see, but the vaginal orifice is excessively expanded when it is opened widely.



Some specula found in the market are too narrow and some too heavy; some are too big and clumsy, and some of the trivalves hurt or allow the vaginal vault to drop too low. Without devoting more time to what seem to me defects in other instruments, I will briefly summarize the practical improvements which I have endeavored to combine in these specula. In presenting the two, I will speak of the regular bivalve speculum first, and of the tubular bivalve later.



*First.*—I have sought to make it as simple as possible in its construction, and to render it aseptic it is made to come apart with the greatest ease.

*Second.*—The vulvar part of the speculum is of a convenient size and does not enlarge on opening the speculum to its widest extent. On the contrary, it becomes slightly smaller when fully expanded.

*Third.*—The upper blade is shorter than the lower one, and working on a short radius retracts (so to speak) and exposes the womb very readily.

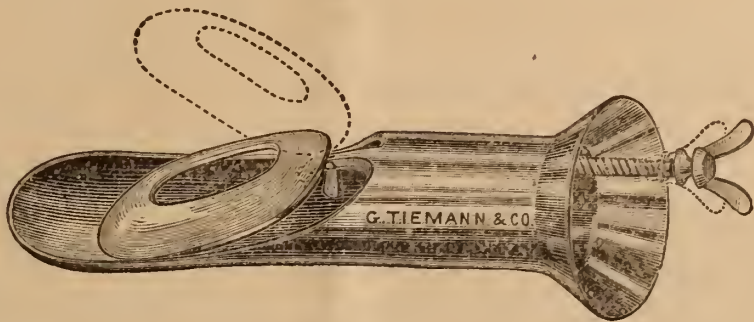
*Fourth.*—The blades are broader at the free ends so that a slight dilatation expands the vagina quite fully and prevents the folds of the canal from falling in at the sides and obstructing the view as I have found to be the case with one very slender speculum of a popular design. This breadth has been compensated for by excessive flatness when shut, to facilitate introduction, and the considerable height of the vulvar end is, on the other hand, compensated for by narrowing the instrument at that point so that the calibre is not increased, and yet a good view is obtained.

*Fifth.*—It has been made light in weight so as not to inconvenience by tilting or by pressing down on a sensitive hymen. Lightness is still further attained by the use of aluminum (one-third the weight of iron), which is, of course, non-corrosive (except to hydrochloric acid), and gives a pure white light by reflection, showing the correct colors of the parts revealed.

*Sixth.*—To save tedious screwing and unscrewing in use, the set screw can be thrown in and out of its bearings, which also facilitates taking the instrument apart.

*Seventh.*—An attempt has been made to adapt the shape of the instrument to the natural anatomical curve of the vagina, and it has been made quite wedge shaped to assist in introduction.

I must acknowledge much courtesy and patience on the part of Messrs. George Tiemann & Co., the manufacturers of the specula, and from whom they can be procured, in carrying out my ideas, which they have done very perfectly. For the best results this speculum should be made up in sets of three sizes, the one shown representing the medium size.



The second speculum, which is simply an improvement on the well known tubular ones, making it more easy of introduction, self retaining, and giving a greater range of vision than usual, has many of the advantages of the first one, but is not aseptic. It works extremely well in practice, however.

Both of these specula have answered my requirements very well, and I can simply say, in offering them for your inspection, that I have given them a trial of many months' duration, and that I do not think that they have the defects of which I complained and from which perhaps some of those present have experienced annoyance.

I know it is much the fashion among specialists and many physicians to rely almost wholly on the Sims speculum. The lack of office assistance makes this impracticable for the mass of physicians. Although I am never without an office assistant, I have found the bivalve speculum quicker, less liable to alter the normal relation of the parts, and in the majority of cases more satisfactory than the Sims, which is, of course, unequalled for many purposes.



## MEDICAL PROGRESS.

CASES OF BRAIN SURGERY.—Dr. Minossi reports (*Gazzetta degli Ospitali*, March 15th, 1891), two cases of brain surgery, in which Professor P. Postemwski, of Rome, was the operator. One was a case of cerebral tumor in a woman, aged 58. She had suffered from pain in the right arm for some ten years, which had gradually increased in frequency and severity, till it became continuous; the movements of the limb had also become somewhat difficult. On November 21st, 1890, she was seized with clonic convulsions in the limb with clonic contraction of the eyelids, and of all the muscles supplied by the right facial nerve. She did not lose consciousness. Other attacks of a similar kind followed at varying intervals, and aphasia, with transient verbal amnesia and paresis of the right facial and hypoglossal nerves, came on. The right arm, when left to itself, lay semiflexed, the thumb being in the same plane as the fingers, which were also semiflexed. Sensibility in the limb was unimpaired. Professor Ezio Sciamanna, under whose care she was, sent her to Professor Postemwski, with the diagnosis of tumour in the left motor area. On February 23d, Postemwski removed a sub-cortical tumour (probably a glioma) of the size of a large chestnut, which occupied the region of the left ascending parietal convolution in its middle part. The operation was immediately followed by right hemiplegia, due to plugging of the wound, and the next day the urine was found to contain a moderate amount of sugar, with traces of albumen. The wound healed by first intention, and the symptoms rapidly disappeared. The patient was shown at a meeting of the Royal Medical Academy of Rome, on May 14th (*Riforma Medica*, June 4th, 1891), when the mental condition was absolutely normal, and there was no disorder of speech; she felt well and was cheerful; there was no impairment of mobility, either in the right arm or in the regions of distribution of the facial and hypoglossal nerves. The right hand could be closed, but the fingers could not be fully extended. There was a certain amount of thinning of the skin on the dorsal surface of the ends of the fingers, and some thickening on the palmar, especially in the thumb. In the other case the patient was a man, aged 37, who had been struck with a hammer on the left side of the head. There was a compound stellate fracture of the skull over the region of the Rolandic fissure. When seen soon after the injury the patient was aphasic, and there was complete hemiplegia and hemianæsthesia of the right side. The head was shaved and disinfected; the wound enlarged; the depressed bone removed over an area of three square centimetres, and a light dressing applied. Three hours afterwards the hemiplegia had almost disappeared, but there were zones of anæsthesia on the outer aspects of the thigh and arm. Six days later these also disappeared, and nineteen days after the injury the patient had completely recovered.

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W. G. MACDONALD, M.D., EDITOR.

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REVIEWS AND BOOK NOTICES.

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A CLINICAL TEXT-BOOK OF MEDICAL DIAGNOSIS FOR PHYSICIANS AND STUDENTS, Based on the Most Recent Methods of Examination. By Oswald Vierordt, M.D., Professor of Medicine at the University of Heidelberg; formerly Privat-Dozent at the University of Leipzig; later Professor of Medicine and Director of the Medical Polyclinic at the University of Jena. Translated by Francis H. Stuart, A.M., M.D., Member of the Medical Society of the County of Kings, New York; Fellow of the New York Academy of Medicine; Member of the British Medical Association, etc. Authorized translation from the second improved and enlarged German edition. 178 illustrations, 8mo, 700 pp. Price, cloth, \$4.00; sheep, \$5.00.

The translation of this valuable and exhaustive text-book by Dr. Stuart adds another to the increasing number of German text-books which have given not only pleasure, but instruction to a large circle of English readers.

The first chapters are devoted to the general considerations of diagnosis. Excellent models are given of the manner of taking and recording of the histories of cases. The importance of the factors, age, diathesis, occupation, and the psychical condition of the patient, are carefully considered. Temperature and pulse-rate, their relation, and the characteristics in several diseases, are well illustrated.

Part III., devoted to diseases of the throat and chest, is very complete. The study of the sputa is carefully written, much attention being paid to naked-eye appearances, from which, the writer believes, much can be learned. The microscopical study of this study contains not only a minut analysis from a bacterio-



logical standpoint, but also a description of histological elements found in sputa. The spectroscopic examination of the blood, together with the estimation of the number and relation of the corpuscles, receives appropriate attention.

The examination of the abdominal organs is gone into with thoroughness. Many useful methods are given for the physical exploration of the liver, pancreas and kidney. Chapters are devoted to the examination of the fæces and urine, which are very useful.

The nervous system receives a sufficient space for the use of the general practitioner, and is clearly written.

The volume, as a whole, is excellent, and compares very favorably with that favorite text-book of Americans, "Da Costa's Medical Diagnosis." The translator is to be congratulated upon having performed so faithfully the difficult task of translating German into excellent English.

**INTERNATIONAL CLINICS.** A quarterly of Clinical Lectures on Medicine, Surgery, Gynæcology, Pediatrics, Neurology, Dermatology, Laryngology, Ophthalmology and Otology. By Professors and Lecturers in the Leading Medical Colleges in the United States, Great Britain and Canada. Edited by John M. Keating, M.D., Philadelphia, Pa., Consulting Physician for Diseases of Women to St. Agnes' Hospital, Philadelphia, Editor "Cyclopædia of the Diseases of Children;" J. P. Crozer Griffith, M.D., Philadelphia, Professor of Clinical Medicine in the Philadelphia Polyclinic; J. Mitchell Bruce, M.D., F.R.C.P., London, England, Physician and Lecturer on Therapeutics at the Charing Cross Hospital; David W. Finlay, M.D., F.R.C.P., London, England, Lecturer on Clinical Medicine, Middlesex Hospital Medical School, Physician to the Royal Hospital for Diseases of the Chest, and to Middlesex Hospital. Philadelphia: J. B. Lippincott Company, 1891.

The editors and publishers of this periodical are worthy of the thanks of the profession for having brought together the views of advanced thinkers, acknowledged teachers and the writings of practical men. It places in the hands of the profession the very latest views upon all subjects pertaining to medicine and surgery. The clinical lectures are abreast of the times, as reported in the first volume, and there is scarcely a paper but that can gather some good points from in its perusal. If the forthcoming volumes are to be maintained in the same high standard the *Clinics* will rank as one of the best periodicals of the time. It is a grand feature to have such clinics in one volume, well indexed and to which the busy practitioner can refer so readily and find the subject he is in search of. No doubt the work will be appreciated and receive a large circulation.

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THE OUTLINES OF INSANITY.\*

BY HENRY HUN, M.D.,

*Professor of Diseases of the Chest and Nervous System in the Albany Medical College.*

LECTURE II.

*Classification on the Basis of Etiology.*—The subject of the classification of the different forms of insanity, although it has been the object of much careful study, has not yet received its final solution, because, in spite of many attempts, it has not as yet been found practicable to group the different forms of insanity in accordance with either of those two great systems, etiology or pathological anatomy, by means of which we classify other forms of disease. We still meet with the terms puerperal, alcoholic, syphilitic, adolescent, climacteric and senile insanity, which bear witness to the attempt at an etiological classification. But this attempt has not been successful, because not only a number of forms of insanity have no distinctive and characteristic etiological factor, but also the same etiological factor may produce very different types of disease. Thus the puerperal state is sometimes followed by mania, sometimes by melancholia, and a classification which includes such widely different types as melancholia and mania in the one class of puerperal insanity leads only to confusion.

*Classification on the Basis of Pathological Anatomy — Organic Psychoses.*—The attempt to group the various forms of insanity on the basis of pathological anatomy has been more successful, for there are several forms of insanity which exhibit after death a definite and characteristic lesion of the brain. Such forms of insanity are: General paresis, syphilitic insanity, alcoholic insanity, acute delirium, etc. Some of these forms are curable. They all

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\*A course of lectures delivered at the Albany Medical College during January and February, 1891.



exhibit a progressive course, and if a cure is not effected, the brain lesion continues to advance and leads to a complete destruction of the mind and finally of the body also. These forms of insanity can be classed together under the name "organic psychoses" or "diseases of the brain with predominating mental symptoms," but they are few in number, and there still remains the majority of the varieties of insanity for which pathological anatomy offers no basis for classification, and which could, therefore, be grouped only in virtue of differences in the clinical pictures which they presented, were it not that we find in the factor of heredity, or, to speak more broadly, in that of deficient mental development, an important aid in classification.

*Amentia.*—In any classification of insanity one division must consist of those unfortunate beings who are either born into the world with a defective brain as the result of hereditary influences or acquire a defective brain from disease in early infancy before the mind has developed, and who are called idiots or imbeciles. Those cases, in other words, of amentia in which mental development has never taken place, and which are in their nature incurable. These defective brains do not directly tend to shorten the life of the patients, and the mental condition does not grow worse, but shows rather a tendency to improvement with advancing years. These cases in a sense possess a pathological anatomy, inasmuch as well-marked lesions are found after death in their brains; but these lesions are neither constant nor characteristic enough to afford any basis for classification.

*Constitutional Psychoses.*—The class of amentia does not exhaust all the forms of mental derangement dependent on defective mental development. Many persons possess a defective brain dependent upon hereditary influences, upon disease in embryo or in early infancy, or even upon cerebral disease or injury later in life, and although the defect in the brain is not so extreme as to produce an entire failure of mental development resulting in idiocy or imbecility, yet it produces a failure in development which manifests itself throughout the entire lives of these patients to such an extent that even before their mental disease has become fully developed they have been considered peculiar people, different from the average man, so that it is difficult to fix accurately the date of the commencement of their insanity, which is often only an exaggeration of their peculiarities. This condition has been called the "psychopathic constitution," or "psychic degeneration," and the

forms of insanity associated with it have been called the "constitutional psychoses," and resemble in many respects those comprised under the class "amentia." They, like the latter, are incurable, and although throughout their entire life these persons show a disordered and abnormal mental action, yet the disease does not progress to a complete destruction of the mind, these cases rarely terminating in an extreme degree of dementia.

*Idiopathic Psychoses.*—Finally, there remains a number of forms of insanity not comprised in the three divisions already described, but which form by themselves a sharply defined class called the "idiopathic psychoses." These forms present a certain resemblance to the second division of insanity—the organic psychoses—in that in them the insanity attacks a mind previously healthy, is often curable, but if not cured the disordered mental action does not remain stationary, but goes on to complete destruction of the mind; so that those cases of idiopathic psychoses which do not terminate in cure terminate in dementia. There is, indeed, as we shall see later, a fundamental difference betraying itself throughout the entire character of the disease between those forms of insanity which attack a brain previously weakened and predisposed to disease by hereditary or other influences and those forms which attack a previously healthy brain; although, of course, transition cases may occur when the psychopathic constitution is only slightly developed.

As a result, then, of these considerations, we can divide the various forms of insanity into four great divisions—*the idiopathic psychoses*, curable forms of insanity, occurring in previously healthy brains, which, if not cured, pass on to a condition of absolute loss of mind; *the constitutional psychoses*, incurable forms of insanity, occurring in brains defective whether from hereditary or acquired causes, which do not go on to complete destruction of the mind even when the insanity has lasted many years; *the organic psychoses*, organic diseases of the brain with predominating mental symptoms, which, if not cured, go on to complete destruction both of the mind and body; and *amentia*, cases in which, in consequence of hereditary influences or disease in utero, or in early infancy, the brain has never developed at all. Each of these four great divisions comprise a number of clinically distinct forms of insanity, which are arranged in the following table substantially in accordance with the classification of Krafft-Ebing, a classification which is now



adopted, with slight modifications, by very many of the writers on insanity.

IDIOPATHIC PSYCHOSES, OR PSYCHIC NEUROSES.	CONSTITUTIONAL PSYCHOSES, OR PSYCHIC DEGENERATION.	ORGANIC PSYCHOSES, OR DISEASES OF THE BRAIN, WITH PREDOMINATING MENTAL SYMPTOMS.	AMENTIA, OR ARRESTED MENTAL DEVELOPMENT.
Melancholia.	Constitutional Affective Insanity, or Folie Raisonante.	General Paresis.	Idiocy.
Mania.		Syphilitic Insanity.	Imbecility.
Hallucinatory Confusion, or Confusional or Delirious Insanity.	Moral Insanity.	Alcoholic Insanity.	
Stupor or Curable Dementia.	Paranoia, or Primary Delusional Insanity.	Senile Insanity.	
Dementia.	Insanity with Irresistible Ideas.	Acute Delirium.	
	Insanity from Constitutional Neuroses (Epileptic, Hysterical, and Hypochondriacal).		
	Periodic Insanity, or Folie Circulaire.		

We have now to consider briefly the chief characteristics of each of these forms of insanity.

#### IDIOPATHIC PSYCHOSES.

*Melancholia.*—Melancholia consists in a depressed, sad and painful frame of mind, which does not depend on any adequate cause (psychical neuralgia), and also in the inhibition of mental and physical activity. The melancholic is sad, he withdraws himself as much as possible from contact with the external world, and especially from what is cheering or exciting, because all perceptions and every form of mental activity have become painful to him (psychical hyperalgia), and he takes little or no interest in his family or in what goes on about him. There seems to be some inhibitory influence repressing all activity, physical and mental, although his mental powers do not seem to be impaired when in any way he can be induced to use them. He sits in a chair or lies in bed without speaking, and cannot be easily aroused to any exhibition of activity. Sometimes he is in a condition of actual stupor (*melancholia cum stupore*), but usually he is merely intensely occupied with his own sad and gloomy thoughts (*melancholia attonita*). At times the patient may be much troubled by morbid hypochondriacal ideas in regard to his internal organs, which may or may not rest on some slight basis of altered function. Frequently the melancholic is troubled by a great feeling of anxiety, and by a feeling of oppres-

sion in the præcordial region, and this feeling of anxiety may become so strong that he can no longer remain quiet and silent, but must walk up and down the room wringing his hands and suffering great agony (*melancholia agitata*). Such cases must always be carefully guarded from injuring themselves in their agony. Melancholics are prone to commit suicide, are often irritable, and, when disturbed, frequently commit deeds of violence. These outbursts of violence (*raptus melancholicus*) are the result of feelings of desperation when the emotions become so powerful that they overcome the inhibition of physical activity usually present.

Hallucinations are rare, and, when occurring, seem to be accidental complications, and delusions play a much less prominent part in melancholia than in most of the other forms of insanity; in many cases of melancholia they are entirely absent, and when they do occur they usually have their origin in the altered feeling of the patient and from his attempt to explain this altered feeling. They are, therefore, not primary, but secondary to the feeling of depression, and usually consist in some form of self-blame and self-accusation. The delusions which most commonly occur are that the patient has committed some unpardonable sin, or is eternally lost, or is unworthy to live, etc., and thus he in some measure explains his altered frame of mind. The origin of these delusions, as Meynert has pointed out, lies in the fact that a criminal is commonly supposed to be troubled by sorrow for his sins and by fear of their detection and punishment, and since the patient experiences an overwhelming sorrow and an intense fear it seems to him that he must have committed a fearful and unpardonable sin. Moreover, since his sorrow and fear are greater than that of criminals in prison he must be much more sinful than they, and unworthy to associate with them. He may even envy and worship them so greatly do they appear superior to him. Finally, since his sorrow, and hence his sin, is so great, he must suffer some unusual torture and punishment; indeed, his sufferings alone cannot atone for it, but all his family and friends, and even the whole world, must be destroyed on account of his crime. In consequence of the inhibition of the association processes, many associations which formerly occurred frequently and easily and formed part of the patient's individuality and gave him pleasure, such as his religious beliefs, his associations with his wife and children, and his pleasure in beautiful things, now take place imperfectly and with difficulty and give him no pleasure; so that he feels cut off from his religion, his family, and the beautiful, and he feels that



his individuality has become narrowed down, and that he must be wicked, for he feels love and sympathy toward no one.

In addition to the mental symptoms, melancholics suffer physically. They sleep badly. They frequently have neuralgic pains in various parts of the body, especially in the head. Their appetite is poor, and they sometimes absolutely refuse to take food. They are constipated. The circulation is poor, the extremities are cold, and the temperature subnormal. All degrees of melancholia (some so slight as scarcely to transcend physiological limits, others very severe) are met with in different cases and in different stages of the same case. Melancholia usually commences gradually, runs a slow course, frequently presents remissions during which the patient seems fairly bright, and in favorable cases the melancholia slowly disappears. About one half of the cases of melancholia terminate in recovery. Recovery takes place usually in the course of a few months, sometimes in the course of a few years. Those melancholics that do not recover gradually lose their mental power, and finally pass into a condition of dementia in which they remain until they die.

*Mania.*—Mania is a very rare form of insanity. It is common enough to find a condition of mania as the result of delusions or as the first stage of general paresis, but a pure mania in which the exalted condition and feeling is primary, is not dependent upon delusions, and is not one stage of some other form of insanity, is a very rare condition. Mania is exactly the opposite of melancholia in every respect, and consists in a joyous frame of mind not dependent upon any adequate cause (psychical hedonic), and in an abnormally free mental and physical activity. Mania is divided into two forms: the milder form being called "maniacal exaltation" and the severer one "frenzy." In maniacal exaltation the patient revels in joyous feelings curiously mingled with feelings of scorn and anger. He never felt so well. He is a king, a general, is wealthy, is honored above all men. The origin of the maniacal delusions, as Meynert has pointed out, lies in the fact that most people suppose that kings and those that live in exalted station and wield power and are rich are, therefore, happy, and since the patient feels intensely happy he must be a king, or general, or person of exalted rank, or immensely rich, or all combined, and he looks with disdain on other men who are not happy and, hence, not exalted. In consequence of the easy flow of the associations the patient's individuality becomes more expanded and all-embracing, which is the reverse of what occurs in

melancholia, according to the mechanism explained in the consideration of melancholia. The maniac is dominated by uncontrollable impulses to movement. He is so active that he jumps and dances instead of walking. He is anxious to take part in every thing that is going on, and gladly goes into society and, carrying everything to excess, easily becomes dissipated, or undertakes ruinous financial enterprises. His joyousness and activity, which perhaps at first please his friends (especially in those not infrequent cases in which the mania is ushered in by a transient mild form of melancholia), soon pass beyond all physiological limits and it becomes evident that they are pathological. In his mind the association of ideas is abnormally active; with each thought many ideas are connected, so much so that his language becomes not only rapid, but incoherent; he strings together words that sound alike or which rhyme together, and says and does a thousand foolish things. He commits all sorts of excesses and is often dangerous. Besides the mental symptoms, there are also physical ones, especially insomnia and a very rapid loss of flesh.

The second division of mania—frenzy—is much more severe. The insanity may commence in the form of frenzy or a maniacal exaltation, may gradually increase into a frenzy, in which it attains its highest pitch, and the patient acts in the most wild and frantic manner. In frenzy, maniacs, sing, shout, dance, tear their clothes and lose all control of themselves; and at times they are very angry and break and smash every thing that they can lay their hands upon. Usually, however, they are joyous, but are so violent, even in their joy, as to be dangerous to all furniture and persons in the neighborhood. Their speech may become not only incoherent, but may consist only of senseless words and inarticulate sounds. Hallucinations may occur, but they are very rare, even more rare than in melancholia, and when delusions are present they are of the most exalted character and constantly changing. These patients give themselves no rest, but are in constant activity, and sometimes do not sleep at all for weeks at a time. They are often very obscene and extremely filthy, covering themselves and their rooms with fæces and urine. The prognosis in cases of mania is even more favorable than in melancholia, but the recovery is very slow. In cases where recovery does not take place the mania gradually passes into dementia.

*Hallucinatory Confusion.*—This form of insanity is often called confusional or delirious insanity, and like the one next to be described



is especially due to exhaustion. They both follow long sickness or great excess or exertion, and include the insanity appearing after the infectious diseases (such as typhoid fever), the puerperal state and severe hemorrhages. In this condition of great exhaustion, the mind can exhibit its enfeebled and disordered action in two forms; one, resembling mania, is called hallucinatory confusion; the other, resembling dementia, is called stupor or curable dementia. In hallucinatory confusion, the dominant symptom is a very confused state of mind. The patient has many hallucinations and illusions, which are so abundant that they surprise and bewilder him so that he cannot comprehend them, but remains in a constant condition of astonishment. He remains quiet, but he is not at all stupid. From the expression of his face and by the movements of his head it can be seen that he is constantly bewildered by impressions coming to him through his various senses. At other times his hallucinations are not so constant and abundant and the patient is not so overwhelmed by them, but he is still unable to form any fixed, systematized delusions; his delusions and consequent actions changing from day to day, or even from hour to hour, according to the changing character of the hallucinations which are constantly coming in upon his mind. Very characteristic of this disease is the fact that the patient does not recognize nor understand his surroundings and has no idea where he is, and he does not recognize familiar objects, but regards them as being very different from what they really are. Sometimes, in consequence of some of their hallucinations, these patients are quite violent. The prognosis in this form of disease is good, the majority of these cases making a good recovery after weeks or months, but those cases which do not terminate in cure do not remain stationary, but pass on to the condition of secondary or incurable dementia. When sane persons simulate insanity, this feigned insanity often resembles hallucinatory confusion. The great variety in the appearance of the patient, the great variety in his delusions, his inability to recognize his surroundings, are more easily and more naturally feigned than such clearly cut types of disease as melancholia, mania, paranoia, etc.

*Stupor.*—Often called primary or curable dementia, as its name implies, consists in an absence of all signs of conscious activity, and like the preceding form of insanity, arises from a condition of great nervous exhaustion. This form of insanity may come on suddenly or more slowly. The patient remains in a condition of complete apathy and will not even eat his food when it is placed before him,

but it must be put into his mouth. He must be pushed and forced to do even the simplest action. He pays no attention to what is going on about him. External impressions produce no effect upon him. He makes almost no voluntary movement; his face is without expression; his pupils are often enormously dilated, and his muscles are flabby. The reflexes are diminished and the cutaneous sensibility diminished or abolished. The heart's action is weak and the extremities are cold and cyanotic. These cases usually run an acute course and at the end of two or three weeks generally show improvement, and during the whole course of the disease show frequent remissions and exacerbations. The great majority of these cases improve slowly and terminate in complete recovery, but a small proportion pass from this condition of primary dementia on to the condition of secondary dementia, which is incurable.

*Dementia.*—The four varieties of idiopathic psychoses already described do not, in their early stages at least, destroy the intellectual faculties, and are, in the majority of cases, curable. Those cases, however, which do not recover gradually exhibit a steadily increasing sluggishness and difficulty in the performance of every mental act, and an ever increasing loss of mental power, up to a complete loss of all mental activity, so that the mind becomes a blank, a condition which is known as dementia. This dementia, sometimes called secondary dementia, in order to distinguish it from stupor or primary dementia, is, therefore, no distinct variety of insanity, but only the terminal stage of a number of other forms. It can have place in a classification of insanity only on the score of convenience; it is a convenient class in which to place a number of cases, but its limits are hard to define, for the loss of mental power characteristic of dementia is present in some degree in every case of insanity. There is a great variation in the degree of dementia; in the milder cases the mental powers are weakened merely, while in the most severe forms the patients sit with the head sunken forward on the breast, and make no motion unless forced to do so and show only the slightest traces of any consciousness. In these severe forms the patients are extremely filthy in their habits, allowing fæces and urine to be passed in their clothing (psychical analgesia), and it is a difficult matter to feed them. Many cases of dementia, however, do not show this extreme degree of loss of mental power, but are active and more cleanly. The patients are usually very quiet (apathetic dementia), but sometimes excited (*dementia agitata*). They sometimes cherish delusions, whether of exaltation or depres-



sion, which they have carried over from their former condition of more active insanity. These delusions remain unchanged and form a part of the patient's individuality, but he no longer possesses sufficient mental power to shape his actions or conversation in accordance with these delusions, as he formerly did. The delusions are mere dead ideas, which he is unable to defend by even a pretence of an argument, and which exercise no influence on his conduct. The emotions of the patients are also destroyed. They maintain a completely indifferent behavior under almost all circumstances. Sometimes, however, these cases of dementia rouse up and show a considerable degree of violence and become dangerous. Dementia is, therefore, a terminal stage of insanity in which the mental powers have become weak and feeble, and it may go on to a degree of almost annihilation of all mental activity. All of these cases are incurable.

*General Considerations on the Idiopathic Psychoses.*—These forms of insanity, which we have thus far described—the idiopathic psychoses—seem in their essence to depend either on an inhibition or an acceleration of the cortical activities. Thus, in melancholia, the cortical activities seem to be more or less completely inhibited, and this sense of hindrance and resistance in the mind is naturally associated with a feeling of depression. In stupor we have the same thing in a greater degree, the cortical activities being absolutely inhibited, and, no mental act taking place, consciousness appears lost. It is not strange, therefore, that transition states between melancholia and stupor should occur (melancholia cum stupore). In mania, on the other hand, the cortical activities instead of being inhibited are accelerated, and the play of the associations is very rapid, and naturally with this easy flow of ideas there is a feeling of power and joy. In hallucinatory confusion the cortical activities are in such an extreme degree of excitation that groups of cells spring into activity, not only through impulses brought by the association fibres, but also spontaneously, and thus not only disturb the play of the associations, but also present countless illusions and hallucinations to the mind, so that consciousness is confused and bewildered both by the disturbance of the play of the associations and by the countless illusions and hallucinations presented to it. In a general way, the idiopathic psychoses may be said to depend on a change of feeling or mental condition of the patient, whether it be one of sadness, joy, confusion, or stupidity, and in them the intellectual faculties seem to be in abeyance and play no part. None of

these feelings ever change the one into the other. Each form presents the same characteristics throughout its entire course ; each form appears in a mind previously healthy, so that the change from health to disease is distinct and startling, and each form terminates either in recovery or in dementia.

#### CONSTITUTIONAL PSYCHOSES.

The constitutional psychoses differ from the idiopathic psychoses in that they depend not on an inhibition nor acceleration, but on a perversion of the cortical activities and occur in brains which are either congenitally weak, as the result of hereditary influences or of intra-uterine disease, or have acquired a weakness as the result of mental strain and worry, brain disease, or other noxious influence, acting during life. This weakness of the brain, whether congenital or acquired, manifests itself by striking mental peculiarities. Such men are different from the rest of mankind, presenting certain peculiarities of mental action which have raised in the minds of their fellow men a suspicion that they were not quite right in their minds, although these persons are frequently conscious of their eccentricities and insane tendencies, and often conceal them with much cunning and skill for a long time even from their relatives and nearest friends. Persons with this psychopathic constitution or predisposition have a vulnerable nervous organization, so that they are emotional and excitable on slight provocation. They may be indolent and indulge in day dreams, and are often indifferent and cruel to their fellow men, and yet are themselves hypersensitive, are greatly affected by slight causes, resenting imaginary insults, quick to take offense, and impulsive. On account of their defective nervous organization the normal events and circumstances of life do not produce an harmonious and normal mental development. Some scarcely develop at all and remain childish, others develop too rapidly into precocious and wonderful children. In still other cases certain factors gain too great a prominence in the mind, and the patients exhibit idiosyncrasies, whims, and marked eccentricities of character, which may remain as such, but which always have a strong tendency to increase and to develop into actual insanity. Such persons often have a very one-sided nature excelling in certain respects and very backward in others, their mental action is usually showy, illogical, and superficial. In short, they do not possess a well-balanced mind and constitute the eccentric persons in a community. Many of these eccentric persons, perhaps, the majority of



them, pass through life without ever becoming insane, but they form a class in which the nervous system is likely to break down under some powerful mental shock or worry, and the person then becomes incurably insane, afflicted with one of the forms of the constitutional psychoses. Clinically, the constitutional psychoses, which are especially apt to appear at certain critical epochs in life, such as puberty, menopause, etc., differ very materially from the idiopathic psychoses, in that they are not so clearly defined, not exhibiting an unchanging sadness, joy or stupor, but being very variable in their symptoms, and the reasoning powers, which play no part in the idiopathic psychoses, are very prominent and dominate the constitutional forms. In these latter forms the patients are constantly searching for reasons for their delusions, their altered feelings, etc., and arguing with not a little cunning, and presenting a very strange but characteristic medley of sane and insane ideas. Finally, the constitutional psychoses usually commence and terminate more abruptly than the idiopathic forms; although the fact that in the former class the patients were always peculiar people makes the change less marked, even though the actual disease commences more abruptly.

*Periodic and Circular Insanity.*—Simple conditions of depression or exaltation not dependent on delusions very rarely occur in persons with the psychopathic constitution, and, when they do, are so modified that they bear little resemblance to the pure forms of simple melancholia or mania, and this modification is more decided the more pronounced is the psychopathic constitution. Thus, feelings of depression and attempts at suicide occur in rapid succession with feelings of religious bliss and exaltation. When these modified forms of melancholia or mania do occur, they run a very chronic course, and do not terminate in complete dementia, but what is especially characteristic of them is their tendency to recur at certain definite periods, which has given rise to the term "periodic insanity." In these cases the symptoms of depression or of exaltation are present for a time varying from a few days to a year or more and then disappear to recur again after a certain period, often coincident with the time of menstruation. Such periodical attacks are maniacal more commonly than melancholic, and sometimes they consist in attacks of delirium. They are always of the same nature in any given case (each attack resembling its predecessors with absolute exactness in some cases), and differ from ordinary cases of melancholia and mania in that the reasoning processes are more

prominent. These patients, having a psychopathic constitution, even in the intervals between the attacks of depression or exaltation, are not in a perfectly normal state, and still exhibit some slight symptoms of insanity. In still other cases an attack of melancholia is immediately followed by an attack of mania, and this in turn either by an interval of freedom of symptoms or immediately by an attack of melancholia, and thus the two kinds of attacks and the free intervals keep constantly recurring. The form of the disease is called "circular insanity," each cycle consisting of an attack of melancholia followed by an attack of mania followed by a normal interval. In such cases the duration of the attacks and of the interval between them is very variable, but, as the disease continues, the free interval usually becomes shorter. The first attack of melancholia is usually more severe than any of the subsequent ones, and both the melancholia and mania are often so mild that it is not necessary to confine the patient in an asylum; although even in the so-called free interval he exhibits a more or less pronounced disordered mental action.

*Constitutional Affective Insanity.*—This form of disease, often called "folie raisonnante," is much more frequent in women than in men, and is especially frequent at the time of the menopause. It is very often not recognized as insanity, being called by physicians hysteria, and by the laity an evil disposition or bad temper. The patients feel themselves to be continuously in a bad temper. They are depressed and always looking on the dark side of things, and are frequently under the dominion of compulsory ideas. They do a great many strange acts which are not in harmony with their education and station in life, and which they defend by ingenious though fallacious arguments. A not infrequent manifestation of this condition is for wives to falsely accuse their husbands of unfaithfulness and of abusing them and their children at home, and to exhibit violent dislike and hatred towards their husbands and relatives, and by skillful reasoning and argument impose upon their friends and neighbors and receive much undeserved sympathy. Such patients cannot carry on any very long or very difficult train of thought, but generally they reason correctly enough in simple matters. They appreciate that they are not doing what is right and wish to do differently, but are constantly and irresistibly impelled to say cruel things and do unkind acts. They very frequently have a great dread of becoming insane, and they readily fall into the morphine or alcoholic habit, which gives them some temporary relief, and are



prone to indulge in sexual and other excesses. The disease is not constant, but exhibits remissions and exacerbations, the latter taking place especially at the time of menstruation.

*Moral Insanity.*—This term does not mean that the patient is healthy in all respects except in his moral nature. All patients belonging to this class are insane and present many symptoms of insanity. In a general way it may be said that moral insanity occurs as one symptom in very many of the other forms of insanity, but it is only where this deficiency occurs alone, without any other very striking mental disorder, that we employ the term (rather as a matter of convenience)—moral insanity. Persons suffering from moral insanity are incapable of experiencing moral feelings and impulses, and cannot comprehend ideas of morality, and their moral nature does not seem capable of cultivation (moral insensibility). They are unable to appreciate any thing that is grand or noble in life, although they are not correspondingly deficient intellectually, and can reason correctly enough on many subjects. The deficiency in moral sense manifests itself from infancy, so that moral insanity might be regarded as a subdivision of amentia. As children, these patients exhibit no true affection for their relatives or friends, are maliciously mischievous, and confirmed liars. They torture animals and other children whenever they have an opportunity of doing so, and often torture them in the most frightful way. When the case is not a very severe one, this defect in the moral nature is often not clearly recognized until the patient grows up to be a man or woman, in which case the want of their moral attributes then appears to the injury of their friends whom they without compunction sacrifice financially and in other ways, often bankrupting both themselves and their friends, showing through it all an entire lack of appreciation of what they are doing, an absence of any correct or moral ideas. These patients show in other respects want of judgment and deficient mental power, but the most striking thing about them is this moral weakness and the impossibility of cultivating in them any moral ideas.

The consideration of the remaining forms of insanity must be postponed till the next lecture.

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TREATMENT OF CONVULSIONS IN CHILDREN.—T. G. Davis recommends, if the patient is cyanotic, a few whiffs of amyl-nitrite, followed by inhalations of chloroform and hypodermic injection of tincture veratrum viride—one-half drop for each year up to six years.

## TWO CASES OF PROSTATIC HYPERTROPHY AND PROSTATECTOMY.\*

BY R. W. STEWART, M.D.,  
PITTSBURG, PA.

I desire to present two specimens of hypertrophied prostate, and also to report a case of prostatectomy. The first specimen is one I removed from the dead-room at Mercy Hospital. In this case there was no history of urinary trouble further than a frequency of passing water, and death was due to other causes. This specimen illustrates beautifully the resulting changes due to obstruction to the outflow of urine from the bladder, the obstruction in this case being a crescentic bar traversing the vesical orifice of the urethra. You will notice that the bladder wall is thinner than normal, and that several saccular pouches are present, caused by the yielding to the intra-vesical pressure of the bladder wall in those situations which are not strengthened by buttresses of hypertrophied muscular bands. Both ureters are dilated, the pelvis on the right side being so much so that it must necessarily interfere, to a great extent, with the excretory function of the right kidney.

A glance at this specimen will show how disastrous would be the results should a cystitis develop in such a case, since an extension of the inflammatory process along the dilated ureters would be almost unavoidable, and a suppurative pylo-nephritis would be ushered in.

The second specimen has an interesting history. Its unfortunate possessor was a blacksmith, age 53. About three years ago he came under my care at Mercy Hospital. At that time he was suffering from retention of urine, due to an enlarged prostate, the attack being brought on by intemperance. He recovered from this attack, and I lost sight of him until a few months ago, when he again entered Mercy Hospital, suffering intensely from retention of urine, cystitis and the rude attempts at catheterization. His condition was evidently going from bad to worse. The urine could only be withdrawn with the greatest difficulty. He was feverish, his tongue was coated, and he was in constant agony. Nevertheless, he refused to submit to a prostatectomy, which I urged upon him, and in a few days after his admission the urine became scant and bloody, and death from suppression of urine followed. The specimen of

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\*Read before the Alleghany County Medical Society.



this case which I show you presents a typical enlargement of the prostate, the middle lobe being chiefly involved. It projects into the cavity of the bladder, acting as a ball valve in preventing the outflow of urine, and bearing on its urethral aspect abundant evidence of the rude manipulation to which it was subjected in the endeavors to force a catheter over it. The lateral lobes are also enlarged, the effect on the prostatic urethra being to convert it into a mere vertical slit of very considerable depth, the increase in the vertical diameter of the urethra rendering more prominent the projecting middle lobe, and more difficult the introduction of instruments which follow the floor of the urethra. The bladder in this specimen, in contra-distinction to the one previously shown, has undergone a marked hypertrophy, its cavity being diminished. No saccular dilatations are to be seen, nor are the ureters dilated.

The third case I desire to speak of is one in which I performed a prostatectomy. This patient, an Italian, age 58, was sent to Mercy Hospital, on August 4th, by Dr. Foster, suffering from retention of urine. On his admission, Dr. Kearns, the resident surgeon, succeeded in passing a soft catheter and withdrew a quantity of bloody urine. On the following morning attempts to pass a catheter were unsuccessful, and in the afternoon I was sent for to see him. I was unable to obtain a concise history of his case, but learned that his present condition was the culminating point of a trouble from which he had been suffering for a period of at least three months.

The bladder was distended to midway between the umbilicus and the ensiform appendix; and as the necessity for its relief was urgent, I had the patient anæsthetized and readily passed a soft catheter into the bladder, relieving the bladder of its extreme distention, but purposely not emptying it. While the most urgent symptom of the case was thus temporarily removed, the cause of the trouble, an enlarged prostate, still remained—a constant menace to the life of the patient. Under these circumstances I decided to do a prostatectomy, choosing the perineal route. I opened the membranous urethra on a grooved staff; then pushing my index finger along the urethra into the bladder, I could distinctly feel the projection at the vesical orifice of the urethra of the enlarged middle lobe. It was about the size of a walnut, and extended further to the right than to the left side of the median line. On withdrawing my finger, about an ounce of urine gushed out, the flow being suddenly checked by the apposition to the vesical orifice of the urethra of the middle lobe. With a bone scoop I detached one side of the

tumor sufficiently to enable me to insinuate my index finger between it and the body of the prostate, and by this means tore it from its attachments and readily removed it.

A microscopical examination showed it to be prostatic tissue. About half an inch of the prostatic urethra which was attached to it was also removed. This portion of the urethra was torn by the passage of catheters, and was doubtless the source of the bleeding, which had been a marked feature of the case. The hemorrhage from the wound, while persistent, was not profuse, and was checked by the internal administration of ergot and the tincture of the chloride of iron. The urine drained through the perineal opening for about three weeks, when the patient was discharged from the hospital. Since that time it has all passed by the natural way, and, except for a slight difficulty in retaining the urine when the bladder is full, the patient suffers no discomfort. As the latter condition is steadily improving, I expect that it will ultimately disappear.

The subject of prostatic hypertrophy is, from its frequency, of interest to the general practitioner as well as the surgeon. Sir Henry Thompson states that one-third of those who have reached the age of fifty-five are affected by it, but that only one-half of those affected by it require treatment.

Why the prostate should become enlarged is an obscure subject upon which but little light has been shed, and we have no better explanation to offer than has the gynecologist to explain why its analogue in the female uterus should undergo similar changes at middle life.

The explanation offered by Thomson, that it was the sequence of increased frequency in passing water, cannot be accepted, since it never occurs before the age of fifty, even with an irritable bladder. In a case which I reported to this society one month ago the patient, from the age of eleven to the age of twenty-one, passed water from twenty to forty times a day, yet in this case there was no enlargement of the prostate. The earliest manifestation of an hypertrophied prostate is a frequency of passing water, noticeably at night or in the early morning, differing in this respect from the frequency of passing water where a calculus is present. The frequent urination observed in prostatic hypertrophy is due to the fact that the bladder is incapable of emptying itself. The amount of residual urine remaining in the bladder varies in different cases. Thompson reports a case where he removed six pints of urine, the patient fancying at the time that his bladder was empty. I recently removed



twenty ounces in a case where I had the patient urinate before me, and he likewise assured me that his bladder was empty. Why the bladder does not empty itself under these circumstances is probably due to two factors, an atonic and weakened condition of the bladder, weakening its expulsive power, and a difficulty in opening the vesical orifice of the urethra from the increase in the development of the surrounding muscular tissue; the result being that the detrusor fibres of the bladder are only able to maintain a patency in the vesical orifice of the urethra when aided by the intravesical tension. When the latter is relieved by the escape of a definite amount of urine, the efforts of the former become impotent and urination ceases.

The treatment of this condition requires the judicious use of a catheter and the treatment of cystitis if present. In those unfortunate cases where there is retention of urine the case assumes a serious aspect, and may tax the patience and ingenuity of the surgeon to the utmost. Only flexible instruments should be used—the best and most often successful being the soft rubber catheter. If this should fail, the condee catheter of Mercier should be tried. The long curved silver catheter should be avoided, as it will rarely pass where a soft instrument fails, and may do considerable harm. The linen catheters manufactured by Lee, of Philadelphia, have a very defective coating, which softens if retained for a few minutes within the urethra, and are rendered useless; besides, the tip of these catheters is not flexible enough for easy introduction into the bladder. Where retention of urine becomes a marked feature and catheterization is difficult, the propriety of removing the obstructing portion of the prostate should meet with favorable consideration.

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## MEDICAL PROGRESS.

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TUBERCULOUS LARYNGEAL TUMORS.—Avellis (Frankfurt-a-M.) gives an interesting paper on Tuberculous Laryngeal Tumors, in the *Deutsche Med. Woch.*, Nos. 32–33, of 1891. He speaks extensively upon the subject and relates his own cases, which tend to show that polypi, which resemble in every way fibromata, are sometimes of a tuberculous nature.

1. Patient, 25 years old, had been hoarse for some months; on the right vocal band, upon its free margin, was made out a polypus the size of half a pea; the growth being pedunculated, the growth

resembled a fibroma, but upon microscopical examination it was found to be of a tuberculous character; not until ten months later was the first indication of lung trouble observed.

Female, aged 40, had a tumor springing from the left vocal cord; growth much resembled a polypus, but further examination showed typical tuberculosis.

3. Patient, aged 19 years, had large tumor on right vocal band, ulceration of posterior wall; lung affection came on later.

4. Patient, 32 years of age, growth on right vocal band; operation, seven months later, ulceration took place and disease of lungs quickly followed.

5. Patient, aged 39; upon the posterior wall was observed a small tumor, which was looked upon as phthisical, but upon further examination it proved to be simply thickened mucous membrane; some time later, however, a typical tuberculous ulcer appeared upon the posterior wall and lung disease followed.

6. Patient, aged 49 years; in the anterior angle (commissure) was discovered a red-grayish tumor, about the size of a cherry; operation was performed with Gollstein forceps; typical tuberculous ulcer followed and the following year an ordinary laryngeal phthisis was present.

This report tends to show that tumors of a tuberculous nature are not so rare as sometimes supposed, and in every case where a tumor is present the lungs should be examined and if such tumor be removed, careful microscopical examination should be made.

A. R.

**SUBCUTANEOUS INJECTIONS OF ETHER IN PUERPERAL ECLAMPSIA.**—An interesting supplement to the treatment of puerperal eclampsia, is offered by Dr. Perron, and quoted in the *Wiener Med. Wach.*, April 12, 1891. The case recorded was that of primipara, twenty years old, who was seized with eclamptic convulsions two hours after delivery. Chloral in liberal doses, blood-letting, and even inhalations of chloroform, had been tried without avail. The convulsions, which had begun at eight in the morning, continued with unabating severity to return every half hour until noon, and then became almost unremitting. The patient lay convulsed with severe dyspnoea and deeply cyanosed, her breathing was labored and sterterous, and death was momentarily expected. Dr. Perrin then injected subcutaneously a syringeful of ether, and in a few minutes the respirations became more regular and less labored. Fifteen minutes later, another similar injection was made, and a third injection two hours later. After the second injection the convulsions ceased entirely, and the patient made a speedy recovery. It is to be noted that no albumen was found in the urine.

**APPARENT GROWTH OF THE PLACENTA AFTER LABOR.**—Dr. W. P. Chunn related to the Gynecological and Obstetrical Society of Baltimore, an instance of a patient who was twenty-eight years



old, and had been married five years. She had had no children at full term, but had had three miscarriages. The first and second miscarriages occurred at about the fourth month of gestation. The last miscarriage occurred about May 10th, 1890. She had missed one period, and believed herself to be about six weeks pregnant. On the 10th of May she began to have bearing-down pains and hemorrhage, with the expulsion of blood clots, lasting some three or four days. Then the pains subsided, the hemorrhage ceased and I regarded the uterus as empty. On the 12th of June, however, she was again seized with violent pains, and during the night was delivered of a placental mass larger than a man's fist, which I saw the next morning; the patient, as well as myself, was surprised. The fœtus was searched for but no sign of it was found.

TREATMENT OF BRIGHT'S DISEASE.—The *Rev. de Clin. et Therap.* publishes the following methods for the treatment of Bright's disease:

(1) *Classic Method.*—The climateric prescription consisted in the avoidance of dampness and sudden changes of temperature. As to diet, rich or irritant articles of food were avoided, as were also eggs. A pure or mixed milk regime was followed, and such articles as wine, whiskey, liquors and beer were entirely prohibited.

(2) *Senator's Method.*—All white meats and pork are allowed, and the use of vegetables and starchy articles of food, fruits, fats and milk advised. Senator also recommended the employment of wine mixed with water.

(3) *Semmola's Method.*—The author observes the preceding treatment and besides advises the employment of the following solution, to be given in the course of twenty-four hours:

Iodide of potassium . . . . .	15 grains.
Phosphate of sodium . . . . .	30 grains.
Chloride of sodium . . . . .	75 to 90 grains.
Water . . . . .	20 ounces.

(4) *Bamberger's Method.*—Besides a milk diet, tonics and ferruginous remedies are employed. The author highly recommends the following preparation: Pills of perchloride of iron. Of these pills three to six are given per day. Each one contains:

Perchloride of iron . . . . .	$\frac{1}{3}$ of a grain.
Pulverized menyanthe (Buckbean) . . . . .	$\frac{3}{4}$ of a grain.
Extract of gentian, a sufficient quantity.	

—*Univ. Med. Mag.*

SALICYLIC ACID FOR THE PREVENTION OF SCARLET FEVER.—Sticker reports the observations of G. de Rosa, who administered salicylic acid in doses of one to five grains, to sixty-six children exposed to infection during an epidemic of scarlet fever. Twenty-seven cases of the disease existed in the building when administration of the drug was commenced. Only three of the sixty-six contracted the disease, the failure in these being ascribed to a longer exposure to infection.—*Centralblatt für klin. Med.*

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W. G. MACDONALD, M.D., EDITOR.

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DRUGS AND DRUG ASSAY.

The last volume of the reports of the State Board of Health for New York contains, besides much other valuable information, the reports of Prof. Willis G. Tucker, of this city, and of Prof. G. C. Caldwell, of Ithaca, on the analysis of drugs bought of our retail dealers in the open market. Both reports are exceedingly creditable to their authors, showing a great amount of painstaking investigation. These reports cannot fail to awaken great interest among physicians and furnish food for serious reflection. Prof. Tucker has devoted considerable labor to the estimation and comparison of the dilute acids of the pharmacopœia. Here an amazing difference in strength was found. The pharmacopœia calls for a six per cent. solution of acetic acid. The specimens examined varied from less than one-half per cent. to nearly thirty per cent. The same condition of affairs was found with dilute hydrochloric and nitric acids. These variations are of great importance to the people. The general departure of these preparations from the strength prescribed by the pharmacopœia cannot be attributed to a love of gain upon the part of the dealer, but rather to gross ignorance or carelessness. Both qualities are equally reprehensible. "Straws show the way the wind blows." We do not want to send out prescriptions to druggists who dispense dilute acids either one-fourth or four times the official strength. The quality of many preparations was far below the standard prescribed. The examination of sixty-eight samples of spirits of nitrous ether showed only *thirteen* to be of good



quality and *fifty-one* of inferior quality. These proportions were found worse rather than better in the examination of compound spirits of ether.

Many inorganic salts presented impurities and adulterations which caused them to fall far below the required tests, both as to quality and strength. Seidlitz powders were very often "short weight," sometimes the deficiency reached forty per cent.

The medicines of the largest manufacturing pharmacists showed wide discrepancies in strength. For example, two-grain quinine pills may contain either one and one-half or three grains. Hypodermic tablets of sulphate of morphine sold for one-fourth grain are found to contain *from less than one-tenth of a grain to nearly one-third of a grain of morphine*. Tincture of opium, if anything, is rather worse than preparations of morphine; but, here, inferior strength is the rule. Tincture of digitalis and the infusion are notoriously of varying strength.

Yet we wonder at the erratic action of drugs, condemn remedies, desert the faith of our fathers, and fly to new remedies recommended by enterprising importers, or introduced by wide-awake manufacturing pharmacists. Finally, we lose all faith in active therapeutics. There is yet a belief among a class of physicians, perhaps of somewhat antiquated notions, that remedies prepared by competent pharmacists according to the methods prescribed by the pharmacopœia from standard drugs are after all the best agents for the cure and alleviation of disease, regardless of what promoters may say of Jones' syrups or Brown's tablets.

The evidence in these reports goes to show that pharmacy, or at least some members of that profession, is guilty of gross ignorance, gross negligence or gross rascality. There are some who, doubtless, can be convicted on all three counts in the indictment; some on the first and second; but by far the majority on the second count. The retail pharmacist in his business assumes a responsibility to the public at common law. He is bound to perform his duties with skill, diligence and fidelity.

A great source of trouble may be avoided in drug assay, and we are glad to see that it is receiving the attention it deserves from progressive pharmacists. It is to be hoped that the latest revision of the pharmacopœia will establish within narrower limits the strength of some of our officinal preparations. We hope at some future time to go somewhat more into the details of this question.

THE announcement of the appointment of Dr. James E. Sadlier (A. M. C., '87) as visiting physician to Vassar Brother's Hospital, Poughkeepsie, is very gratifying to his friends. Dr. Sadlier is well remembered in Albany as the Senior Resident Physician of the Albany Hospital, where he performed his duties with unusual skill and fidelity. Vassar Hospital is equally fortunate with Dr. Sadlier in his appointment. The hospital has the assurance of both faithful and skillful attendance, while to Dr. Sadlier there comes the peculiar advantages of hospital practice.

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## REVIEWS AND BOOK NOTICES.

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ON THE MEDICAL AND SURGICAL USES OF ELECTRICITY. By George M. Beard, A.M., M.D., and A. D. Rockwell, A.M., M.D., formerly professor of Electro-Therapeutics in the New York Post-Graduate Medical School and Hospital; Fellow of the New York Academy of Medicine; Member of the American Academy of Medicine; Member of the New York Neurological Society; Formerly Electro-Therapist to the Woman's Hospital of the State of New York, etc. Eighth Edition. With over two hundred illustrations. New York: William Wood & Co.

This is a work worthy of the editors, and reflects credit upon the able publishers, who have presented to the profession in this country so many valuable medical works. The book has been thoroughly revised and is fully abreast of the times. It gives all that could be desired in the advancements that have been made in medical and surgical electricity since the last edition was published, and this is a very important consideration in a new edition of any work. It is just here that success rests with many books and brings about the publication of many editions. The readers of such works feel that they are benefited and that they acquire knowledge by the study of revised editions. Those who have access to this present volume will not feel that they have had their confidence abused, but will be grateful for the contribution made by its remaining editor, Dr. Rockwell. We can give it our hearty endorsement, particularly in all that pertains to surgical electricity.

A. V.



**THE POCKET ANATOMIST.** Founded upon Gray. By C. Henri Leonard, A.M., M.D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynæcology, in the Detroit College of Medicine. Fourteenth revised edition, containing Dissection Hints and Visceral Anatomy. Detroit, Mich., 1891. The Illustrated Medical Journal Co., Publishers. Cloth, 297 pages, 193 illustrations; price, postpaid, \$1.00.

This book is issued on thin, though nicely glazed paper, and takes up but little room, though 300 pages in thickness. The plates introduced are photo-engraved from the English edition of Gray, and are therefore exact; most of them are full-paged, and where they are not they are grouped together so as to save as much thumbing as possible. The useless "questions" are absent in this work, and their room given to needed illustrations or terse descriptions of the minor parts found in the several dissections made. The chapter given to "dissection hints" gives the lines of incision necessary to best expose the underlying organs, arteries, nerves, or muscles. The chapter on Gynæcological Anatomy can be found only in the more expensive work of Savage. The pronunciation of each anatomical term is given, be it artery, vein, nerve, muscle, or bone. Over 100 pages are devoted to the anatomy of the special organs and viscera. The book has been honored by a re-printing in England after some three thousand copies had been sold over there by the American publishers.

**TAKING COLD.** By Francke H. Bosworth, M.D., Professor of Diseases of the Throat, in the Bellevue Hospital Medical College, New York. The Physicians' Leisure Library, Geo. S. Davis, Detroit, Mich. Price, post-paid, 25 cents.

Dr. Bosworth has written a very instructive monograph on this subject. It contains many valuable hints for the management of this not always trifling ailment. Besides the acute inflammatory affections, the nose and throat receive a brief but clear description, with theaapeutic hints of great value to the general practitioner.

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THE OUTLINES OF INSANITY.\*

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LECTURE III.

*Paranoia or Primary Delusional Insanity.*—This is one of the most interesting of all the forms of insanity. In it the hereditary influence is most strongly marked. It occurs in patients whose ancestors have been eccentric, drunkards, neurotic or insane. In rare cases it occurs in those who, without any hereditary taint, suffered in infancy from some disease of the brain or received a severe wound of the head. These patients as a rule, even in childhood, exhibit symptoms of a weak brain; they have convulsions and become delirious in moderate fevers. Such children are quiet, retiring and suspicious. They have vivid fancies and indulge in day dreams and weave out of the daily events of life wonderful romances. They mingle romance and reality together so that they scarcely know what is taking place about them; they become jealous, unhappy, unreasonable and indolent. As they grow older they cherish certain incidents and speeches in their memory, and these appear later in their delusions in a most remarkable way. Before they are actually insane they observe things in the closest manner for some concealed or symbolic meaning. To most trivial things they attach some hidden and important significance, and they are apt to imagine that there is some reference to themselves in the things occurring about them. In consequence of this seeking for the hidden meaning of things, the patient observes every thing closely, and thinks that he discovers in it some reference to himself. If a man spits in the street as he passes he thinks it is a mark of contempt for him, etc.

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\*A course of lectures delivered at the Albany Medical College during January and February, 1891.



In typical cases the disease commences with a delusion of observation. These patients imagine that people are noticing them and observing them closely, and have some design upon them. This feeling is increased by the very vivid imagination of these patients, which finds in everything a reference to themselves, and by the numerous hallucinations which occur usually at this stage of the disease. It is true that some cases of paranoia run their entire course without hallucinations, but these are very exceptional ones, while in the great majority of cases, hallucinations are numerous and of great influence in forming the delusions of the patients. These hallucinations may affect any sense, but are most common in the domain of tactile sensibility and of hearing. The paranoiac feels pains and curious sensations in various parts of the body, and hears voices calling him vile names, etc. In consequence of these hallucinations, and the idea that people are observing him, he, not unnaturally, develops out of his first delusion of observation his second one, which is a delusion of persecution. He imagines that for some reason a number of people have conspired together to persecute him. They torture him with magnetic forces; drive needles into his body; call him vile names, and in all conceivable ways torment him. His reasoning is very ingenious and is based on a curious mixture of actual and imaginary occurrences. It is wonderful how he will twist every fact in such a way as to support his theory, and will find in his past life many events which have in his eyes a symbolical significance, and which leave him in no doubt as to the absolute truth of his delusion. The particular kind of persecution will depend on the patient's education and social position, whether it be by Jesuits, Socialists, Spiritualists, etc. If the patient have a disease, whether functional or organic, of any organ, the hallucinations or illusions, and consequently the delusions, are apt to be related to that organ. Thus, if there is a disturbance of taste or digestion, he thinks that he is being poisoned; if there is any irritation about the sexual organs, he thinks that he is being used for unnatural sexual intercourse; if he has intestinal disease, he thinks that he has snakes, or even men, inside of his abdomen, etc., but frequently his delusions become localized in an organ in which no abnormality can be discovered.

All the time that the patient is suffering from this delusion of persecution he is seeking for some explanation of it. The people who are persecuting him must have some reason for picking out him in particular as the subject of the persecution, so that he concludes

that he must be some remarkable person who stands in the way of these people. Partly in this way and partly in consequence of hallucinations he works out for himself that he is some distinguished person, or a great inventor, or an heir to some vast property, or to be married to some high personage, or even a king, or the Saviour of the world, and his tormentors are either trying to keep him out of his due in order that they may reap the benefits, or else they are trying by persecution to perfect his character and thus make him worthy of his exalted station. In this way he arrives at his final delusion—the delusion of greatness. When this delusion of greatness is reached the others he has made fade more or less completely from his memory, but the patient is fully convinced of his greatness. His ideas as to the exact nature of his greatness varies with the education and cultivation of the patient, and with the hallucinations to which he is subject, but it is always the same in the same person, and he brings all the events and conditions of his life into harmony with it, and he is said to have a fixed and systematized delusion. The patient's actions, bearing, and manner of conversation are all in accordance with his supposed character, and his frame of mind, whether depressed or joyous, is secondary to, and depends on his delusions, and is not primary, as we saw was the case in simple melancholia and mania. A paranoiac with a delusion of greatness is not necessarily happy, and therein differs greatly from a maniac who imagines that he is a great man, because he is happy. The paranoiac believes that he is a great man and, like the great man in reality, he is not always happy, but, in spite of his greatness, is often very unhappy on account of obstacles in his way. In paranoia the delusions are always the primary and essential element and the patient's thoughts, feelings and actions are secondary to, and brought in accord with them.

These patients are dangerous to the community and to themselves. In consequence of their delusions, especially the delusion of persecution, they often attack persons who, they think, are injuring them, and often appeal to the police and the courts for protection. Sometimes, in consequence of a supposed command from God, they will not speak, refuse all food, or even commit suicide, and yet so strong is their intellectual activity that, for a time at least, they can perform their duties in the world with success as long as the subject matter of their delusion is not involved. A man with the delusion that he is Jesus Christ may still be able to manage his business in many respects shrewdly. It is very noteworthy how large a part the



reasoning powers usually play in the production of these systematized delusions, which, in some cases, depend on hallucinations, and in other cases, spring into consciousness spontaneously as fully formed delusions. In either case the patient defends these systematized delusions with vigorous arguments and cannot be reasoned out of them, and will scarcely modify or change them at all, which is very different from the case of those delusions of greatness occurring in general paresis or in simple mania.

This remarkable disease, then, in typical cases, goes through a regular course, presenting in succession a delusion of observation, a delusion of persecution and a delusion of greatness. It is true that in practice we usually meet with the patient in one or the other stage of the disease and rarely can follow the case long enough to see it pass through all its slow transitions. Indeed, perhaps half of the cases do not pass through all these transitions, but remain throughout life in one or the other stage, although frequently we see a patient presenting a combination of all these delusions at the same time. In the early stages of the disease recovery is possible, although it is not common and the danger of a relapse is imminent. One of the first signs of improvement is that the patient begins to doubt the truth of his delusions. In the latter stages it is incurable. It never degenerates into extreme dementia. The mind becomes weakened only to a moderate degree and patients continue in their delusions. The bodily functions are not characteristically affected in this form of insanity, although insomnia is frequently a troublesome symptom and the general nutrition is often impaired.

In such a complicated disease as paranoia (under which are included most of the cases formerly classed under monomania), it is not strange that many subdivisions should have been made. It does not seem necessary or desirable that these subdivisions should be retained, although one, closely connected with the delusion of persecution, the litigious paranoia, which consists of constant litigation and fighting for assumed rights and complaints against those in authority, is of interest, as it explains many cases of obstinate contention in our courts and civic life, otherwise inexplicable. Other subdivisions which have been made are the religious paranoia, the erotic paranoia, etc., according as the subject matter of the delusions is of a religious or of an erotic nature.

*Insanity with Irresistible Ideas.*—The irresistible ideas which occur in this form of insanity resemble greatly the compulsory ideas and impulses to action, which we mentioned in our first lecture as

occurring in very many forms of insanity, and differ from them only in that these irresistible ideas are of a more permanent character and dominate more completely the patient's actions. In many cases this disease commences in childhood and steadily develops and becomes more complicated with the mental development of the person. An interesting and complicated case of this nature has been reported by Cowles.\* In other cases the disease commences abruptly. Suddenly, in the midst of apparent health, some idea takes possession of consciousness and dominates the entire mental activity. This irresistible idea is often a question, sometimes of a religious or metaphysical, sometimes of a trivial nature, such as whether a certain act was sinful, whether they have not pushed some one into the water, what is the color of a person's eyes, whether a letter was properly addressed, etc. In all cases the question becomes most painful by its persistence, which is so great that the person cannot free himself from it, nor turn his thoughts in other directions. The actions of the patient are in accordance with his irresistible idea. He must remove stones from the path so that nobody will stumble over them; he must wash his hands constantly to remove poison or other contamination which may be on them; if he touches one side of a doorway he must touch the other, etc. His nervousness about these things may deepen into anxiety, and his anxiety into despair, and his condition may become such a miserable one that he seeks relief in suicide. The disease in its course often presents remissions. Melancholia can occur in its course, and, indeed, the disease itself often bears a strong analogy to melancholia occurring in a patient with the psychopathic constitution.

*Epileptic Insanity.*—This occurs in two forms. The first form is that of chronic psychical degeneration, and is present, to some extent, in the majority of epileptics. It consists in a gradual diminution of the intellectual power, loss of memory, an impairment of the judgment, combined with an increasing irritability of temper, and a very great tendency to impulsive acts. This psychical degeneration is usually most marked in those cases of epilepsy which commence very early in life and steadily increase in degree, the rapidity of this increase being, in general, proportional to the frequency of the epileptic attacks, especially to the attacks of petit mal. The bromides, given to prevent the attacks, have a tendency to produce an analogous condition, but they do not act nearly so powerfully in this direction as do the attacks which they avert. The second form of

\* American Journal of Psychology, Vol. I, p. 222.



epileptic insanity consists in a transitory attack of stupor, or delirium, or both combined, which occurs usually after an attack of convulsions (post-epileptic insanity), sometimes before such an attack (pre-epileptic insanity), and sometimes replaces the attack (psychical equivalent). The most characteristic features of such attacks are that their onset is sudden, that during them there is a complete or almost complete loss of consciousness, and that they usually terminate in a heavy sleep. These transitory attacks may last only a few seconds, minutes, or hours, or may continue during days. During them the patients may be the prey of terrifying hallucinations and be very violent, or they may act with apparent intelligence and converse correctly, and yet, when the attack is over, be entirely unconscious of what they have done. This loss of memory of what happened during the attack, although very characteristic, is not a specific sign of epilepsy, inasmuch as it is not complete in all cases, and the memory of the attack is also completely absent in some cases of mania and of hallucinatory confusion. Frequently in the attacks the patients are impelled to action of one sort or another, which manifests itself at times in foolish or obscene talk or silly actions, or at times in deeds of such fearful and senseless violence as to recall the epileptic convulsion. In these outbursts of violence they may kill their wife and children or rush into the street and kill all whom they meet.

*Hysterical Insanity.*—Inasmuch as disordered mental action plays a prominent part in the great majority, if not in all, hysterical manifestations, it is very often difficult to draw an exact line between the disordered mental action of hysteria and that of insanity. Certainly hysterical insanity is one of the most serious of all the manifestations of hysteria, and occurs in two forms, a transitory, and a more permanent one. The transitory form appears as a condition of anxiety and terror, a maniacal exaltation, a delirium, or a condition of ecstasy, often combined with catalepsy, but more commonly it is a mixture of many forms with rapid transition from one to the other. In the attack the consciousness seems obscured, and but little memory of the attack remains, although the hysterical are such accomplished liars that their statements in this regard must be taken with caution. The more permanent forms of hysterical insanity simulate melancholia, mania, delusional insanity, etc., but not in a pure form, manifesting a mixture of many of the elementary disorders of mental action, and showing a tendency to exaggerate symptoms, which is characteristic of hysteria in all its forms. Trau-

matic influences (especially the fright often associated with the accident), which are often the etiological factors in the production of a great variety of the forms of hysteria, cause also a form of hysterical insanity which usually bears a hypochondriacal-melancholic character.

*Hypochondriacal Insanity.*—This form is allied to melancholia in that the patients are depressed, but the characteristic feature lies in the delusions which the patients cherish in regard to some organ or portion of the body, and the feeling of depression is secondary to the delusion, and, therefore, physiological rather than pathological. In hypochondriasis the ego is very prominent, but it is the “sick ego” in contradistinction to the “sinful and accursed ego” of the melancholic. The abnormal feelings in hypochondriasis react on the functions of the organs so that muscular spasms and disorders of secretion are of common occurrence, and constitute two of the numerous features in which the disease resembles hysteria. The delusions of the patient may centre in some internal organ, and he may imagine that it is either absent, or excessively developed, or diseased in any conceivable way, or the patient may have the delusion that he is suffering from some disease such as hydrophobia, or syphilis (syphilophobia). These delusions engross the patient’s entire attention, and cannot be disproved by any arguments, and lead, finally, to a certain degree of intellectual feebleness.

#### THE ORGANIC PSYCHOSES.

The forms of insanity comprised in this class exhibit a definite and constant cerebral lesion after death, and this lesion is of such a nature that the disordered mental action can fairly be brought into relation with it. The lesions on which the organic psychoses depend are not local ones, but diffuse, involving the whole or a considerable portion of the cerebral cortex. The lesions produce, in addition to the disordered mental action, which is the characteristic feature of the disease, also well-marked physical symptoms in the form of tremor, paralysis, etc.

*General Paresis.*—This is one of the most interesting and best understood of all the varieties of insanity, and, if for no other reason, the frequency of its occurrence makes it of great importance. It has been known by a great variety of names, among which the most common are: general paralysis of the insane, paretic dementia, progressive paralytic dementia, and by the laity it is known under the term “softening of the brain.” The anatomical lesion causing



this disease is a chronic encephalo-meningitis, diffused over the whole of the cerebral hemispheres, although most marked over the anterior lobes. It manifests itself at first by a hyperæmia of the meninges and cortex, followed later by adhesions of the pia mater and cortex, and by a very decided cortical atrophy with thickened neuroglia and degenerated and atrophied nerve cells and fibres, and is often accompanied by secondary lesions in the nervous system, such as œdema, dilated ventricles, cerebral hemorrhages, etc., in the brain, and systemic diseases of the spinal cord, especially posterior sclerosis. The clinical picture resulting from this lesion is a gradually increasing loss of the intellectual faculties, together with an increasing incoördination and weakness of the muscles of the body, finally resulting in an almost complete loss of mental and physical power, and terminating in the course of a few years in death. Although the clinical picture of the disease can thus be summarized, yet in practice it manifests itself under a great variety of forms, and by reason of its slow course it can be divided into three stages—(1st) a prodromal stage; (2d) a stage of mania or melancholia; (3d) a stage of dementia. These stages all run into one another, so much so that traces of the stage of dementia can be found in the prodromal stage, and yet there is a certain practical advantage in dividing the disease into these stages.

In the *prodromal stage* the disease commences very gradually and insidiously with a peculiar indifferent carelessness and forgetfulness, associated with a loss of will power, and of energy of character, and with drowsiness at unsuitable times. These symptoms are often accompanied with neuralgic pains, especially in the head. The patient becomes passionate and emotional and is easily moved to anger or to tears. He reasons less correctly than formerly and is less inclined to reason; he accomplishes his work less easily and is disinclined to work. The disinclination to work may be due in part to a very slight degree of muscular weakness and incoördination, which appears sometimes very early in the disease and manifests itself especially in his speech, as will be described later. In the prodromal stage vaso-motor disturbances are met with, such as attacks of dizziness, temporary loss of speech, etc.; and motor pareses are common, such as temporary paresis of some of the ocular or other muscles, and especially common is a facial paresis, varying from day to day in intensity. At times there is loss of reflex activity, especially of the patellar and pupil reflex, and the pupils are often greatly contracted or uneven.

The prodromal stage passes without any abrupt transition into the *stage of mania or melancholia*. In this stage the great majority of patients are more or less maniacal and only a small minority melancholic, and of this latter class a certain number are hypochondriacal. Neither the melancholia, nor the mania of general paresis, exhibits the depth and intensity of feeling of the simple forms of melancholia and mania. The melancholia and hypochondriasis of general paresis present the same quality of enormous exaggeration which we shall see characterizes the mania of this disease. "They will be confined a million years in the jail;" "their sins have been repeated billions of times;" "they have had no movement of the bowels in months;" "they have grown several feet smaller or larger in the night;" so that there is an element of absurdity, of dementia, in their delusions. Frequently the melancholic delusions are combined with delusions of great undertakings that they have accomplished, the feeling of sadness being combined with a sense of their personal greatness, which is never present in true melancholia, and sometimes their only melancholic feeling is that they are unjustly treated and prevented from exercising their remarkable powers. Not very infrequently a short period of melancholia precedes a more lasting period of mania, but more commonly the dominant condition is that of mania, with which are mingled at times feelings of depression, and especially hypochondriacal feelings.

The mania of general paresis is very characteristic. The patients feel happy and joyous, and, although really accomplishing less work than formerly, they think that they are accomplishing a great deal, and are capable of doing anything and everything. Their wealth increases, in their own imagination, to thousands and billions of dollars, and becomes so boundless that they cannot put in words their wealth nor their own dignity. They are in rapid succession Napoleon, the Emperor, the President, Christ, or God. They shift their delusions from time to time, but these are always of the most grand nature and on the most extensive scale. They give their imagination full play and live in an ideal world. Their delusions, however, have no fixed character, and are not supported by argument. The patients can give no reason why they are Napoleon or God, and can be reasoned out of their delusions, temporarily abandoning them or changing their character; and thus the parietic differs from the paranoiac, who reasons very ingeniously and closely in support of his delusion. The whole character of these delusions is monstrous and of a very childish nature, and is a witness



to the great loss of mental power in these patients—so much so that the delusions of a paretic are characteristic because of the strong element of dementia which enters into them. The degree and number of these delusions of a maniacal character vary very greatly in different cases, but all cases of this disease present this maniacal character, at least to a certain extent, and if they have no well-marked delusion, they, at least, are happy and contented, although they are obliged to give up their work, and are in a position which would make a normal person most unhappy. The occurrence of this feeling of happiness and greatness and these delusions of excessive wealth are particularly dangerous, occurring as they do in a very early stage of the disease, because the patient feeling in this way is extremely extravagant, is ready to indulge in any reckless speculation, and very often before the disease is fully recognized he has bankrupted himself by a foolish expenditure of money, due to the delusion of his own great wealth and wisdom. For the same reason, on account of their imaginary great strength and power, these patients plunge into alcoholic and sexual excesses. Hallucinations and illusions, although they do occur, are not common in general paresis, and do not form the basis of the delusions, which depend, rather, upon a too vivid play of the imagination and a weakening of the logical process. But with or without hallucinations the maniacal exaltation frequently is interrupted by violent attacks of frenzy in which the patient becomes very destructive and dangerous.

With these expansive delusions of grandeur, the incoördination of movement mentioned as occurring in the prodromal stage becomes more pronounced, and shows itself in a tremor of the muscles and in a decided incoördination in the use of the muscles—a certain awkwardness. The patient shows this tremor especially about the lips and in the muscles of the face, and the awkwardness of the muscles shown first in the movements of the tongue; the speech becomes difficult, slow and hesitating, the patient finds it difficult to pronounce words, he leaves out syllables and even entire words in speaking, so that his speech becomes most indistinct and incoherent, and with it there is a decided tremor of the voice. When he does speak a word distinctly, he speaks it with effort, so that stress is laid on certain words, giving a kind of impulsiveness to the speech which is quite characteristic. The same thing is seen in the movements of the patient's hands, especially in his writing. Not only is the writing illegible from the bad shape of the letters, but letters

and syllables, and whole words, are left out of the writing just as in speaking. The patient loses his skill in any manual labor in which he was before proficient, and the movements of both his arms and legs become both awkward and weak. The sensibility is not usually decidedly affected in general paresis, although at times it seems as though analgesia was present, because the exalted frame of mind of these patients will not allow them to acknowledge that they can feel any pain.

These symptoms persist and grow steadily worse, and, except in those rare cases in which the initial maniacal exaltation deepens into frenzy and the patients die in it, there appears a more and more decided degree of mental weakness, so that the patient's judgment becomes more and more impaired, his intellectual powers become weaker and weaker, he becomes filthy in his habits, and finally passes into the third and terminal stage of the disease—a condition of total loss of mind, of complete *dementia*, and at the same time the movements of his muscles become extremely weak and so awkward that he can hardly walk, and cannot use his hands to any purpose. The parietic loses his mental powers in the inverse order in which he acquired them, and slowly becomes reduced to the mental condition of a little child again. The dreams of future greatness and of excellence in all directions in which a child indulges become real to the parietic. In some cases the dementia appears at the very outset of the disease and steadily progresses. During the course of the disease epileptiform and apoplectiform attacks are apt to occur and last for a longer or shorter time, the patient generally making a good recovery from them, although frequently the patient dies in an apoplectiform attack. The course of the disease is a very slow one, and it does not terminate fatally until it has lasted for a number of years, one or two being a rather short time for it to exist. The older the patient, other things being equal, the slower is the course of the disease. In its course remissions may occur, and at times these remissions are of considerable length, lasting several years, during which the disease makes no progress; on the contrary, the patient shows, if any thing, a slight improvement. An actual recovery from the disease never occurs.

*Syphilitic Insanity.*—Syphilis attacks the nervous system in many ways, producing in its early stages localized patches of inflammation, and in its later stages syphilitic gummata or a syphilitic endarteritis (which is merely a syphilitic gumma growing in the intima of an artery). All of these lesions are local and produce local symptoms.



Furthermore, in the next lecture, when we consider the causes of insanity, we shall learn that one very common cause of general paresis is syphilis. There are, however, some cases of insanity which greatly resemble in their onset general paresis, but which differ from it in that under anti-syphilitic treatment the patient makes a good recovery. In addition to these cases terminating favorably, there are other cases which closely resemble general paresis, except that they present some local paralysis (not a paresis), a symptom which forms no part of uncomplicated general paresis. Thus, in these cases, there is an anæsthesia, a ptosis, a paralysis of all the muscles of one eyeball, a facial paralysis, a pure form of aphasia, or some other local symptom, showing that in addition to the general meningo-encephalitis on the syphilitic basis, there are local points of injury to the brain due to a syphilitic gumma or a softening caused by a syphilitic endarteritis. These local symptoms, when they occur, point to the syphilitic origin of the process, and serve to differentiate some cases from the ordinary cases of general paresis. In these cases, also, the initial maniacal excitement is not apt to be so pronounced, the patients are happy, indeed, but rarely present those extreme delusions which are typical of the ordinary form of paresis. These cases evidently due to syphilitic infection and presenting local symptoms are somewhat more amenable to treatment than the ordinary form of the disease, and, therefore, it is, perhaps, wise to still keep the class of syphilitic insanity distinct from the class of general paresis, although the two merge into each other at many points, and the distinction between them is rather an arbitrary one.

*Alcoholic Insanity.*—Alcohol produces very decided effects on the nervous system, affecting, as one might say, the two extremes of the nervous system, producing alcoholic paralysis by causing an inflammation of the peripheral nerves, and especially the terminal filaments of these nerves, and producing mental disorder by acting on the cortex of the cerebral hemispheres, and having very little action on the rest of the nervous system—that is, the spinal cord and the ganglia at the base of the brain. The lesions of the cerebral cortex caused by alcohol are those of a chronic meningitis and, in the terminal stages, of atrophy of the convolutions. The mildest manifestation of the action of alcohol on the cerebral cortex is seen in that form of disease called delirium tremens. Even in this form the alcohol must have produced some organic change in the cortex, because a single excess in alcohol, no matter to what degree, will never produce delirium tremens; it will simply produce a condition

of drunkenness and coma. In order that delirium tremens may occur the brain must have been weakened or organically changed by a series of excesses in alcohol. In addition to delirium tremens, which was described sufficiently in the first lecture, alcohol produces a further disturbance of mental action which can be divided into two forms—a transitory and a chronic. In the transitory form, which is sometimes called alcoholic hallucinatory confusion, there is a mixture of mania and paranoia. The patient has a great many hallucinations of all sorts. With them is accompanied a great anxiety, which depends upon the hallucinations. Very frequently he has a well-marked delusion of persecution, and, yet, mingled with this delusion of persecution and with these feelings of anxiety, there is a delusion of grandeur, a sense of elation which is quite characteristic of the disease. Among his hallucinations those relating to the sexual sphere are especially prominent, and almost characteristic of this form is the delusion that their wives are unfaithful to them and have committed the grossest excesses with men, which the patients claim to have seen.

In the chronic form of the disease the mental activity of the patient very steadily and decidedly fails. The hallucinations and delusions still continue, but the mind becomes weaker and weaker until the patient falls into a condition of dementia. Both in the chronic and the acute forms of alcoholic insanity there is a well-marked tremor of hands and tongue and incoördination of movement, but this is not so decided as in delirium tremens.

*Senile Insanity.*—This condition, as its name implies, depends upon old age. The anatomical lesions consist in atheromatous changes in the cerebral arteries, followed by atrophy of the cerebral convolution and degeneration of the nerve cells in these convolutions. Physically, the disease is characterized by a progressive mental weakness; the patient's memory and judgment both fail, especially his memory for recent events. His ideas—often his moral ideas—become blunted, and not infrequently he gets into a condition of sexual excitement which leads him to many foolish acts, so that he often sacrifices children to his lust. Gradually the patient loses all idea of his surroundings, gets lost in the street, thinks he is from home when he is in his own house, and begs piteously to be taken home. With this condition of mental weakness may combine itself a condition of melancholia or of maniacal excitement, the melancholia being much the more common of the two. And, not infrequently, these patients with senile dementia are very mistrustful



and suspicious, and are the victims of a delusion of persecution. The disease is a chronic one, and usually terminates in an attack of apoplexy, though in some cases death may occur from an inflammation of the bladder, a bronchitis, a pneumonia, or some other disease by which old people die.

*Acute Delirium.*—This is the last form of the organic psychoses and one of the most severe, inasmuch as it usually terminates fatally in a very short time. At the autopsy a condition of intense cerebral hyperæmia is found, with exudation of lymph and lymph-cells, entirely filling the lymphatic vessels of the brain, and the nerve cells of the brain are found to be in a condition of cloudy swelling or parenchymatous degeneration. Clinically the disease is very distinct. Patients complain at the outset of severe headache, of a feeling of fullness in the head, and of feeling dazed. They are excitable and anxious, and may pass into a condition of stupor. After these initial symptoms have continued for a short time, from a few hours to a few days, the disease manifests itself in its full force, and there suddenly develops a maniacal exaltation, which deepens into a frenzy. The patients exhibit the highest degree of maniacal delirium. They string words together according to sound, and their speech becomes in the highest degree incoherent. The delusions which they have are of every possible character and rapidly changing. In addition to this they feel compelled to exercise their muscles. They stamp and walk about and throw themselves violently from one part of the room to the other, their reflex acts are much increased, and they even have tonic convulsions of many of the muscles, somewhat resembling strychnia poisoning. Very frequently they exhibit a temporary lock-jaw, and their speech is often interfered with by these spasms of the muscles of the jaws and tongue. There is usually present fever, and the patient's nourishment fails rapidly, so that he becomes quite thin, and the face, at first congested, becomes pale. The urine sometimes contains albumen. Usually during the attack remissions occur in which all the symptoms disappear in great part, but the remissions are soon followed by another outburst, and so the disease varies from remission to exacerbation, usually terminating fatally in the course of two or three weeks. In those rare cases where recovery takes place the convalescence is an extremely slow one, and a certain degree of mental weakness remains during the entire life of the patient.

## AMENTIA.

The last great division of insanity is amentia or defective mental development, and this occurs as the result of hereditary influences or of cerebral disease in utero or in early infancy, and consequently interrupts the brain in its development, and the imperfect organ resulting is the cause of imperfect and deficient mental action throughout the life of its possessor. In these cases, after death, we usually find very decided pathological lesions in the brain, and the skull often shows abnormalities, especially an early synostosis. There is very frequently a meningitis and invariably a very decided degree of atrophy of the brain. This atrophy of the brain, which probably depends in part on the too early synostosis of the bones of the skull, and partly on the meningitis, may be general, involving the whole brain in all its diameters and in both hemispheres, or it may be a partial atrophy, a certain lobe of the brain alone being atrophied. In this form of partial atrophy is included porencephalia, in which a considerable number of the convolutions and the white matter below them are atrophied, the place being filled by the increase of sub-arachnoid fluid. At times certain parts of the brain other than the convolutions, such as the cerebellum, the corpus collosum, etc., are atrophied or entirely absent, and it is very common to find a general hydrocephalus as the cause of the lack of mental development. It would take too long to mention all the lesions found in amentia. These lesions, however, are not characteristic and diagnostic; sometimes one, and sometimes another being found, and the clinical history of the case can rarely be obtained with sufficient accuracy to correspond with the special lesion in the brain.

Clinically, the degree of amentia in any special case is best measured by the speech. The lowest grade of idiots are unable to speak at all, and make only inarticulate sounds, and from this up to the full development of speech there is every conceivable variation, and as the other symptoms of idiocy vary in a fairly constant manner with the speech, this offers a basis for classification. For all practical purposes, however, the division into the two groups of idiots and imbeciles is sufficient.\*

*Idiocy.*—This represents the lowest degree of amentia. In it the intellectual processes are hardly in existence. The sensory perceptions are limited to the ideas of obtaining food, and the movements are simply those that will satisfy hunger. They are lower

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\*Moral insanity, which may, perhaps, be regarded as a variety of amentia, has already been considered among the constitutional psychoses.



than animals, in that they neither seek nor choose their food, eating, indiscriminately, whatever is put before them. Abstract ideas, and even the perception of external objects, are either entirely absent or very slowly formed and imperfect. Their sexual instinct is usually entirely abolished or very nearly so. About the only emotion these patients show is that of anger, and in their anger they are extremely dangerous. These patients are entirely helpless and dependent on their fellow men for all support. With the mental weakness is also a physical weakness. The movements of the patients are awkward and they usually show, in some degree, the clinical picture of a spastic paralysis; so that they can do only the coarsest kind of work or none at all. Idiots are often deformed and exhibit pathological conditions in various parts of the body which attain their highest degree in that variety of idiocy called cretenism. These patients often exhibit curious automatic movements, such as repeated bowing, etc., for which no reason can be assigned. The speech is either entirely absent or very imperfect.

*Imbecility.*—In this condition of amentia the patients show a certain degree of intellectual activity. They have other sensory perceptions besides those of food, and choose their food when placed before them according to their taste; their speech is fairly well developed, and they often work well as long as any one is able to supervise and lay out their work for them. They require, however, constant attention. They do their work mechanically and are able to originate nothing. It is impossible to inculcate in them any high æsthetic or moral ideas. It is a matter of interest that some of these imbeciles show a remarkable aptitude and capability in some one direction, sometimes for numbers, sometimes for music, sometimes for some mechanical work, and in this one field they may even be prodigies or geniuses. The bodily functions are involved in imbecility as in idiocy, but to a much less extent, manifesting themselves rather by attacks of spasms, local or general, and by contractures of certain muscles or by a paretic condition of certain muscles. The teeth are usually bad, the ears misshapen, and the expression of the face betrays the deficiency in intelligence. The sexual function is often present to a certain extent, but the patients are usually impotent and masturbators.

*Combined Forms of Insanity.*—We have now considered in outline all of the principal forms of insanity, although certain ones, such as hebephrenia, katatonia, etc., have not been separately treated, but have been regarded as varieties of some of the forms described.

It is to be remembered that some cases of insanity present a combination of a number of forms, and this is especially true of the constitutional psychoses. Thus, dementia, to a certain extent, complicates almost all the forms, or insanity with irresistible ideas is often combined with moral insanity, with paranoia, with hysterical insanity, and so on in great variety. Or an intercurrent attack of some temporary form of insanity may obscure a more chronic form. Thus, an attack of hallucinatory confusion may occur in the course of an attack of moral insanity, of paranoia, of hysterical insanity, etc. This combination of forms, however, is the exception; and even in these combined and obscured forms a careful observation extended over a sufficient length of time will in almost every case result in a clear and certain diagnosis.

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## THE PSEUDO-SCARLATINA OF PUERPERIUM.

BY W. L. ALLEN, M.D.,  
GREENBUSH, N. Y.

The case which I shall subsequently report has exhibited many features of interest, not only in the rarity of its occurrence, but also in the severity of its symptoms.

I was called to attend Mrs. P., aged 23, primipara, on the 14th of August, 1886. She presented a healthy appearance and was finely developed physically. Her previous history showed nothing having any relation to the subsequent course of the case. The presentation was that of the vertex, with the occiput in the third position. The labor was tedious, and was finally terminated by a forceps delivery without anæsthesia. After delivery of the placenta the uterus contracted well. The perineum was intact. The child weighed six and one-half pounds, was unable to take the breast, and died, twenty-two days after delivery, of marasmus. The evening following delivery a warm carbolized douche was given. The kidneys were excreting normally; temperature 100° F. The patient had taken a fair amount of nourishment and was comfortable.

August 15th, I learned that the patient had slept very little, and was very thirsty. She complained of pain in the left illiac region. Pulse 100; temperature 104° F. She was given tincture of aconite and Tully's powder, with local heat to abdomen. In the evening her temperature was 104° F. and her pulse 140. Pain much less. Lochia normal.



August 16th, A. M. The patient had had five watery movements of the bowels during the night. Urine normal. Temperature  $104^{\circ}$  F.; pulse 120; respirations 40. She had no pain in abdomen; lochia normal. Carbolized douches were ordered. There was no secretion of milk. Afternoon temperature  $103^{\circ}$ ; pulse 120; respirations 40.

August 17th, A. M., temperature  $102^{\circ}$  F.; pulse 114. She complained of sore throat, and her face arms and chest were covered by a fine red rash, which did not itch or burn. Patient was sweating profusely and was very excitable. Afternoon temperature  $102.3^{\circ}$  F.; pulse 136 and feeble. Patient vomited during afternoon and was delirious. Lochia was excessive. Digitalis in combination with hyoscyamus and the bromide of potash was given every two hours.

August 18th, A. M., temperature  $102^{\circ}$ ; pulse 140. The patient was now acutely maniacal. Lochia yet free from odor. Chloral hydrate was now given in fifteen-grain doses. P. M., mania continued; pulse 140; temperature could not be taken; treatment continued.

August 19th, there was no change in the patient's condition. She had slept only two hours.

August 20th, patient was quite rational. The rash was fading; bowels moved naturally. P. M., patient hysterical; pulse 120; temperature  $102^{\circ}$  F. She complained bitterly of difficulty in passing water.

August 22d, patient was doing well. Slept much of the time. Urine very acid, but free from albumen and casts. The patient continued to improve, and on August 29th all medication was omitted.

August 29th, she sat up, and, while taking tea, fell suddenly to the floor, and was picked up unconscious and with a marked hemiplegia. Consciousness soon returned, but a marked aphasia was present.

September 2d, Drs. Vander Veer and C. S. Allen saw the patient with me. She was subsequently treated by the administration of ergot and nux vomica, together with the use of electricity. She has gained slowly, but yet there remains some evidence of her hemiplegia.

In a careful study of the literature of the subject, a collection of cases is found reported from the Copenhagen Maternity (*Annual Univ. Med. Sc.*, 1888, Vol. IV., p. 236) which exhibited many similar features, yet were very fatal. More recently, in some of the larger

continental maternities, epidemics of this disease have occurred. It follows as well operations other than obstetrical.

While this disease presents in its behavior many characteristic symptoms of scarlet fever, yet it does not correspond to it in many others. For example, it is not contagious with healthy children or adults. For its inoculation, wounds are necessary, either surgical or puerperal. To my mind, it is an acute infectious process, septic in character, affecting women in childbed. The accompanying hemiplegia was doubtless due to embolism.

The source of this infection in my case is undermined. I never before saw the disease, nor have I since had a similar experience.

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## MEDICAL PROGRESS.

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A CASE OF CHOLEDOCHOTOMY.—Prof. E. Küster reports a case of gall obstruction and jaundice in a woman 48 years old. She had suffered for two years and had been already icteric for months. Küster, from the symptoms, diagnosticated presence of stone in the common duct. The operation showed this diagnosis to be true. He found the gall bladder shrunken, the common duct very much dilated and containing several stones. The common duct was incised and several calculi removed. The wound was closed by a double row of sutures and tamponed with iodoform gauze. With the exception of considerable secondary hemorrhage the recovery was complete. This is not the first case. Another case is reported by Kümmel; yet another by Courvoisier, in all five cases, so that we have six cases with one death and five recoveries. The application of this operation is entirely circumscribed. The cholecystentery of Winiwarter will not be entirely replaced by this operation. Rehn, of Frankfort-on-Main, had, in a similar case to that reported by Küster, extirpated the gall bladder, after which he found several biliary calculus in the common duct, which he removed by incision. Sutures-recovery. Braun, of Konighberg, reported a case in which he, after separating the adhesions and fixed the shrunken gall bladder against the duodnum, discovered a large sized biliary calculi in the common duct, which by means of incision was removed. The wound was closed by four sutures, tamponed by iodoform gauze, and an uncomplicated recovery ensued. After seven days bile appeared in the intestinal canal.

A CASE OF EXTIRPATION OF THE GALL BLADDER, with establishment of a communication between the duodenum and the ductus-choledochus. Sprengel operated in a case of obstructive jaundice



where the cause of the obstruction lay in the common duct. After opening the abdomen, the stone, which as it appeared to him was inclosed in the common duct, and which by employing considerable force was passed into a cavity, the latter appearing to him be the duodenum. After a few weeks all of the old symptoms reappeared and a second operation was undertaken for relief. At the second operation the stone was found, not in the common duct, but in the cystic duct, and that the common duct was enormously dilated. The calculus was forced into the gall bladder and the latter extirpated. It was now possible to see the relations of the common duct and the hepatic duct, in which a second stone was found. As he made the effort to pass this stone into the duodenum the common duct was torn across. It was now necessary for him to establish a new communication between the common duct and the intestinal canal or the patient would surely die. This was accordingly done by establishing a fistula between the common duct and the duodenum. The common duct and the duodenum were attached to each other by sutures just passing through the peritoneal coats. A recovery followed without interruption, the patient entirely well four weeks after operation.

A CASE OF TUMOR OF THE CEREBELLUM, CAUSING SUDDEN DEATH.—Dr. Walker Schell reports a case of tumor of the cerebellum (*Indiana Medical Journal*, June, 1891), occurring in a boy seven years old. The family history in the case failed to show anything definite, although the patient's father died of "misery in the head" (syphilis?), after a history of suffering from headache during life. The previous health of the patient had been good and he had been well developed and fairly intelligent. A year prior to his death, he began to complain of headache, *which was always referred to the frontal region*. He was treated for sometime, alternately, for worms and catarrh by various domestic and quack remedies. Three months before his death he began to totter in walking and the headache became continuous and severe. About this time hyperæsthesia of the scalp was observed. When suffering acutely from headache his head was always turned to the right and his eyes were strabismic. On the day of his death, in endeavoring to walk, he fell several times always to the left. A convulsion finally occurred which was speedily followed by death. The autopsy revealed a tumor, an inch and one-half in diameter, in the right of the cerebellum. It was found upon examination to be sarcomatous in character.

CYSTS OF THE VAGINA are among those rare occurrences which many practitioners never meet. These formations may originate as retention cysts from the glands of the vaginal walls. Cystic spaces originating from injuries and extravasations of blood have been described by Kaltenbach (*Arch. fuer Gyn.* V. S. 138); also by Goltzhardt (*Wiener Med. Wochenschrift* 1889); first described cysts

beginning in lymph spaces and lined with endothelium. According to Viet, these cysts arise from Gartner's ducts or from rudiments of the Wolfian bodies. They vary in size from a buckshot to that of a child's head.

Nelaton reports an analysis of the contents as follows: Water, eighteen parts; albumen, one part and a half, and salts a half a part. They occur most frequently on the posterior wall of the vagina, but have been found in all portions of it. Martin, of Berlin (*Diseases of Women*, 2d American edition), has extirpated extensive vaginal cysts fifteen times. This author reports a peculiar case of a cyst of the vagina about the size of a walnut, which projected into the lumen of the vagina and made a cover for the os uteri on digital or specular examination, and prematurely on sexual intercourse, as the woman was sterile.

Poupinol (*Revue de Chir.* IX. 7) after much research has collected 141 cases. These came from every age, but seldom before the 20th year; 86 per cent. of the cases were solitary cysts. Treatment is operative. It is usually best to remove a large part of the cyst wall to prevent it closing and refilling. Patients generally apply to the surgeon on account of a procedentia caused by the cyst, an impediment to coition, or an uncomfortable feeling.—*E. S. McKee, M.D.*

**APIOL.**—An emennagogue not abortifacient is said by Shoemaker, in his new edition of *Materia Medica, Therapeutics and Pharmacology*, to be found in apiol. It cures congestion of the uterus and ovaries and favors the occurrence of the menstrual discharge. In cases of scanty or deficient menstruation with pains, etc., one capsule containing three minims can be given three times a day, after meals, for a week before the expected period. It is also especially appropriate when the amenorrhœa depends upon ænemia. This author recommends it as follows: *Apiolini*, minims v, *aloin* gr. 1-10, *sulphur sublimatus*, gr. v in each capsule. Take one capsule night and morning a week before and during the menstrual period. In *La Bulletin Medicale* we read that apiol has an action on the uterus similar to that of digitalis on the heart. It regulates menstruation and is useful in all the derangements of menstruation, namely, amenorrhœa, dysmenorrhœa and metorrhagia, provided these disturbances be idiopathic. By curing menstrual disease, a common cause of sterility, it will always cure the sterility. It is also recommended in erosion of the cervix and vulvar eczema. It may be used in powder, glycerine, suppositories, pencils, and etherial and collodion solutions.

**ARISTOL** in gynecology has been exciting some interest in the more recent medical literature. Shoemaker, in his recent edition of *Materia Medica, Pharmacology and Therapeutics*, gives a clear, concise and valuable exposition of this, as he does of so many of the new remedies barely mentioned in many of the text books. He



finds it remarkably efficacious in promoting cicatrization, and thus useful in ulcerated epithelioma. The odor of epithelioma of the uterus and vagina is removed by a cotton tampon coated with aristol powder, which also leads to the discharge of pieces of the growth. Ulcerated scirrhous of the breast is reported, on the authority of Prof. Waugh, to have improved surprisingly by dusting aristol thickly over the surface. The author wishes to avoid advocating injudiciously and prematurely the virtues of a new medicament, especially with reference to such a malignant disease as cancer; but, from the testimony of excellent observers and his own clinical experience, aristol appears to have a power not hitherto exhibited by any remedy. It originates apparently healthy granulations and cicatrizations of a cancerous ulcer. In the gonorrhœal urethritis of women aristol made into cylinders with cocoa butter resulted most favorably. Suppositories containing five grains each are excellent in the treatment of leucorrhœa and pruritus pudendi.

**FATTY DEGENERATION OF THE PLACENTA.**—Fatty degeneration of the placenta as a frequent cause of abortion has long been recognized, and the chlorate of potassium is well known as its most valuable remedy.

Shoemaker, in his recent edition of *Materia Medica, Pharmacology and Therapeutics*, says it is found useful in deficient oxygenation of the blood, especially in placental inadequacy, in impoverishment of the blood, as in *æmia* and chlorosis. In this latter condition, tincture of the chloride iron in an effervescing solution, containing twenty-five grains of the chlorate of potassium, is recommended three times daily, after meals. It has been shown that administered in fifteen-grain doses, three times a day, it is serviceable in preventing diseases of the placenta, and thus enabling a woman who had previously miscarried several times to go on to the end of term.

**MENSTRUATION AND LARYNGEAL DISEASES.**—Menstruation, according to Dr. Carl H. von Klein, of Cleveland, shows its presence in the voice of female singers nine times out of ten in the low tone of voice. He says many of the most difficult cases with which the laryngologist has to deal are disturbances of the throat caused by disturbances of the ovaries. It is a common thing to meet with cases of acute inflammation of the tonsils, larynx, pharynx and fauces in females during their menstrual period. He has observed the voice in many professional singers during their menstrual period defective in gravity, force and timbre, producing in many cases a husky sound, as of a low masculine order. Prima-donnas aim to avoid engagements during their expected period. In many cases of ovarian troubles, the laryngologist can accomplish little without the aid of the gynecologist.

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W. G. MACDONALD, M.D., EDITOR.

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REVIEWS AND BOOK NOTICES.

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INTERNATIONAL CLINICS. A Quarterly of Clinical Lectures on Medicine, Surgery, Gynecology, Pediatrics, Neurology, Dermatology, Laryngology, Ophthalmology and Otology, by Professors and Lecturers in the Leading Medical Colleges of the United States, Great Britain and Canada. Edited by John M. Keating, M.D., Philadelphia, Consulting Physician for Diseases of Women to St. Agnes' Hospital, Philadelphia, Editor of "Cyclopedia of Diseases of Children;" J. P. Crozer Griffith, M.D., Philadelphia, Clinical Professor of Diseases of Children in the University of Pennsylvania, Professor of Clinical Medicine in the Philadelphia Polyclinic; J. Mitchell Bruce, M.D., F.R.C.P., London, England, Physician to and Lecturer on Therapeutics at the Charing Cross Hospital; David W. Finlay, M.D., F.R.C.P., London, England, Physician to the Middlesex Hospital and to the Royal Hospital for Diseases of the Chest, Lecturer on Clinical Medicine in the Middlesex Hospital Medical School. Philadelphia: J. B. Lippincott. July, 1891.

Volume II. maintains the high standard warranted in the first volume. The biographical sketch of Joseph Leidy, M.D., will be read with much interest by his many admirers. The amount of work accomplished by Dr. Leidy in his life-time was perhaps greater than has ever been accomplished by any other anatomist in this country.

Professor Leslie has well said, in concluding a tribute to his friend and fellow scientist: "The life of Joseph Leidy may some



day be written, but there can never be more than a colorless sketch of it from which his fine personality has mainly evaporated. This is the fate of the greatest masters in science. The pyramid conceals the Pharaoh. Early in life he discovered the true function of the liver in animal life, and this placed him side by side with Harvey, the discoverer of the circulation of the blood. In middle life his discovery of the world of extinct vertebrate forms in the western region of this continent made him the peer of the great Cuvier. His years of study of the infusorial forms rivalled in wealth of new and wonderful knowledge those of Ehrenberg. What must we think of the man who was Harvey, Cuvier and Ehrenberg combined?"

The rest of the volume is made up of some of the brightest lectures that it is possible to collate in any country. One can hardly select from the excellent compilation any particular one that is decidedly superior to another. They are all of the very best, and will well repay the time required by the practitioner to look through and read the volume thoroughly.

**THE URINE, THE COMMON POISONS, AND THE MILK.** Memoranda, Chemical and Microscopical, for Laboratory Use. By J. W. Holland, M.D., Professor of Medical Chemistry and Toxicology, Jefferson Medical College, Philadelphia. Illustrated Fourth Edition, Revised and Enlarged. Philadelphia: P. Blakiston, Son & Co. 1891.

This syllabus prepared by Dr. Holland has much to recommend it. First of all, the large amount of useful facts contained in it without making it unwieldy. Particular attention is devoted to the analytical study without burdening the student with many useless processes. The methods given for the discovery of the common poisons are clear and direct. The illustrations of apparatus and of microscopical preparations are good.

The syllabus is interleaved for additional notes, and will be found a useful companion for the student in the laboratory or a valuable addition to the table devoted to urinary analysis in the physician's office.

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THE OUTLINES OF INSANITY.\*

BY HENRY HUN, M.D.,

*Professor of Diseases of the Chest and Nervous System in the Albany Medical College.*

LECTURE IV.

In the last two lectures, in describing the symptomatology of the different forms of insanity, nothing was said in regard to the etiology, diagnosis or treatment, because this would have resulted in a great deal of repetition. There remains, then, for us to consider in this, the last lecture of the course, the etiology, the diagnosis, and the treatment of insanity, both in general and in regard to each of the clinical forms in which disordered mental action manifests itself.

ETIOLOGY.

*General Etiology.*—The etiology of insanity, as in the case of other diseases, is best studied under the two heads of predisposing and of exciting causes. We have already learned that certain individuals are born into the world with a defective brain and predisposed to mental disease, which is most clearly manifested in the class of amentia (idiots and imbeciles), while other persons, who are born into the world with healthy brains and without any predisposition to mental disease, acquire insanity as the result of some harmful agent or accidental cause acting upon their nervous system. These predisposing and accidental causes in insanity, as in many other diseases, stand in inverse ratio to each other; that is, the stronger the predisposition the slighter the accidental cause necessary (even the ordinary events of life are sufficient) for the production of insanity, and *vice versa*.

*General Predisposing Causes.*—The predisposing causes of insanity, which act slowly and alter the constitution of the patient, can be

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\*A course of lectures delivered at the Albany Medical College during January and February, 1891.



divided into two groups—one affecting a large class or a whole race of men as general predisposing causes, the other affecting only certain special men as individual predisposing causes. The most important among these general predisposing causes are the age in which the persons live, the nationality, the sex, the social condition and occupation, and the time of life.

In regard to the effect of nationality and of the age in causing insanity, there are very few statistics on which reliance can be placed, but it seems that the greater the degree of cultivation and of luxury, and the more difficult and worrisome the “struggle for existence” becomes, the more frequent is insanity. The majority of the factors existing in the complicated life of highly civilized communities tend to produce rather than to prevent insanity. Race and climate seem to have very little effect in the production of insanity, with the single exception that the Jewish race is especially predisposed to it, which is not to be wondered at, perhaps, when we consider the history of this race during the past two thousand years. In regard to sex there is no great difference in predisposition to insanity, although men seem slightly more subject to it than women; it is noteworthy, however, that insanity is much more common in unmarried than in married persons. In regard to social condition and occupation, insanity is more common among the poor than among the rich. It occurs rather frequently among governesses, on account of homesickness and of their unpleasant social position, and among artists, whether painters, poets or actors. It is also common among sailors and prostitutes (probably on account of excesses in venery and alcohol), among prisoners confined in jail, among soldiers in war time, and among civilians in times of great political excitement. In regard to the time of life, insanity occurs much more frequently at certain periods of life than at others, and is most common between the ages of twenty-five and fifty years, when the man or woman is at the height of their development and work. In early childhood insanity is very rare, except in the form of amentia. At puberty the relative proportion of the insane increases quite rapidly, and then falls again to become more common in the case of women between the ages of twenty-five and thirty-five years, and in the case of men between the ages of thirty-five and fifty years, although at the climacterium the women again show a decided predisposition to insanity. After the age of fifty years insanity becomes less frequent until the period of old age is reached, when that form of insanity, called senile insanity, becomes common.

*Individual Predisposing Causes—Congenital.*—Thus far we have considered only those general predisposing causes which affect a great class or community of persons. Among the individual predisposing causes by far the most important is heredity. It is a matter of daily observation that normal mental characteristics are inherited from parent to child, and it is not less certain that abnormal mental characteristics are similarly inherited. We have seen in our lectures on nervous diseases how important a factor in their production is the neuropathic constitution, which signifies that the patient is predisposed to nervous disease on account of disease of the nervous system, usually of a functional nature, which has existed in his ancestors. No less important in the production of insanity is the psychopathic constitution, which is a condition of mental vulnerability due to inheritance and derived from ancestors who have themselves suffered from some form of functional nervous disease. In some cases the actual disease occurs in generation after generation and seems to be directly inherited, but in most cases it is not the disease itself that is inherited so much as a tendency to disease, a defective organization of the brain which under an exciting cause leads to any form of mental disease, and among the forms in which this psychopathic predisposition manifests itself must be regarded suicide, drunkenness, crime in some of its forms, and, perhaps, also genius, for the relation of genius to insanity has been pointed out by many observers. The marriage of near relations has been supposed to produce a predisposition to insanity in the offspring, but this is, to say the least, extremely doubtful. If among the ancestors cases of insanity and of nervous disease have occurred, then the marriage will probably intensify the predisposition, and the offspring will manifest in various ways a disordered mind. If, on the other hand, the married persons themselves are healthy, and come from a healthy stock, it is altogether probable that the offspring will be healthy and will show no mental peculiarity. This psychopathic constitution is sometimes directly inherited; sometimes it skips over one or two generations. In some cases its intensity diminishes in succeeding generations; in others it increases until the race is extinguished by the production of sterile idiots or of individuals who have a morbid feeling of repulsion towards the other sex, or else the early outbreak of insanity prevents marriage. The individual predisposition to insanity can be congenital and yet not hereditary. It may be the result of injury to the fœtus in the womb, whether from the pressure of uterine tumors, or from injury at the time of birth, or



from disease of the brain occurring in foetal life ; while those cases of congenital predisposition which are apparently due to some nervous fright or shock which the mother receives while carrying the child must probably be classed under hereditary predisposition.

*Individual Predisposing Causes—Acquired.*—In addition to this congenital predisposition to insanity there is an acquired predisposition, which is often the result of a faulty education. Indeed, it is a question whether a certain proportion of the so-called cases of hereditary predisposition may not be due to the early and long-continued faulty training and education of the child by the parent who is a sufferer from the psychopathic constitution, perhaps even from actual insanity. It may be that the child was born with a fairly well-developed brain, but in consequence of a very faulty system of education his healthy brain may show a disordered mental action. This defect in the education may be due either to too much repression or to too much indulgence on the part of the parent or educator, and is usually the result of a want of steady, just and wise guidance. This faulty education acts with especial bad effect on those children who are born into the world predisposed to mental disease. Not only as the result of education, but in consequence of other injurious factors, the psychopathic predisposition may be acquired. Thus, it occurs sometimes after severe constitutional disease, like fever, or after a series of childbirths, especially when accompanied with much loss of blood, or after excesses whether sexual or alcoholic, or as the result of masturbation, or, finally, as the result of overstrain on the part of the brain, rarely from hard work, more commonly from worry and anxiety. When the psychopathic predisposition is present from any of these causes then these patients are especially liable to an outburst of insanity from slight exciting causes which would be entirely harmless to a healthy brain, and these patients before the actual insanity manifests itself exhibit peculiarities such as we described in the second lecture under the head of "the psychopathic constitution," and which it is not necessary to repeat.

*Exciting or Accidental Causes—Psychical.*—The exciting causes of insanity are both psychical and physical. They cannot be absolutely separated from the predisposing causes, because an exciting cause occurring once (trauma capitis) or frequently repeated (anxiety, harsh treatment, etc.) weakens the brain and becomes a predisposing cause. A very great emotion such as fright, anger, jealousy, etc., is sometimes followed by an attack of insanity. The insanity may

immediately follow the shock, but usually the patient seems to recover from the immediate shock, and is in a fairly healthy condition for a short time, and later begins to fail, becomes depressed, loses his appetite, and the insanity then develops. It may be one shock, such as a fright, or it may be a constantly recurring shock or emotion; the latter being by far the more dangerous. The death of a near relative or some one dearly loved, worry and anxiety about household affairs, and especially nostalgia, are among the prominent psychical causes of insanity. In this connection psychical contagion is to be considered, for as certain nervous diseases, especially hysteria, epilepsy, etc., are sometimes directly imitated, so a person predisposed to insanity sometimes imitates the action and manner of thought of insane patients, with whom he comes in contact. All the above causes, although of a purely psychical nature, probably cause insanity only by producing a pathological change in the cerebral cortex.

*Exciting or Accidental Causes—Physical.*—Scarcely less important than these psychical factors as exciting causes of insanity are the physical factors; that is, certain conditions of the body, which are often the result of previous disease, which has attacked, directly or indirectly, the brain. Thus, meningitis is frequently the exciting cause of attacks of insanity, as are also local diseases of the brain; and one of the most important of all the exciting causes is injury to the brain; under which may be included sunstroke. Diseases of the spinal cord are very rarely exciting causes of insanity, but it is not very uncommon to have injuries of the peripheral nerves, or severe forms of neuralgia, preceding attacks of insanity, and apparently the exciting cause of them; just as injuries of the peripheral nerves are often the exciting cause of hysteria and epilepsy; and these two functional nervous diseases, as well as chorea, are themselves often an exciting cause of the forms of insanity which bear their name. Acute infectious diseases, such as typhoid fever, pneumonia, rheumatism, puerperal fever, etc., are not only accompanied during the height of the attack by delirium, but are often followed by an attack of insanity, of which they are the exciting cause. In these acute diseases not only is the brain supplied irregularly with overheated blood, but the blood is changed in character and probably contains poisonous ptomaines, and, in addition, these diseases are usually accompanied by disturbing psychical factors, such as disappointed plans, extra expense, fear of death, and other fears, which are especially prominent in the puerperal state. Chronic diseases,



such as tuberculosis, syphilis, nephritis, etc., and abnormalities in certain physiological processes, such as puberty, menstruation, pregnancy, the puerperal state, and lactation, are not infrequently the exciting causes of insanity. There are also certain poisons, such as alcohol, morphia, belladonna, cocaine, chloral hydrate, cannabis indica, chloroform, ether, salicylic acid, lead, mercury, carbonic oxide, and many others, which act as exciting causes for attacks of insanity. It is not impossible that excesses, especially sexual excesses, lead to insanity, and masturbation is frequently assigned as a cause, although it must always be borne in mind that masturbation, as well as many other assigned causes for insanity, may, in certain cases, be really an early symptom of the disease itself.

*Special Etiology—Constitutional Psychoses.*—If we turn now from these general considerations to the etiology of the individual forms, we shall see that the hereditary predisposition, or the defective brain at the time of birth, accounts entirely for the class of amentia (idiots and imbeciles) without the addition of any exciting cause. This same predisposition, usually congenital, rarely acquired, is also the essential cause for the constitutional psychoses; although in each of these constitutional psychoses, with the single exception of moral insanity, which thus resembles idiocy and imbecility, the outbreak of actual insanity is usually the result of some exciting cause. In the case of constitutional affective insanity, of insanity with irresistible ideas, and of periodic or circular insanity, the predisposition is the dominant cause, the exciting cause being either unrecognizable or some physiological process, such as puberty, menstruation, the climacterium, etc. Of course, any of the exciting causes of insanity may precede an attack of any one of these three forms of insanity and be the exciting cause of it, but such a decided prominent exciting cause is not necessary. Epileptic, hypochondriacal, and hysterical insanity depend on the neuroses of the same name, the etiology of which we have considered in our lectures on nervous diseases. Paranoia, the only remaining form of the constitutional psychoses, may, like the other forms, depend entirely upon the psychopathic constitution; the peculiarities of the patient growing steadily and progressively worse until they merge into actual insanity. The physiological but critical periods of life, such as puberty, menstruation, and the climacterium, may be of themselves sufficient exciting causes. At other times the exciting causes are masturbation, diseases of the uterus, or general diseases of the body, especially fevers and diseases of the intestinal tract. While in other cases any of

the exciting causes of insanity mentioned above may be the starting point for paranoia.

*Special Etiology—Organic Psychoses.*—From this short consideration of their etiology it is evident of what dominant importance in the production of the constitutional psychoses is the psychopathic constitution. On the other hand, when we turn to the consideration of the etiology of the organic psychoses, we find that the psychopathic constitution is not essential. It may, indeed, be present, and is so in a considerable number of cases, but in other cases not the slightest constitutional predisposition can be traced, and, therefore, the predisposition cannot be an essential factor in the etiology of this group of diseases, although, doubtless, when present, it is not without a certain influence. The most important etiological factor in the production of general paresis is syphilis, which, in a large majority of cases, seems to be directly or indirectly the cause of the disease. In general paresis, as in locomotor ataxia, the syphilis often precedes the outbreak of the nervous disease by many years. The disease itself is post-syphilitic rather than syphilitic, and is not amenable to anti-syphilitic treatment. Other causes of general paresis are blows on the head, and long-continued tension of the nervous system caused by excessive mental work and anxiety, or by alcoholic or sexual excesses. In syphilitic insanity, in alcoholic insanity, and in senile insanity, the dominant etiological factors respectively are, syphilis, alcohol and old age, to which may be added as subordinate factors any of the predisposing and exciting causes of insanity mentioned in the early part of this lecture. The etiological factors of acute delirium are very manifold, but they all have this in common, that they produce a condition of great exhaustion of the brain. The commonest causes are violent emotions, too severe mental work, excesses in alcohol, anxiety and worry, insufficient nourishment, blows on the head, sunstroke, and febrile and other diseases.

*Special Etiology—Idiopathic Psychoses.*—The group of the idiopathic psychoses occupies a position midway between that of the constitutional and the organic psychoses. Certainly in the idiopathic psychoses a constitutional predisposition is not essential, and thus the group differs from that of the constitutional psychoses. On the other hand, a predisposition to nervous and mental disease is certainly much more common in the group of idiopathic psychoses than it is in the group of organic psychoses, and probably in the former it plays a more important part than in the latter. In



each of the forms of the idiopathic psychoses, melancholia, mania, hallucinatory confusion, and stupor, an hereditary influence can be traced in about half the cases, but this hereditary influence is not so pronounced as to produce characteristic peculiarities and idiosyncrasies in the patient, so that, as a general rule, the patient has not been peculiar prior to the outbreak of the attack of insanity. All of these forms of disease occur at all ages, but are especially frequent between the ages of twenty and twenty-five years, and they affect both sexes about equally. In the etiology of melancholia the physical exciting and predisposing causes of insanity mentioned in the early part of this lecture are especially prominent, but the melancholia, in only exceptional cases, follows one such psychical shock, being usually the result of anxiety and worry and other psychical factors acting over a long space of time. Nostalgia is an especially frequent cause of melancholia. Melancholia is also not infrequently caused by physical factors, such as the occurrence of fevers or other forms of disease, tuberculosis being especially prominent in this regard. In the etiology of mania, blows on the head, and the functional neuroses, such as hysteria, epilepsy, and chorea, are prominent factors, but the general diseases and fevers are less pronounced etiological factors of mania than they are of melancholia. Just as tuberculosis is a prominent factor in the causation of melancholia, so cardiac disease is sometimes a prominent etiological factor in mania. The causes both of stupor and hallucinatory confusion are those of exhaustion, whether as the result of masturbation, or excessive loss of blood, or of insufficient nourishment, or of exhausting fevers, or of the puerperal state.

#### DIAGNOSIS.

*General Diagnosis.*—The diagnosis of insanity naturally falls under two heads, that of the diagnosis of insanity in general: general diagnosis, and of the differential diagnosis of the various forms of insanity: special diagnosis. In regard to the general diagnosis, it is important to fully appreciate the fact that there is no diagnostic sign of insanity. There is no one symptom which, in itself and by itself alone, makes the diagnosis of insanity certain. The nearest approach to this is an hallucination. Hallucinations are, indeed, always pathological, but it does not necessarily follow that the person who is the subject of them is insane. In examining a patient suspected of insanity, we depend partly on what he tells us of his feelings, and partly on what we ourselves can detect in talking with,

and examining him, the information obtained from the latter of these two sources is much the more important. But before examining a patient at all it is necessary to get as complete a history of the case as possible from members of the family and friends of the patient; inquiring as to his previous conduct, and whether he was always of a peculiar disposition, or whether his present conduct is at variance with his past life, extending this inquiry back, not only over the patient's life, but also to that of his ancestors, his parents, uncles, aunts and grandparents. It is also important to obtain from the friends some idea of the patient's delusions and peculiarities, so as to guide us in our conversation with him. We cannot get too much of this kind of information before we see the patient himself. For although many cases of insanity are of very easy diagnosis and require only a short visit, the first glance at the patient revealing a decided degree of disordered mental action, his mere surroundings and appearance being enough to prove his insanity, there are many other cases in which the diagnosis is very obscure, so much so, as to require a long period of observation before we can arrive at any exact diagnosis with any degree of certainty.

The next and most important part of the examination of a suspected case of insanity consists in a conversation with the person, if practicable, alone. This conversation should be commenced in a very general way, and should be turned gradually to the patient's former life, his occupation, and his manner of living, in which the examiner should show a good deal of sympathy and interest, be in no hurry, be a good listener, be careful not to contradict too much, and should not disclose the fact that he is examining the patient's mental condition. A good deal of attention should be directed to the ailments of the patients. Everything should be done to get the patient's confidence, and inquiry should be made in regard to his fortune in the world, his plans for the future, his feeling of comfort or discomfort, and his aspirations. As a general rule, when the subject of the patient's delusions is approached, he will himself disclose them and be anxious to talk about them, so that it is merely necessary to direct the conversation very slightly. During this whole conversation the attitude, the appearance, the manner of talking, and action of the patient, can, of course, be studied at one's leisure. Often his manner will tell us more than his words, a sudden start, a rapid turning of the head, will often reveal the existence of an hallucination which he may deny. It is also important to get the patient



to write, for much information is sometimes obtained from the study of his handwriting and method of expressing himself.

Though a patient is best examined in an ordinary informal conversation, yet it is important to have in mind some scheme of such an examination, so that important questions may not be forgotten, although the exact order of the scheme is rarely, if ever, followed in the actual examination, and much of the information called for by such a scheme must be obtained, not from the patient, but from his friends and relatives. It is also to be remembered that the patient's own statements must be taken with much caution and carefully weighed before reliance is placed on them. In such a scheme we should inquire into the *family history*, and learn if any member of the family has suffered from any form of insanity, or any form of nervous disease, or has been a drunkard, or committed suicide, and of what nature this disease was, and at what age it commenced, whether the parents were nearly related, and whether anything remarkable happened to the mother while she was carrying this child. In the patient's *personal history* we inquire for brain disease, night terrors, or convulsions in childhood, at what age he learned to speak and to walk, and whether he learned well in school; next as to the age at which puberty or menstruation commenced, and whether there were any unusual disturbances of the mind or body occurring at that time. Then, following up the patient's personal history, we inquire in regard to his sexual power and passion, to peculiarities of temperament, or disposition, or curious eccentricities of character which he may have manifested, whether he uses tobacco or liquor in excess, and what diseases he has had, especially asking in regard to any disease of the nervous system or syphillis. Finally, we inquire in regard to his intellectual powers, his success in business or in his profession, and his capability of performing hard mental work. Coming next to the *actual disease*, it is important to inquire carefully in regard to any possible cause, whether predisposing or exciting. Then as to the exact commencement of the disease. What were the prodromal symptoms. What symptoms were first noticed, and in what order the succeeding ones occurred, and then we learn all that we possibly can in regard to his attack, and especially we try to learn whether the patient's actions and manner of thought are in harmony with the conditions of his life (physiological) or in discord with these conditions (pathological), and in weighing the symptoms which he presents we must view them in the light of

his previous mental characteristics, for the personal element is a much more important factor in insanity than in any other disease. We then examine the patient's psychical condition, bearing in mind especially the following points: *Character* (change from his former habits and methods of thought and action). *Memory* (tested by simple sums in arithmetic, asking about events in the distant, and in the near past, by getting him to repeat statements that he has made earlier in the examination, etc.). *Frame of mind* (whether joyous, sad or confused, and whether it is based on reason, whether it is physiological or pathological). *Emotional nature* (whether easily moved to tears or laughter, irritability, and quickness of temper). *Reasoning process* (whether slow or quick, logical or illogical, and power of application). *Hallucinations* (of what sense, and whether occurring by day or by night). *Delusions* (whether primary or secondary, whether fixed or changing, systematized or incoördinate). *Subject to irresistible ideas and perverse impulses* (and of what nature). *Anxiety* (præcordial or elsewhere, whether suspicious or mistrustful). *Consciousness* (whether his ideas of place, time, and of himself are normal). *Natural feelings* (love of family, religious, sexual). We also examine the patient for aphasia or any local cerebral disease, and in regard to his sleep, dreams, headache, dizziness, and his special senses. We next make a careful physical examination of the patient, examining with special care his head, face, ears, teeth, etc., and not neglecting his thoracic and abdominal viscera, and seeking carefully for signs of any nervous disease. Of course, in many cases, such a complete examination is unnecessary and in others impracticable, but much valuable information would be obtained if such an examination were attempted in every case. Finally, in any such examination it is important to have in mind the transitory forms of mental disorder due to drink, opium and other narcotics, and the delirium of fevers, of approaching death (which sometimes resembles hysterical insanity), of brain syphilis and gross cerebral disease (tumors), of injury to the head, and of hysteria.

It is sometimes the case that insanity is simulated, and this is often an easy matter for a short time, because the physician is not always on his guard against such a trick. A continuous observation of the case during a few days will make the simulation plain, because the impostor cannot keep up his acting continuously, and in the majority of cases he does not know his part, and his feigned insanity does not correspond with any known form, but is usually over-acted,



is theatrical, exhibits a constant endeavor to produce startling effects, and in answering questions he displays an apparent foolish silliness by irrelevant answers, which is entirely foreign to insanity.

*Special Diagnosis.*—Thus far we have considered only the general diagnosis, and we have not time enough in this lecture to enter into all the details of the special diagnosis of the different forms. For your convenience and aid, however, I have tabulated the prominent points in such a diagnosis. Of course, in such a table much must be omitted, and many general statements must be made which would be the better for some qualification. In this table, mainly on account of space, a number of the forms of insanity are omitted, thus: Dementia and amentia are omitted, because their diagnosis is comparatively easy from the great mental weakness of the patient, and it is also not difficult to decide whether it is a dementia, secondary to some form of insanity, or whether it is a form of amentia, primary, depending on a congenital or acquired predisposition. Also in the forms of amentia it is not a difficult matter to distinguish the different degrees comprising idiocy or imbecility, or the moral insanity depending on a want of the moral sense. The hysterical, the epileptic, and the hypochondriacal forms of insanity are omitted, because the diagnosis is made in such cases from the previous existence of the corresponding neurosis. Finally, the periodic and circular form of insanity is omitted, because the diagnosis in such cases is plain, from the periodical returns of the attack or from the alternating attacks of melancholia and mania with a free interval.

#### THERAPEUTICS.

*Prophylaxis.*—That portion of the treatment of insanity which concerns the general practitioner is the prophylaxis and the therapeutics of incipient insanity. There are certain children whom we know are born into the world with a psychopathic constitution, which we cannot remove, but which by a careful system of education and life we can prevent from becoming more pronounced, and in a considerable number of these cases by removing all accidental exciting causes we can prevent during the whole life of the patient an attack of insanity, which, under other conditions, would have almost surely occurred. In regard to prophylaxis, we must say in a general way that these children should lead a healthy life, and slight excesses which would produce no injury in children not predisposed to insanity must be carefully avoided by them. In particular, they should

DIAGNOSTIC POINTS.	<i>Melancholia.</i>	<i>Mania.</i>	<i>Hallucinatory Confusion.</i>	<i>Stupor.</i>	<i>Folie Raisonnannte.</i>	<i>Paranoia.</i>	<i>Insanity with Irresistible Ideas.</i>	<i>General Paresis.</i>	<i>Alcoholic Insanity.</i>	<i>Acute Delirium</i>
<i>Previous Character.</i>	normal.	normal.	normal.	normal.	abnormal, peculiar liar.	abnormal, peculiar liar.	abnormal, peculiar.	normal.	normal.	normal.
<i>Exciting Cause.</i>	decided cause; worry, nostalgia, disease.	decided cause; worry, neuroses.	decided cause; exhaustion, disease.	decided cause; exhaustion, disease.	slight cause; menstrual function.	slight cause; disturbance of sexual or menstrual function.	slight or no cause.	syphtis, trauma capitis, mental over-work and anxiety.	alcoholic excess of long duration.	physical exhaustion.
<i>Frame of Mind.</i>	depressed without reason.	joyous without reason.	confused and changing.	stupid.	irritable and complaining.	variable, depending on delusions.	anxious and depressed.	usually joyous.	anxious and excited.	confused.
<i>Reasoning Powers.</i>	intact, but in abeyance.	intact, but in abeyance.	confused.	absent.	constantly in use, ingenious but illogical.	constantly in use, ingenious but illogical.	constantly in use, but to no purpose.	greatly weakened.	weakened.	absent.
<i>Hallucinations.</i>	very rare.	very rare.	numerous.	very rare.	none.	numerous, rarely absent.	none.	rare.	numerous.	numerous.
<i>Delusions.</i>	absent or few and secondary to frame of mind.	absent or few and secondary to frame of mind.	numerous, but changing and not systematized.	none.	absent or rare.	prominent and systematized, of observation, perception and greatness.	absent or rare.	numerous, of greatness and childish, always changing.	numerous.	numerous.
<i>Compulsory Ideas.</i>	distress for imaginary sins.			none.	frequent.		the essential element in the disease.	rare.		
<i>Activity.</i>	quiet, with at times the energy of desperation.	wildly active.	variable, usually active.	quiet.	active.	active.	variable.	active, but awkward and weak.	active.	active.
<i>Speech.</i>	rarely speaks, coherent.	shouts and sings, incoherent.	delirium, incoherent.	will not speak.	great talkers, coherent.	usually great talkers, coherent.	unaltered.	tremulous, slowly, letters and syllables omitted.	tremulous and incoherent.	delirious, incoherent.
<i>Dangerous.</i>	to themselves.	to themselves and others.	to themselves and others.	no.	rarely to themselves.	to themselves and others.	rarely.	at times to others.	to themselves and others.	to themselves and others.
<i>Other Symptoms.</i>	neuralgic pains, cold extremities, cyanosis, constipation, loss in weight.	insomnia, loss in weight.	insomnia, loss in weight.	sluggish circulation, cyanosis, constipation, loss in weight.		neuralgic pains and abnormal sensations.		tremor; incoördination of movements and weakness, apoplectic form and epileptiform attacks.	general tremor.	fever.



have plenty of good but simple food and long hours of sleep, being sent to bed early and not being allowed to attend children's parties or to have excitement in the evening, which might keep them awake at night. In addition to an abundance of plain food, from which, of course, coffee, tea and alcoholic liquors must be excluded, and in addition to long hours of sleep, these children should be accustomed to long hours of play in the open air, and not be allowed to indulge in day dreams or in reading novels to excess. They should also work systematically at their lessons, but as these children are often precocious they should not be pushed or stimulated by prizes to extra exertion in study. Obedience should be insisted upon, and these children should be subjected to a firm but not irksome discipline, and in especial they should not have their emotional nature excited by contention and disturbance at home. Indeed, it may often be necessary to send them away from home on account of the exciting influences of their nervous father or mother, and in such cases it is much better that they should go, not to a public school, but to a private house, preferably in the country, where they can live under the best hygienic conditions; although the individuality of the child must in every case be considered, and different children will require to be placed in different surroundings. At the age of puberty the child should be protected as far as possible from the pernicious habit of masturbation; and in regard to his occupation in life it should be one of routine duty, something of a clerical nature, if possible, and not one which subjects him to excitement or long continued exertion and anxiety, alternating with long periods of comparative rest. The work should be a daily task without much anxiety or excitement in it. In regard to marriage, as a general thing the man will be benefited by an early marriage, but the woman will be better for a late marriage—her constitution being fully formed, she will be better able to pass through the perils of the puerperal condition. Throughout their lives these persons should be protected as far as possible from any excess, whether in mental activity, or especially in sexual or alcoholic abuse, or in the use of tobacco.

*Therapeutics of Incipient Insanity.*—Only in exceptional cases does insanity commence suddenly. Usually there is a prodromal period extending over a considerable space of time, during which it is apparent that an acute attack of insanity is imminent. In such a case the first thing to be done in the way of treatment is to dis-

cover, if possible, any existing cause for the insanity or any cause which is constantly weakening the nervous system, and to remove this as quickly as possible, and in a number of cases it may be necessary to send the patient away on a journey of considerable length to separate him from injurious influences. This removal of the cause, even when it is known, is always difficult, often impossible. It is often impossible even to prevent the patient taking alcohol, morphia, and other injurious drugs, while the removal of other and more subtle factors in the production of insanity is still more difficult. Having removed, when possible, the cause, the next indication for treatment is that of strengthening the nervous system in every way, which is best accomplished by very liberal or even forced diet, a complete rest from work and care, and a large amount of sleep. If there is any organic or functional disease of any organ of the body, especially any anomaly of menstruation or any disturbance of the sexual organs, this disease, whether organic or functional, should be either cured or alleviated as far as possible. In regard to the treatment by drugs, this is distinctly subordinate to that of the hygienic treatment already mentioned, but it is often important to give the bitter tonics, such as compound tincture of gentian before meals, in order to improve the appetite and to get the patient to take as much food as he possibly can, and it may be necessary to insure sleep by means of narcotics, provided sleep cannot be obtained by making the patient lead a quiet, uneventful, unexciting life. Often a warm bath at night will produce sleep, and sometimes eating just before going to bed has the same effect. When necessary, we employ sulfonal, chloralamid, bromide of potassium, or paraldehyde to produce sleep, in preference to chloral or opium, which latter drugs we give only when the others fail, and when it is impossible to obtain sleep in any other way. Opium, although its dangers are very great, is often of signal service in a great variety of the forms of insanity. In regard to the so-called nerve tonics, phosphorus, in some of its forms, either the acid phosphates or the compound syrup of the hypophosphites, or a mixture of the two, acts, frequently, well in these cases, and pills of the valerianate of quinine, iron, and zinc, given in doses of four or six pills daily, often produce very excellent effects in these cases of incipient insanity. A depressing treatment of any form whatever is decidedly contraindicated in any form of insanity. It is especially important that cases of insanity should be treated by rest, and that no attempt



should be made to divert them, even in those forms of melancholia and hypochondriasis where there seems to the laity to be so much need of diversion. It is impossible to divert these cases, and any attempt at cheering the patient by insisting on his going to the theatre or into society only makes him worse.

The danger of suicide or homicide is always to be considered and to be guarded against. The refusal of food is usually obviated by persuasion or by the sight of a stomach tube, but in obstinate cases the stomach tube must be used, passed either through the nose or mouth. In all cases mechanical restraint should be replaced as much as possible by that of skilled attendants, and in the treatment of all cases of insanity constant kindness, firmness and patience will accomplish much. Scolding is worse than useless, and deception should be employed only when absolutely necessary and only with extreme rarity. In regard to the therapeutics of the actual attack, this concerns the general practitioner less than the specialist, for in the great majority of cases it is impossible to treat the patient at home, and he must be removed to an asylum, and thus passes from the hands of the general practitioner into that of the asylum physician. It is true that if a patient is wealthy he can be properly isolated and watched and cared for in his own house, or in a house provided for the purpose, and under such circumstances he does as well as, if not better than, when confined in an asylum, because he can have individual attention from the nurse and the physician, all his little wants can be gratified, and he will be less liable to irritation, although the moral effect of asylum discipline will be absent. This, however, is a most expensive process, and there are few patients who are situated in such a way that they can be thus treated. The treatment of the actual attack is continued on the same lines as that of the incipient stages of the disease. Finally, in the case of convalescence from insanity, the patient should be treated, as in its incipiency, by freedom from excitement and care, abundant food and enforced rest. In no disease do the individual characteristics of the patient need to be so much regarded in therapeutics as in insanity, and the family physician, knowing these peculiarities, is often the best judge of what is advisable in the way of treatment in any especial case.

## THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

### AN ABSTRACT FROM THE TRANSACTIONS OF THE FOURTH ANNUAL MEETING.\*

The President, *Dr. A. H. Wright*, of Toronto, in the chair.

An address of welcome was delivered by *Dr. Robert T. Morris*, of New York, and the response was made by *Dr. George H. Rohé*, Vice-President, of Baltimore.

*Dr. Aug. P. Clark*, of Cambridge, Mass., read an essay on

#### POST-PARTUM HEMORRHAGE—ITS ETIOLOGY AND MANAGEMET.

After an exhaustive and scholarly review of the conditions leading to post-partum bleeding, including uterine atony and hour-glass contraction, disproportionate growth of the uterine vessels, ectasis of the fundal vessels, uterine edema, placental abnormalities, fibroma or other morbid growths, lacerations of uterus, vagina, or vulva, etc., he discussed the treatment. Anesthesia is of incalculable benefit in lessening many of the dangers incident to parturition, being particularly useful in cases of uterine inertia dependent on the exhaustion of the system generally. In cases of advanced or serious renal affections, chloroform may be the safer of the two anesthetics. Pressure or support over the fundal uterine segment as the child recedes from it will aid in keeping up continuous or regular uterine contraction, and thus lessen the risks of the occurrence of severe hemorrhages. The administration of ergotin or ergotinin will assist in re-establishing normal contraction. When used hypodermically its physiological and therapeutical action is often speedily and permanently manifested. It is in the milder class of cases that its use will be of the most material service. In cases in which hemorrhage is profuse intra-uterine injections will be of great advantage. In women of full or plethoric habit cold water may be employed; in those who suffer from nervous affections water from 115° F. to 125° F. is to be preferred. Doubtless when hemorrhage is arrested by hot water it is owing to the formation of thrombi more or less extended into the vascular tissues. The employment of cold has a reflex action—it gives a toning effect to all the tissues, it facilitates the constriction of the muscular coat of the dilated vessels. Caffeine used hypodermically is of benefit. The application of some form of electricity will aid in some measure in promoting contraction of the uterine muscular fibres. In cases in which hemorrhage is anticipated, the early administration of quinine may in large measure serve to keep the hemorrhage under control. The occurrence of certain pains may lead us to anticipate post-partum hemorrhage. If the pains are acute and brisk, with abrupt endings, and followed by

\*Held in New York city, September 17th, 18th and 19th, at the Academy of Medicine.



unusually long pauses, we may infer that there is a deficiency of nerve force. This may result in atony of the muscular structures and in failure to effect constriction of the uterus and closure of the utero-placental vessels. In cases in which hemorrhage proceeds from the lower section of the uterus or from the upper portion of the cervix, the application of iodoform wool and gauze and of styptics or of iodine will be of service. The author has great confidence in the employment of nitrite of amyl; it is an arterial and cardiac stimulant of the most extraordinary power. The employment of intravenous injections, and the dangers attending their use, are matters for determination in each individual case. The employment of alcoholic saline intravenous injections for their dynamic or tension effect will be most beneficial. The author's later experience favors the adoption of the method of hypodermic injection or transfusion of spirituous saline solutions. This method is more convenient, is safer, and is more likely to be followed with favorable results. Other methods for controlling hemorrhage and for preventing collapse are referred to. Compression of the abdominal aorta should sometimes be tried. This may, in some measure, enable the medical attendant to get control over the hemorrhage when all other means have failed. This procedure has been approved by such great authorities as Barnes, Churchill, and Simpson.

*Dr. W. J. Asdale*, of Pittsburg, read a paper on

#### REMOVAL OF THE KIDNEY IN DISEASE, WITH CASES.

Before reliable conclusions and methods can be established, and this most formidable surgical procedure can be made safe, if ever, a familiar acquaintance with all that has been done in the sphere of renal surgery must be secured and the details of a considerable number of cases must be carefully studied, that questions of both physiological and pathological import may be determined. Any contribution, although stating no new facts, may be of present value by corroboration and emphasis of points previously taken.

The following points were accentuated by the histories of a number of cases and operations:

First, in respect to the symptomatology of malignant disease. It is often insidious in its attack; pain may be absent or insignificant in amount. Early copious hemorrhages, without any marked previous manifestations of concern, are most suggestive of structural change of malign character.

Second, in regard to method of operation. The choice will be governed not more by preference than by necessity. We are reminded, however, of the facility of approach by the lateral abdominal method of incision, and of the ease with which large solid growths may be taken from the renal site. Again, in all cases it is of primal importance to possess the advantage of direct palpation of the other kidney before nephrectomy; this manœuvre of the operation, by primary anterior incision, is made easy.

The antero-lateral incision provides the minimum of injury to the peritoneum and the strongest assurance that soiling of the peritoneal surfaces will be avoided. Drainage, the importance of which cannot be overestimated, can be most efficiently applied after the lateral abdominal operation. Shock, even to the aged and feeble, does not of necessity inure to forbid a carefully conducted operation for removal of the kidney. Finally, the importance of early diagnosis and the futility of late operations, in malignant disease especially, are clear.

#### DISCUSSION.

*Dr. A. Vander Veer*, of Albany.—We owe Dr. Asdale our thanks for his thorough and candid manner of reporting his cases; there was a fatality present that no operator can avoid—that is, an advanced condition of disease. Malignant disease of itself is always a dangerous condition for us to attack, and when advanced, as in these two cases, we have heavy odds against us. The consensus of opinion is that chloroform is the safest anesthetic to use in surgical kidney. In malignant disease let us operate early—as early as possible.

*Dr. G. A. L. Reed*, of Cincinnati.—The question of the treatment of the pedicle in nephrectomy will remain a serious one as long as we have kidneys to remove. We all recognize the treacherous friability of the renal vein. To avoid the unhappy and almost necessarily fatal accident of cutting it by a tight ligature, he had put around this vessel the protecting influence of its neighboring structures, and had ligated the pedicle in one mass. He endeavored, in effecting the division, to leave something of a button to make the ligature secure. So far he had not been embarrassed with secondary hemorrhage. The amount of force that is required to control hemorrhage from the renal artery need not be so great as to cut the walls of the neighboring vein, providing we have left a sufficient button to prevent slipping of the pedicle under the very considerable circulatory pressure which is brought to bear upon it through the few hours immediately succeeding the operation. Unless there be surgical conditions of the ureter itself demanding special treatment, there is no need of treating it otherwise than you would the circulatory vessels.

*Dr. Kellogg*, of Battle Creek, Mich.—The question which should be raised in this discussion is whether it is better to remove the kidney, or whether it is better to perform the operation of nephrotomy. If we drain the kidney in case of suppurating kidney and in case of malignant disease of the kidney, the patient will likely recover. Mr. Tait never removes the kidney. If any operation at all was considered desirable, he performed the operation of nephrotomy through the lumbar region and drained the kidney. K. made it a practice to examine the position of the kidneys and all abdominal organs in every case of pelvic disease of women. In a very large proportion of cases the right kidney especially is prolapsed and movable. In thirty per cent. of all cases in which there is displacement of the



pelvic organs there is also displacement of the kidneys. His method has been to first examine the patient on the back, the shoulders elevated, and legs flexed forward so as to relax the abdominal muscles as much as possible; placing one hand at the back and the other hand in front. In case he fails, he has the patient rise on the feet and rest against the end of a table; then, on bending forward, the abdominal muscles are completely relaxed, the kidney is dragged down, and when the patient takes a deep breath it is easy to seize it, if it is at all prolapsed.

*Dr. L. S. McMurtry*, of Louisville, read a paper on

INTRA-UTERINE IRRIGATION AFTER LABOR.

*Dr. W. W. Potter*, of Buffalo.—The distinguished fellow from Kentucky sounded the key-note of this whole question of intra-uterine irrigation after labor when he said that the time for commencement of the treatment was at the time when it became essential—that is, at the initial symptoms of infection. If we could only always determine when that initial symptom presented, I have no doubt that this method would result in the saving of life and in the prevention of prolonged sickness. There are ways in which infection gets to the vital organism insidiously, and we only know that by watching the symptoms which it produces; hence the importance attaching to the puerperal woman in her attendant paying more attention to a labor—not treating it lightly, not going to it and hurrying away in a few minutes after delivery, and saying, “I will come back when you need me,” but she is to be watched with all care, even after simple labor, for a few days, until all danger of that initial symptom has passed away. It is important to emphasize all that, for the obstetricians of to-day must certainly recognize the fact that they are occupying a more responsible place than ever. There is more light upon the subject than formerly.

*Dr. E. E. Montgomery*, of Philadelphia.—This subject is one of vital interest, for upon the meeting and subduing of the germs at an early stage is dependent the future comfort, health, and possibly life of the individual. He fully indorsed what was said as to the importance of early intra-uterine irrigation where there is the least indication of septic infection. We have in the cavity of the uterus a large absorbing surface; a surface that is covered with a débris, surface in which, through the heat of the body and the character of the secretions, germs multiply with great rapidity, are readily taken up and carried through the vessels, carried by the continuous action of the mucous membrane into the tubes, and we have secondary infection not only of the tubes and ovaries, but we have systemic infection through the absorption into the system. It is important to early render this surface sterile and prevent the development of the disease. In such cases he would advocate, in addition to irrigation, the use of the curette, the scraping away and removal of the infected débris, and, after irrigation with a chemical solution, the introduction of a twist of gauze to the fundus, and in this way make sure that the subsequent drainage was perfect and complete.

*Dr. George H. Rohé*, of Baltimore.—It is my conviction, based upon observation and some personal experience, that the practitioner who is in doubt about antisepticism in obstetrics will lose nearly as many patients from septic troubles as one who misbelieves in that method. If there is any one thing necessary in practising aseptic obstetrics, it is a firm belief that it is absolutely necessary in every case. Consequently it has been well said that the time to begin treating sepsis in a lying-in woman is before she is septic. But even after the septic condition has been established a thorough carrying out of the aseptic practice will result in success in a large majority of cases. Any one who has ever seen the interior of the uterus of a woman who has died of septic infection after delivery will appreciate the importance of more than superficial measures—not merely an injection now and then, even thoroughly made, but also the use of some chemical disinfectant which will inhibit the rapid multiplication of the germs.

*Dr. J. H. Carstens*, of Detroit.—It has been pretty well settled that normal cases had better be let alone; but where symptoms develop it is well to start irrigation very early. There are cases where the temperature rises up to  $103^{\circ}$  or  $104^{\circ}$  or  $105^{\circ}$ , where the irrigation has no effect at all, even if you irrigate every three hours, or every hour. There is no débris there, nothing wrong with the uterus, the physician or midwife who attended the wound was aseptic, and still that woman has puerperal fever. These are cases of auto-infection. We know that when women have a latent disease of the tubes, be it tubercular, gonorrhoeal, or an ordinary pyosalpinx, the act of parturition will cause it to break out in full force or will cause a rupture of the tube, which will allow pus to run down into the uterus and there set up a violent septic poisoning. These are the cases which need laparotomy. We ought to have it before our minds that there are cases which are due to a poison being introduced from without, by the physician or nurse, and there are other cases where the cause is within the patient and may have been lying latent for years, simply needing something to cause the explosion.

*Dr. Cushing*, of Boston, in confirmation of what the last speaker said, reported a case that apparently sprang from tubal infection.

*Dr. A. H. Wright*, of Toronto.—I indorse the statements expressed in the paper. The subject is of the utmost importance. Nothing in the art of obstetrics has given me more anxious thought than this question of antiseptics. It is my practice in the lying-in hospital and in private practice to use intra-uterine irrigation very seldom. In itself it is an evil, capable of doing a certain amount of harm. When the necessity arises I certainly do not scruple at once to go on with irrigation in the interior of the uterus. As far as I have seen irrigation carried on by general practitioners, I have been sometimes rather horrified at the miserably careless and indifferent way in which it was done. It is one of the most difficult things to teach hospital students how to do this properly.



*Dr. J. F. W. Ross*, of Toronto.—I do not think ordinary water used as an injection is as good as some antiseptic solution. My experience with intra-uterine irrigation has not been as favorable as I could wish. Two cases of puerperal septic trouble coming under my notice within the last two years, have been treated by packing the uterine cavity with iodoform gauze through a speculum, and in this way attempting to subdue the formation of the poisonous ptomaines in the cavity.

*Dr. McMurtry*, closing the discussion.—I feel very grateful to the fellows for the very cordial manner in which they have received the suggestions I intended to convey. The purpose of the paper was not to discuss the routine use of intra-uterine irrigation after labor, or to deal with the prophylaxis of puerperal sepsis, but simply to emphasize the point that this very valuable method, which we can institute in the very initial stages of sepsis, is not generally appreciated by the great body of the profession; that the golden moment when it can be most efficient is lost by the administration of a hypodermic dose of morphia, under the mistaken idea that the initial stage of sepsis is a little milk fever or malaria, or some little disturbance brought on by the process of labor. *Dr. Carstens*, of Detroit, has alluded to a class of cases which should not be considered in connection with this treatment at all—that is, to the fulminating cases, cases of sapræmia, where in a few hours the system is thoroughly saturated with the poison; cases that nothing in the world can resist. Even in the initial stages of these cases this treatment can do no harm. The cases alluded to by *Dr. Cushing*, are scarcely within the scope of the discussion. There is no such thing as auto-infection of a woman after labor. Cases of tubal disease belong to that class where the disease was present before labor began. They may have been mechanically affected by the process of labor and the muscular contractions, so as to complicate the case. They are complications of the puerperal condition. Moreover, the treatment of those cases by laparotomy, evacuation, removal of the disintegrating structures, drainage, and irrigation is but an application from above of the same principle of treatment.

*Dr. J. F. W. Ross*, of Toronto, read a paper entitled

HOW SHOULD WE PROCEED WHEN ABDOMINAL TUMORS ARE COMPLICATED  
BY PREGNANCY?

He emphasized the point that there was nothing of malpractice in the opening of an abdomen during the existence of a concealed pregnancy, before proceeding to discuss cases in which pregnancy had been recognized. Cases of ovarian tumor and fibroid tumor of the uterus were reported, and a request was made for reports from members of the association, so that a foundation might be laid on which to build up a few fixed rules for future guidance. Ovarian and myomatous tumors were the only two forms taken into consideration.

*Ovarian Tumors.*—He said that the methods of treatment to be discussed were:

1. To allow the pregnancy to go to full term, or until the uterus throws off its product.
2. Puncture of the cyst until delivery is completed.
3. Induction of premature labor.
4. Ovariectomy—the uterus left to abort or go to term.
5. Ovariectomy—the uterus emptied of its contents by incision.
6. Ovariectomy and abdominal hysterectomy.

The author advocated early ovariectomy, but supported cyst puncture in certain favorable cases, if the patients objected to the operation, or wished to have a living child. If at any time bad symptoms arose, he insisted on immediate abdominal section.

In advanced cases where injury or much handling of the uterus is unavoidable, the organ should be emptied to forestall the almost inevitable abortion or premature labor.

*Myomatous Tumors.*—I. Induction of premature labor.

2. Early myotomy or abdominal hysterectomy.
3. Late hysterectomy or Cæsarean section.
4. Tentative measures, as:
  - (a) Enucleation of cervical tumor to permit labor completion.
  - (b) Enucleation of a sloughing tumor following labor.
  - (c) Abdominal hysterectomy for a sloughing tumor or uncontrollable hemorrhage following labor.
  - (d) Abdominal hysterectomy for septic infection from retention of discharges in the non-contractile uterus.
  - (e) Abdominal hysterectomy or Cæsarean section to end a labor that will require long forceps, version, or craniotomy.

He finally concluded that tentative measures were the best.—*American Journal of Obstetrics.*

## MEDICAL PROGRESS.

IS EMBRYOTOMY OF THE LIVING FŒTUS JUSTIFIABLE?—A paper by Dr. Egbert H. Grandin opened the discussion on this question. He thought that, in view of the great progress in abdominal surgery during the past decade, the time had come when the question of the justifiability of fœticide should receive earnest consideration. Ten years ago, when the mortality from the Cæsarean section was forty per cent. on an average, embryotomy had been a beneficent necessity. To-day, however, when sepsis had been practically banished as an after-complication of abdominal surgery, when we knew how to effectively suture the uterine wound so as to guard against gaping and internal hemorrhage, when the fear of opening the peritoneal cavity had been proved groundless, the time was at hand when the physician had a right to question if, under all condi-



tions, he was called upon to mutilate the living fœtus. On moral grounds the speaker would not discuss the question. Theologians could not decide the point for obstetricians. If the latter could once prove that the risk to the woman from the Cæsarean section was no greater than from embryotomy, their duty as well as their pleasure would be to save two lives instead of, as in the past, destroying the lesser. If our data concerning the Cæsarean section continued to improve over those of the present time, the choice of operation would lie purely with the physician and not at all with the laity, who would always claim precedence for embryotomy over the Cæsarean section. One important factor lacking toward the desired end was more thorough education of the student in pelvimetry. The Cæsarean section should be *elected*, even as an ovariectomy or a hysterectomy was. The operation should never be left as a *dernier resort*. A difficult embryotomy subjected the woman to as great risks as the *elective* Cæsarean section. Shock was the element to be feared chiefly after both operations, and the speaker had witnessed greater shock after embryotomy than after the Cæsarean section. We must learn, further, not to rest our conclusions on the statistics at present at our disposal. These were very fallible, seeing that they included many instances where the section was not elected. The record of individual operators from the elective Cæsarean section gave a fair estimate of the results obtainable in the future. Thus, certain German operators had a mortality as low as six per cent. Hertsch had reported seven cases with no deaths; Cameron, ten cases with one death. At the New York Maternity Hospital the record for the past two years was four elective sections, all successful as regarded both the mothers and the children, while during the same period there had been four craniotomies with one death. The speaker trusted, therefore, that surgeons to maternity hospitals would with one accord cease doing embryotomy, and perform the Cæsarean section under the relative as well as the absolute indication, deliberately electing it. His belief was thus, in the near future, the maternal mortality could be lowered at least five per cent., while fully ninety-five per cent. of the children could be saved. These results would pave the way for the election of the Cæsarean section in private practice.—*Medical and Surgical Reporter*.

LANDERER (*Deutsche Zeitsch für Chirurgie*, '89, 5, 611) reports a case of rupture of the gall bladder or duct from violence. The patient, a girl aged sixteen, was run over by a wagon, the wheel crossing the abdomen; she complained severely of pain and suffered from shock. After a few days the stools contained no biliary matter and the abdomen became distended with fluid, which was removed five times with the aspirator. This fluid, upon analysis, was found to be bile. After a time things returned to a normal condition and the patient was discharged cured.

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THE TREATMENT OF DIPHTHERIA.\*

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INDICATIONS FOR TREATMENT.

BY F. C. CURTIS, M.D.

Diphtheria is the scourge of the modern civilized world. Out of 589,174 deaths during the past six years in the state of New York, 33,813, or about six per cent. of all deaths, and twenty-five per cent. of all ordinary zymotic deaths, were from this cause. This fairly represents its prevalence generally.

The treatment of this disease is a worthy theme for discussion at the first fall meeting of this society. It is my part in the opening of this discussion to outline cursorily the indications for its treatment.

We have three conditions to contend with—the germ, the false membrane, the infected blood.

I take for accepted that the disease is always produced by a specific microörganism, and that this is in every case derived, mediately or immediately, from a preëxisting case.

The initial indication, then, is *isolation* of the patient, since he is always a factory of specific germs. He should be kept strictly excluded until he ceases to propagate and throw off these germs, and as fast as it is possible these should be destroyed, and subsequently their complete destruction should be final and effective. How this should be accomplished it is not my province now to discuss. Its importance I would not fail to emphasize as primary, even though it is somewhat apart from the subject, literally, of the treatment of a given case of the disease.

The second indication which I propose is closely allied to my first, and relates also to the germ, but in its relation to the patient

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\* Papers read before the Medical Society of the County of Albany, November 4, 1891.



himself, viz., *asepsis of his environment*, or, in other words, the *hygienic management* of a case of diphtheria. This, I believe, is more important for the patient than any other indication. Diphtheria differs from most other zymotic diseases in that once having had it does not protect from subsequently contracting it, but, rather, increases susceptibility. Not only this, but while still pursuing its course *reïnfection* is possible. Many die or their sickness is indefinitely prolonged by receiving repeatedly germs previously elaborated in their own persons. A final quietus should be put upon every germ possible as soon as it is given off from the patient. This is accomplished by fresh air constantly supplied through open windows, and, if possible, by changing rooms, by cleanliness, by burning cloths receiving the sputa, and disinfection of bedding and clothing, and, to such degree as is possible, the air of the room by disinfectant vapors.

My third proposition relates to the *local destruction of the specific germ*, or disinfection of affected mucous surfaces, or wherever the point of local infection may be. Here we come upon mooted ground. Is diphtheria primarily local or constitutional? This is a question upon the nature of the disease which I have not time nor is it practical to discuss now. There is no question, even though constitutional symptoms often exist, very probably from systemic infection, before the eye can detect the character of the disease, but that the germs exist locally, and, in fact, they have never been found beyond the submucous tissue, except occasionally in neighboring lymphatic glands. It seems well established by the recent researches of Roux and Yersin that the general phenomena of the disease are produced by a toxin formed by the bacillus at the point where it is found to exist, that is on the mucous membrane. These observers separated this toxin from the bacilli by either sterilizing by heat the culture fluid, or by removing them by straining through a kaolin filter, and with it thus breed from bacilli produced all the phenomena of the disease, local and general, except the presence of bacilli and the communicability of the disease. This is an important contribution, and deductions are to be drawn from it as to treatment. I have no hesitation in emphasizing as an important indication the use of means for sterilizing the affected surfaces. The earlier this can be done the better, and by sprays, by the brush or swab, by the syringe for nasal surfaces, by insufflation of powders, by fluids swallowed—all of them with an eye singly to their antiseptic action.

An indication related to this, of secondary importance, is reduction of local inflammation; but its value mainly lies in stypsis of local blood-vessels and lymphatics, by means of which absorption will be hindered.

The fourth leading indication relates to the *false membrane*. Regarding this, I would say it should never be interfered with, save when it threatened to become a mechanical cause of death. We should bear in mind that it is not the disease, but the product of the disease. It is a protector of a denuded mucous surface. Agents for effecting its solution above the rima glottidis are valueless, and mechanical removal prior to its complete detachment is worse than useless, since this opens vessels and favors absorption of the *materies morbi*. When the membrane threatens to cause asphyxia, surgical interference may avert death; but laryngeal diphtheria is generally fatal. A distinct gain in the saving of life in these cases has been made by O'Dwyer's intubation.

The final indication is to counteract the effects of absorbed toxic material—effects which are not, however, peculiar to the toxin of diphtheria, nor are the indications peculiar. Blood globules are destroyed, muscular tissue softened, the controlling power of the nervous system interfered with, the action of the vital organs weakened. Remedies and procedures are called for which increase blood-globules, the oxygen carriers, which stimulate the action of the heart and reduce to a minimum the work it has to do (rest and recumbency), which favor the eliminative action of the emunctories, and which establish the controlling balance of the nervous system. Hygiene, fresh air, suitable nutriment, blood enrichers and oxidizers, stimulants, rest, are along the line of the indications for constitutional treatment. Much is made of germicides given internally, but beyond their local action on the throat they have at least no theoretical value. The clear indications are for stimulants, blood supply, from drugs and food, fresh air and hygiene to prevent reinfection, febrifuges and rest.

To repeat the leading indications which I have outlined, and which seem to me to cover the ground of the management of diphtheria, I would enumerate as—

1. Isolation and disinfection.
2. Hygiene, so that the patient always breathes air as free as possible from disease germs and full as possible of oxygen.
3. Local destruction of the disease germs at the surface of the body—that is, in the mouth, throat and nose—and with it reduction of local inflammation.



4. Surgical relief of threatening asphyxia.
5. Relief of adynamia of organs, nerves and tissues, the result of absorbed poison elaborated by the germs of this disease.

### SURGICAL TREATMENT.

BY WILLIAM HAILES, M.D.

I have been requested to open, briefly, the discussion upon the surgery of diphtheria, and it seems to me best treated by dividing the subject into general and special indications.

The general indications might be very properly considered by first remembering that the factors which are to be dealt with relate to a disease which undoubtedly depends upon a *parasite* which is implanted *on or in* the mucous membrane or other affected surface, which produces the poison which causes the disease. This specific inflammation which is excited thereby results in—

- (1) The reproduction and local dissemination of the poison; and
- (2) The production of a false membrane, which, though in itself is inert, does harm in two ways, namely, by shutting in the poison and preventing its removal, and thus favoring its absorption, and also in certain situations by interfering mechanically with vital functions, especially with respiration.

These constitute mainly the points upon which I am requested to speak, namely, the surgical and mechanical means of assistance.

The first surgical procedure that would naturally suggest itself would be the destruction by caustics of the infected area, whenever it was limited to accessible localities. But the application of powerful caustics in diphtheria is open to grave objections, and it is subject to great and important limitations. The theory is based upon the destruction of the specific characters of the inflammation, but it very often happens that they fail to completely accomplish this object. The inflamed and necrosed tissues caused by their use must become especially favorable soil for the occupation of the diphtheritic virus and result in an aggravation of the disease. The use of the actual cautery or the galvano-cautery has been attended with favorable results. The false membrane rolls up and falls off, and does not re-form or the diphtheritic process extend, and the slough which it causes comes away in from eight to fourteen days, and leaves a healthy ulcer. But only in rare and exceptionally favorable cases can this procedure be permitted, and then only in the very earliest stages of the disease; but in the larger number of

cases its employment is difficult or impossible of safe execution, and in the majority of the worst cases we have to deal with it is practically excluded, and consequently the verdict of the profession has consigned these measures to almost complete disuse.

When respiration is so severely interfered with in laryngeal diphtheria that asphyxia is imminent, operative interference is usually the only resource by which the life of the patient can be saved.

Tracheotomy and intubation of the larynx are the accepted surgical means at our disposal, and both of these methods of operation have their points of *advantage* and *disadvantage*.

Tracheotomy is more or less a bloody and occasionally a difficult operation, often putting the operator at his wits' ends to overcome some unexpected emergency.

In very young children the thymus gland embarrasses the operation considerably; but its greatest objection, after the consent of the parents has been obtained to a mutilation of so prominent a part as the neck, is the fact that we make an extensive wound upon which a new implantation of diphtheritic poison may take place. It is true that we may possibly prevent the infection of the wound by sponging with an antiseptic solution the incised tissues before opening the trachea, but it is hazardous, and I have often seen an extension of the diphtheritic infection over the entire wound in eighteen hours after the operation, and in spite of iodoform or solution of bichloride (1 to 500) diligently and intelligently applied. In cases where there are large loose portions of membrane below the tube, an immediate tracheotomy is about the only surgical remedy left, except the use of a special set of O'Dwyer's large tubes to avoid impaction of false membrane.

Intubation is readily and easily performed, fulfills most of the indications, and offers equally good chances of after-treatment; and after a personal experience of almost two hundred and fifty cases, with about thirty-five per cent. of recoveries, as a rule, I should advise, with some exceptions, that the treatment should be begun with intubation, and that tracheotomy should follow when the former is not successful.

The after-treatment is very important. Warmth, moisture and the use of antiseptic vapors, and the employment of the croup-camp are necessary.

With a properly fitting tube in the larynx the difficulty of swallowing is due to the swollen condition of the epiglottis, and is com-



mon in croup. Some liquids undoubtedly gain admission to the trachea, but are promptly expelled. Impaired sensibility, due to toxæmia, precludes any reasonable chance of recovery, but the stomach tube may be used. Dr. Castlebury, of Chicago, suggests feeding by placing the head considerably lower than the body, and drinking through a glass tube or bottle. Solid or semi-solid forms may be given when swallowed better than liquids. Rectal feeding is useful.

The most fatal of all the complications of croup is the extension of the disease to the lower air passages—croupous or fibrinous bronchitis, for the prevention of which there is no known remedy.

The steam treatment under a tent affords the best means of accomplishing free diaphoresis; and if nephritis is present, a high temperature (80° F.) is indicated.

Pardon me, gentlemen, for my fragmentary remarks. Any one of the features alluded to would afford ample material for a whole evening's deliberation, and I have barely more than mentioned them by title.

#### LOCAL TREATMENT.

BY J. M. BIGELOW, M.D.

The local treatment of diphtheria is directed (1) to the prevention of local infection—prophylaxis; secondly, to the destruction and removal of the false membrane, and antisepsis; (3) to the annihilation of the diphtheria bacillus and of its ptomaines.

To secure the first object, the part exposed to infection should be sprayed with a solution of peroxide of hydrogen (one part peroxide of hydrogen to three parts of water), and within five minutes after apply to the part a solution of bichloride of mercury, 1 part to 2,000 of water.—(R. C. Van Wyck, M.D., in *Med. Record*, Feb. 28, 1891.) Others advocate a spray of a weak solution of chlorate of potassium in water, and the dissolving slowly in the mouth of sulphur lozenges (each lozenge containing two grains of sulphur lotun).

To gain the second, the remedies are legion, and we shall select only those that have received the approval or have obtained the ear of the medical profession by their novelty. Steam in a large room, with a fresh supply of fresh atmospheric air, can be employed. Steam may be medicated with bromine, iodine or chlorine, to a slight extent. (As to the advantages and disadvantages of this procedure, see Jacobi on "Diphtheria," p. 179; Mackenzie, p. 121, etc.)

The fauces may be sprayed with a one or two per cent. solution of chlorate of potassium every hour; or with lime water; or with a combination of lime water and glycerine; or with lactic acid solution (40 grains lactic acid to an ounce of water). Boroglyceride application with a swab is well spoken of; also the use of "Papoid;" trypsin, the proteolytic ferment of pancreatin will often dissolve the membrane. Liquor potassæ one part, water 4 parts; or hydrate of chloral 3 ss, syrup simpli 3 j, has been employed with great success by H. Hemming, Drs. Acetella (Tunis), Ferrini, Massei (Naples). ℞ Liquor sodæ chlorate ℥ iv, aquæ ℥ x, is advised by Mackenzie. Of the remedies employed, one of the best is peroxyde of hydrogen, "a strong, undiluted, 15-volume preparation, as made by Marchand, of New York, and pressed against the diseased mucous membrane accomplishes almost marvellous results. If the nasal chambers become affected, a solution of the strength of from one to four or two to four parts of peroxide of hydrogen (15 volumes), should be used as a spray or with a syringe." Pepsin acidulated with one per cent. hydrochloric acid (U. S. P.) or two and a half per cent. lactic acid in water is recommended as a reliable solvent. In the *Therapeutische Monatschrift*, Dr. Wolf urgently commends the application with camel's hair brush of a powder containing one part menthol to 10 or 20 parts of sugar (white); if the nasal passages are involved, insufflate with this powder; if bronchi are involved, use menthol spray. Dr. S. Schurtzer advocates the local application of equal parts of tobacco juice and alcohol. "This treatment was the result of the observation of persons who are habitual chewers of tobacco, and, noting their immunity from local infectious diseases, Dr. S. was led to employ tobacco in the treatment (local) of diphtheria. In 7 only of 60 cases of diphtheria so treated have the results been unsatisfactory."—(*N. Y. Med. Journal*, May 16, 1891, p. 571. See also "Treatment of Diphtheritic Throat," *London Lancet*, April 25, 1891, p. 132). Sunon recommends "the irrigation of the nostrils and throat with boric acid solution (4 per cent.) and the applications every two or three hours with pledgets of absorbent cotton wet with ℞ Salicylic acid, gr. vij to gr. xv; alcohol q. s. to dissolve acid; glycerin, ℥ iss; infusi eucalypt. ℥ ij.—M. In persons liable to exposure to diphtheria, cleanliness of the teeth and mouth is imperative. Löffler recommends the use of aromatic waters, weak sublimate solutions (1 : 10,000 or 1 : 15,000) or solutions of mercuric cyanide (1 : 8000 or 1 : 10,000), or thymol (1 : 500 parts alcohol, 20 per cent.). Dr. Netzetky says: In twenty-two years' practice



the best treatment of faucial diphtheria consists in an energetic use of permanganate of potash administered in the shape of painting and gargle, as follows: ℞ Pot. Permanganat. ʒj; aquæ destillat. ʒj—M. Paint afflicted surface every three hours; for gargle, mix ʒj of the above solution with a tumblerful of boiled water; use every three hours.”—(*N. Y. Med. Record*.) Andeir has shown that the application of a 10 per cent. solution of resorcin in glycerin quickly destroys the membrane, penetrates the tissue, kills the bacillus, and proves a useful antiseptic in this disease.—(*St. Lazareth Hospital Reports, in London Lancet*.) Doux and Yersin advise the inhalations of carbolic acid (2 to 5 per cent.). Dr. Gurtz, of Dresden, strongly insists on the use of bichromate of potash dissolved in *carbonic acid* water ( $\frac{1}{2}$  gram bichromate of potash to one pint of carbonic acid water) both as a local and internal medicament, the above mentioned quantity to be used *per diem*.—(*London Lancet*.) Dr. E. L. Oatman (*N. Y. Med. Record*, Oct. 10, 1891) reports a case of diphtheritic conjunctivitis successfully treated by continuous antiseptic irrigation with a saturated solution of boric acid, ice cold, for the first twenty-four hours, then, as the corneal opacities were slightly increased, ice was discontinued in the solution, and the solution was used at a temperature of about 100° F. Dr. A. Pulawski, of Warsaw, details seventeen cases of diphtheria, severe type, rapidly cured by the local use of powdered iodoform in doses varying from 5 to 10 grains three times daily with insufflator. Sulphate of zinc, 20 grains dissolved in six ounces of water, as a gargle or a spray, used every half hour or hour, has been well mentioned, both as a solvent of the membrane and a prevention to its re-formation. Sulphur has been much employed, but has not proved to be as efficient as other remedies mentioned. Ringer speaks of the use of quinine in form of spray and powder (p. 442, 12th ed.). Ice is a great comfort when taken in small pieces, slowly dissolved in the mouth; it allays the dryness and heat of the throat, the dysphagia, and often arrests the inflammation. Sylvester especially commends the administration of ice in conjunction with other local treatment; he prescribes small pieces of ice to be slowly dissolved in the mouth every ten minutes, day and night, claiming that it reduces the swelling and checks the formation of membrane. Sir M. Mackenzie says: “In cases where there is much inflammatory action and tendency to suppuration of the glands of the neck, in the first stage of the disease, the application of ice to the neck in an ice-bag or in a bladder is very beneficial (p. 121); also Ringer, p. 69.

Jacobi, Mosler and Ringer strongly commend eucalyptus as antiseptic and disinfectant, used topically and by inhalation. Turpentine inhalations also find their adherents in Taube, Jacobi, Hare and Potter. Raulin advises the application to the surface denuded of the membrane by a curette or by antiseptic irrigation, every three hours, of ℞ Acid lactic, ʒ ss; acid carbolic, gr. xlv; glycerini puri, ʒ j.—M. Especially beneficial in nasal diphtheria. Ammonium chloride, where there is defective secretion of mucous and the expectoration is slow and viscid, is of undoubted benefit, either as a local application or when inhaled by burning half a drachm of the pure salt on the stove or over an alcohol lamp, or gas in the room, or in the "croup tent." It evaporates speedily into a dense white cloud, unirritating and very alleviating (Jacobi, p. 187). Sir M. Mackenzie mentions the use of a varnish, which, by exclusion of air from the false membrane, appears to have an antiseptic influence. He prefers the ethereal solution of gum tolu, 1 part, sulph. ether, 5 parts, as most pleasant to the patient lasting longest and needs to be less frequently applied. The surface of the false membrane should be dried with blotting paper before the application of varnish.

Third.—In regard to the destruction of the germ and its ptomaines, besides the many means already noticed, Hagedorn (*Deutsche Medicin. Wochen.*, No. 28, 1891) recommends the galvano-cautery in the treatment of diphtheria of the larynx and fauces; he advises the use of the stirrup-shaped cautery so soon as the membrane appears; overcomes pain with cocaine. In twenty-four cases thus treated all recovered. Dr. W. P. Munn asserts that when the original lesion is seen at an early stage, and is not extensive, it has cleaned off, healed promptly and been followed by no constitutional disturbance, after thorough cauterization with nitrate of silver (stick?), carbolic acid, or a solution of corrosive sublimate (1 part to 50 of water). Dr. M. Behrens maintains that the topical use of fused nitrate of silver diluted with 10 per cent. nitrate of potash, applied with blunt, cone-shaped, sharp-pointed probes (roughened at the end so that the caustic will not fall off), and the subsequent application of common salt to mitigate the effect of the caustic will prevent the spread of and often avert the constitutional effect of the local infection (*Med. News*, May 9, 1891, p. 624). Dr. A. Seibert (*N. Y. Med. Journal*, Dec. 6, 1891), in a paper entitled "Local Treatment of Pharyngeal Diphtheria," states that hypodermic injections (*into and below the inflamed mucosa beneath the pseudo-membrane*) of two-tenths per cent.



solution of aqua chlorini (an aqueous solution of chlorine containing four-tenths per cent. of the gas) in total doses of two drops, by means of a hypodermic syringe (diphtheritic syringe) especially constructed for this purpose, can be employed without inconvenience or danger on children, and that the chlorine water thus brought in contact with the Löffler bacilli and the inflamed parts evidently tends to check their career in the mucous membrane and to shorten the disease. Dr. Tyndale observes that the use of chlorine water by the Siebert method is only serviceable in tonsillar deposits. Babtschinski recommends the inoculation of cases of diphtheria with the cultures of the erysipelas microbes. As the symptoms of erysipelas showed themselves in from four to twelve hours, and as the erysipelas progressed the diphtheritic membrane gradually disappeared from the fauces, the lymphatic engorgement diminished, and the temperature fell. In fourteen cases treated, twelve recovered. In the two unsuccessful cases death occurred before the development of the erysipelas (*London Med. Recorder*, Sept., 1890).

In the acute stage of diphtheria, Lennox Brown advocates the removal of enlarged and œdematous uvulæ, as removing an impediment to the respiration, as tending to prevent the downward progress of the exudation, and as an easy substitute or means of averting the necessity for the more dangerous measure of opening the windpipe (Brown, p. 346 and 347). G. M. Lefferts has adopted the same treatment (*Archiv. of Laryng.*, vol. ii., p. 82, N. Y., 1882).

If suffocation by membrane be imminent, inhalations of oxygen should be employed, atropine or strychnine be administered, intubation or tracheotomy be resorted to.

In cases of convalescence from diphtheria, the local treatment consists in the application of solutions of boric acid, followed by the local use of weak solutions of antiseptics, such as peroxide of hydrogen, thymol, carbolic acid, chlorate of potassium, or by the use of astringents, such as tannic acid or tincture chloride of iron.

For local paralysis of pharynx or larynx, use hypodermic injections of strychnine, best in nape of the neck, in conjunction with the electric current.

We have not attempted to enumerate all of the remedies employed in the local treatment of diphtheria, but have aimed to bring to your notice those which have the best commendations as to reliability in the practice of the most accurate scientific and experienced observers.

## CONSTITUTIONAL TREATMENT.

BY A. VANDER VEER, M.D.

In discussing the constitutional treatment of diphtheria, I do not wish to present my views in a way that may seem at all dogmatic; but it seems to me that whether we study the disease from an anatomical standpoint, whether as an inflammatory condition of the mucous membrane, with a special tendency to fibrous or false membranous deposit, or whether we look upon it as a primary croupous or diphtheritic condition of the mucous membrane, or a germ disease, there is a constitutional condition that demands a plain, straightforward line of work. I desire here to emphasize that the etiological relations of diphtheria to that of treatment must never be lost sight of. Speaking as a surgeon, and from a surgical standpoint, when we have grafted upon a wound, or upon any of our surgical operations, a diphtheritic condition, one of the first duties that falls to our lot, in the way of constitutional treatment, is to learn the sources of the poison. What are the sanitary conditions? What are the surroundings? If the drainage is bad, it must be attended to at once; if next door to our patient, possibly under his very window, is found a pile of manure filled with dead animal matter, decaying vegetable material, etc., all this must be promptly remedied. The increase of diphtheria in our villages and outlying districts is often to be accounted for in this way. It is a disease which, in my opinion, if not fed by some general cause, its power of infection becomes *nil*, and the early crushing out of its appearance can be predicted with certainty. I am quite sure that in the constitutional treatment of diphtheria too little attention is paid to the condition of the soil underneath the house, in the streets and surrounding portions of country. Cold, wet soil and cellars are undoubtedly a predisposing causes, and must be remedied.

When once we have made the diagnosis of diphtheria, there are certain responsibilities presented to us in the line of treatment that we cannot shirk. We must keep in mind that it is essentially a disease of childhood, that its greatest mortality occurs between the ages of three and twelve years, and in the constitutional treatment of our cases we must bear this fact in mind. Unfortunately, many of the cases occur among a class of people who cannot aid us in all that is desirable in the care of the patient. I would say, if it is possible, when coming in contact with such a case, to take a room in the upper part of the house, disinfecting it thoroughly with sul-



phur, etc., in which place the patient, and see that that the temperature is kept at from 65 to 70 degrees, that the air be moistened somewhat with steam, possibly of lime water or any alkali. The patient should have as pleasant surroundings as possible, with good, cheerful nursing. When there is much swelling of the throat, with the temperature 102° or 103°, I believe that the application of ice, by means of the modern ice-bag placed around the neck, is a proper and justifiable line of treatment. The body should be sponged frequently with a strong solution of bicarbonate of soda in hot water. If the child is at all plethoric and full blooded, I believe much in the theory of alkalizing the blood, letting the child drink of a solution of bicarbonate of potash in cold water, so that he will average from five to twenty grains every two or three hours. This may be kept up from one to three days. These patients, I believe, will also bear, when the membrane seems to be depositing rapidly in the throat, small doses of the bichloride of mercury, say from  $\frac{1}{100}$  to  $\frac{1}{80}$  of a grain every two or three hours, watching the effects carefully. We must remember that in one, two or at least three days from the onset of the disease we have to deal with a condition that tends rapidly to weaken or exhaust the system, and then it is well to leave off the potash, giving of the tincture of chloride of iron, which I believe to be the best of all the preparations of iron that we have for the treatment of this disease; but we must remember that in very young children it is not always pleasant to administer, prepare it as we will in the most palatable manner possible. In that event, I have found some good, reliable preparation of dialyzed iron to be of service. Quinine is also of service, and when we have a case that is tending rapidly to development of abscess, I am strongly impressed that carbolic acid and iodine, administered internally, is to be recommended. We must not tire our patient with too much medication. The bowels may be moved by means of an enema or rectal suppository, and it is seldom that the kidneys need to be stimulated with sweet spirits of nitre or nauseating doses of acetate of potash or digitalis. We must remember that our patient is to be thoroughly supported, and if I were to place side by side nourishment and stimulants in one column, and medicines in the other, and have to select from which to treat my patients, I would give up the latter. Therefore, we must begin our nourishment promptly, and in a manner that is palatable to our patient. When the throat has become hot, swollen, throbbing and constantly dry, there can be no mistake in giving our nourishment, such as beef extract, milk, liquid food of whatever nature we may think best; cold, if it is pleasant

to the patient—plain ice cream is of great service, and frozen milk allowed to melt in the mouth is very gratifying. Plenty of nourishment should be given as often as once in two hours, watching the effect upon the stomach so as not to nauseate, but to sustain our patient well. When threatened with paralysis of any form, then is the time to add to our iron, strychnine or nux vomica, and if accompanied with much exhaustion, to have great confidence in the administration of stimulants. I believe that such of our extreme men in the profession as treat diphtheria with alcohol are not always to be criticized. There are undoubtedly cases saved in this manner.

This is a disease in which, as regards constitutional treatment, I do not believe blood-letting is advisable, not even local application of leeches to the throat. No mercurialization; when we use mercury, we should watch its effects very carefully. No administration of *veratrum viride* or powerful drugs to depress the heart's action. It is essentially an exhausting disease, and after the first onset is over gives proof of this assertion. We should teach our nurses, be they members of the family or outsiders, that it is a disease from which adults seldom suffer, and that in nursing they must do their work thoroughly well. When a case appears in the family, it should be isolated in some way or in some manner, and the rest of the family kept in the dry, healthy open air as much as possible. We should study with great care to make our line of treatment, both as regards the administration of drugs or of food, as palatable to our patient as possible, especially with children. When once a case has occurred in a family, the room in which the patient has been should be thoroughly opened up, thoroughly ventilated, and disinfectants made use of in cleansing the clothing, if thought necessary. Nurses should be made to understand that there is no danger in inhaling the breath of the diphtheritic patient, but that it is from the sputum coming in contact with the mucous membranes or other points of abraded surfaces of the skin that is likely to produce infection, and lead to an attack like that from which the patient is suffering. Food should not be allowed to stand in the room in the presence of the patient suffering from this disease, and no nurse should undertake the care of such patients, particularly if they are to be up at night, without taking plenty of nourishment and, at a proper time in the twenty-four hours, sufficient out-door exercise, so as to keep their own system in a condition of resistance. No better charitable work is carried out in our large cities than the furnishing of nurses who are competent to take charge of such cases among the poor, and willing to carry out the line of treatment prescribed,



## GENERAL DISCUSSION.

Dr. VANDER VEER was glad to have Dr. Curtis emphasize so strongly 'the microörganism, the germ of diphtheria, and believed that the profession did not grasp this point so strongly as they should, and thought that a good deal of attention should be paid to it. He thought Dr. Curtis was deserving of a great deal of credit and thanks for the reading of his paper and the suggestions made. Regarding Dr. Hailes' surgical treatment of diphtheria, he would like to emphasize several points. Tracheotomy was the most difficult, very embarrassing, and the operation a very trying one. More cases of diphtheria got well by intubation than by tracheotomy. Should the operation of intubation fail, then tracheotomy could be resorted to. Regarding tracheotomy, this operation was not to be excluded or condemned entirely, but in most cases where the consent of the parents was asked, the operation of intubation would be listened to much quicker than that of tracheotomy.

As to the ground covered by Dr. Bigelow, he thought the society should feel grateful to both Drs. Hale and Bigelow. Dr. Hale had touched so lightly upon the subject of local applications, while Dr. Bigelow had spoken so thoroughly, he felt like asking the question, Are local applications a success? Some years ago, when he was beginning the study of medicine, applications of sixty grains of nitrate of silver in the ounce of water were frequently applied, with the result that it caused much struggling and gasping for breath, and brought about an extension of the membrane. He was of the opinion that papoid and peroxide of hydrogen were the best for local application. In conclusion, he thought that constitutional treatment would always stand at the head in the line of treatment.

Dr. MERENESS: "It is rather late. Of course, each of us who has had very much experience—a dozen or fifteen years, has become acquainted with many ways of treating diphtheria. The general theory is that the fauces or throat is where the germ strikes and begins to grow. Then comes our treatment. I do not know as I can add any thing to what has already been said." In his own behalf he stated that he had met with more success with chlorate of potassium and muriatic tincture of iron in combination. In addition to that, an atomizer with six drops of carbolic acid to the ounce of lime-water could be used. This solution can be thrown in the nostrils, if desirable, without much resistance. In addition, good nursing, cocaine, a stimulant, plenty of food and fresh air.

Dr. BAILEY: "I would like to speak on the cleansing of houses. I saw, a few days ago, a mild case of diphtheria in a tenement house, rather nicely situated and apparently healthful. Some six years ago several cases occurred there among little childreu, two or more of whom died, the family who lived there at that time having moved away. The rooms were supposed to have been perfectly cleansed and disinfected, and within two years another family moved into the house, and one of their children had diphtheria, in that case the

membrane going down into the larynx, and Dr. Hailes intubated and saved the child. That is a little over a year ago, and in the meantime this family moved away, and another family, now living there, had a mild case, which was treated by sulpho-calcine, a preparation made from lime derived from oyster shells." He wished to show more particularly the persistency with which the germs of diphtheria hang about the premises where the disease has been, as illustrated in the case of that one house.

It had been Dr. PERRY'S fortune (or misfortune) to practice a great many years in a locality where diphtheria was very prevalent. He had used many remedies, and was successful in different cases with different remedies. Having tried all the remedies spoken of, and more, he had boiled his conclusions down to a treatment, which was found to be satisfactory, of the use of peroxide of hydrogen. He had used fifty per cent. without regard to the age of the child. He advised that the use of hydrogen be begun as early as possible with an atomizer.

Dr. CURTIS: Not long ago a very urgent request came to the State Board of Health to go to the country seat in Westchester county of a gentleman well known through the world, on account of there having developed two cases of diphtheria in his family, and I was asked to go down and see what light I might throw upon the subject of its cause. I found the local physicians gathered there, the physicians of each branch of the family soon arrived from New York, and not long after there appeared, also, a leading consulting physician of New York city. I do not know how we could have had more accumulated wisdom under the circumstances to manage the case. The cause of the outbreak was a sewing woman who came up a few weeks before from an infectious district in New York, and brought the disease with her. I accompanied to New York the consulting physician, who inspired all the treatment. I said, "What did you prescribe?" (for I had been busy about the premises, and had not seen the patients themselves. He said, "My prescription was a solution of bichloride of mercury, one to four thousand, given every hour in a wineglassful of milk." I said, "Is that all?" He said, "It was." I thought to myself that for five of the profession to be so called upon, and men brought there from so many distances, and then to limit the treatment to this, was rather treating the poor children in a way the case did not deserve. They died. They died very soon—within twenty-four hours.

Now, Mr. President, I believe in active, vigorous measures in the treatment of diphtheria. I believe in being brutal if necessary. I have had the best success, so far as treatment goes, with an application, by means of a camel's hair brush, of a solution of persulphide of iron, with the use of muriatic tincture of iron, which I believe to be the best of any one thing to give internally, and alcoholic stimulants and food. I think it always desirable and necessary to take hold of such cases with vigor and earnestness.



I feel that I have been much instructed upon the discussion of this subject. I know that the plan proposed by the President of carrying on a similar discussion of every-day topics is going to result in good to all of us, and I have been especially pleased to hear the testimony given by Drs. Perry and Mereness.

There is one thing I would like to say in addition to my paper, and that is concerning disinfection of the room. It is important to make it as aseptic as possible. While fresh air is the best, still there can be considerable accomplished, in addition to this, by using agents which disinfect that air still further. I would recommend the filling of the atmosphere of the room, to some degree at least, with a vapor, by putting in a shallow pan of water some oil of turpentine and adding to it carbolic acid, which, it seems to me, is coming to the front again. I would propose, for this purpose, an ounce each of carbolic acid and oil of eucalyptus, placed in a shallow pan of water, and added to in sufficient quantity to keep the air pure.

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STATISTICS ON BREAST AMPUTATIONS.—Terrillon in a recent number of the *Bulletin General de Therapeutique*, publishes a practical paper on the immediate and remote results of a hundred cases of amputation of the breast performed by himself. They are divided into forty-eight cases of carcinoma with enlarged axillary glands; thirty-one of mixed growths, mainly sarcomatous; twenty-one of adenomata or cystic growths. Out of the first series, forty-two are dead, but recurrence has taken place in all of the remaining six. Of the second series, two only are dead; one of these lived eight years, recurrence taking place in the region of the scapula, the other lived four years, recurrence showing itself in the axillary region. Of the last series all the patients are alive. Thus, out of the whole number submitted to operation, fifty-six are still living, and forty-four were only benefited in varying degrees. With regard to the forty-four carcinomatous cases the following details may be given of the periods of their survival: One patient lived seven years; two survived five years; four, four years; five, three years; twelve, one year and a half; and lastly, eight less than one year. He remarks that recurrence seems to be the rule when, after removing the breast, it is found at the same time necessary to extirpate some of the axillary glands. The recurrence, moreover, most commonly takes place in the first five years, that is, there is seldom survival beyond the seventh or eighth year. The paper includes various remarks about complications arising from the operation and the after-treatment.—*Med. Press.*

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REVIEWS AND BOOK NOTICES.

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A PRACTICAL TREATISE ON THE DISEASES OF WOMEN. By T. Gaillard Thomas, M.D., LL.D., Professor Emeritus of Diseases of Women in the College of Physicians and Surgeons, New York; Consulting Surgeon to the New York State Woman's Hospital; Honorary Fellow of the Obstetrical Society of London; Corresponding Fellow of the Obstetrical Society of Berlin and of the Obstetrical Society of Philadelphia; Honorary Member of the South Carolina Medical Association, and of the Gynecological Society of Boston. Enlarged and Thoroughly Revised by Paul F. Munde, M.D., Professor of Gynecology at the New York Polyclinic and at Dartmouth College; Gynecologist to Mt. Sinai Hospital; Fellow of the American, British and German Gynecological Societies; Corresponding Fellow of the Edinburgh and Philadelphia Obstetrical Societies, and of the Gynecological Society of Boston. Containing three hundred and forty-seven Engravings on Wood. Philadelphia: Lea Brothers & Co. 1891.

It will be a great comfort and source of satisfaction to gynecologists to know that this valuable work is to be preserved to the profession. Few men have ever done so thoroughly well the historical part of the subject as did Dr. Thomas in the preparation of his work; this, through the excellent judgment of Dr. Munde, has been retained. Perhaps no more difficult position can be given a writer than the one that was accepted by Dr. Munde to revise a book that had been for so long a time a standard authority. The *Medical News* has well said: "In this revision Dr. Munde has undertaken to preserve the practical nature of the work, which has rendered it so useful to the student and physician, and, also, to bring it fully abreast with the best gynecological practice of the present day. The completeness



of the revision is evidenced by the fact that the new illustrations number over two hundred. They include a series of artistic engravings, novel in design, and most successful in vividly portraying various affections and methods of treatment."

Surely, Dr. Munde is deserving of the thanks of the profession, for the admirable way in which he has accomplished his task. As an evidence of the manner in which the book has been brought up to the modern standard of gynecology, the following extract from the chapter on "Vaginal Hysterectomy" will well illustrate many of the valuable pages that the book contains.

"VAGINAL HYSTERECTOMY.—This operation dates back very much farther than is generally supposed, since it was first performed by Langenbeck in 1813, the patient living thirty years after the operation. In 1822, Sauter, of Zurich, performed the same operation, the patient recovering, but dying four months later. Blundell repeated the operation in 1828, and, in 1830, Recamiér and Delpach, together, did the same. After this time the operation seems to have been more or less forgotten, until the high mortality of Freund's abdominal method induced Prof. Czerny, of Heidelberg, in 1879, to revive it, in which action he was speedily followed by Schroeder, Olshausen, Martin, Billroth, Fritsch, and others, until now, the statistics of vaginal hysterectomy for cancer foot up to a total of many hundreds. Practically, however, the operation, as now performed, is scarcely a dozen years old.

*Indications.*—The one chief indication for the complete removal of the cancerous uterus through the vagina is the positive and absolute limitation of the disease to that organ. As already stated, authorities are still in doubt, at least in this country and in England, as to whether cancer of the cervix warrants the removal of the entire organ. In Germany, with the exception of Carl Braun, and, possibly, some others, the question is settled in favor of the complete extirpation. As regards the justifiability of removing the whole uterus in cases of cancer of the body of the organ, there can, of course, be no discussion. It is for this special location of cancer that the complete removal of the uterus seems expressly indicated.

*Contra-indications.*—Whenever there is the slightest appearance, or even suspicion, of the involvement of the peri-uterine tissues (vagina, broad ligaments, pelvic cellular tissue, bladder or rectum) in the cancerous degeneration, the removal of the whole organ is absolutely contra-indicated. We are aware that, in making this positive statement, we are opposed to the views and practice of many prominent operators, notably in Germany, who have often removed the uterus with a portion of the diseased adjacent tissues, with a recovery of the patients from the operation; but our experience and logic leads us to except such cases from those warranting the operation, since it is scarcely probable, or even possible, that the disease can have been entirely extirpated under such circumstances.

*Method.*—A number of technically more or less different methods of vaginal hysterectomy have been introduced and practiced by

different operators. Schroeder advised opening the posterior cul-de-sac first, retroverting the uterus, and drawing the fundus out through the opening, and then proceed to ligate the broad ligament on either side with several strong silk ligatures, and divide the attachments; finally, the anterior cul-de-sac was opened, and the bladder detached from the vagina. Czerny first opened the anterior cul-de-sac, incised the vaginal vault around the cervix, pushed up the bladder, opened Douglas' pouch, and then retroverted the uterus; finally, the broad ligaments were ligated in from three to six portions on each side, and the uterus excised, Olshausen does not retrovert the uterus, but draws it down with vulsella inserted into the cervix, incises the vaginal wall all around, gradually separates the connections of the bladder and the rectum with the finger, ligates bleeding vessels, opens the peritoneal cavity in front and behind, and ties the broad ligaments by an elastic ligature, passed through by means of an aneurism needle, and then removes the organ. Peter Müller advised cutting the uterus in half, and removing each half separately. This method applies chiefly to cases where the organ is very much enlarged, and is not generally practiced. Fritsch ligates the tissues step by step, first on one side and then on the other, drawing the uterus down as far as possible by vulsella, and dividing the tissues between the uterus and the ligated portions as he proceeds. The anterior cul-de-sac is then opened, the bladder pushed up, bleeding vessels secured, the same done with the posterior cul-de-sac, and the remaining attachments of the uterus then divided.

*Operation.*—The method which we have employed, and which is subsequently that of Martin and Fritsch combined, is the following: With the patient in the lithotomy position, the vagina is thoroughly disinfected with a 1 : 5000 bichloride solution, gangrenous and infectious portions of the cervix having been removed by the currette, either previously or at the same time. The cervix is firmly seized with one or two vulsella forceps, drawn down as far as possible to the vulva, and two deep ligatures of stout silk are passed through each lateral vaginal pouch, and tied, in order to compress the uterine arteries. The cervix being now pulled sharply upward, a transverse incision is made well outside the diseased tissues in the posterior cul-de-sac, and Douglas' pouch speedily opened. The opening is enlarged with the fingers, and the peritoneum stitched by quite deep sutures of catgut to the vaginal wall. This is a very important point, because severe hemorrhage is likely to occur from the vessels in the cellular tissue, the blood running into the peritoneal cavity during the rest of the operation, and being overlooked. We are convinced that two of the fatal results among our early operations were due to our having omitted to notice this hemorrhage. A well disinfected sponge of the size of an egg, with a long string attached (which should be black, in order to distinguish it from the ligatures), is passed up into the abdominal cavity, in order to prevent the intestines from coming down. The index finger of the left hand is now introduced into the abdominal cavity through the opening in



Douglas' pouch, and the vaginal wall on the left side lifted up sharply. With a stout aneurism needle, or a so-called Desclamps' needle, curved toward the left, a strong silk ligature is passed about a quarter of an inch from the border of the uterus, and securely tied, one end being cut short. The tissue included by this ligature is now divided by scissors, and another one applied higher up, and so on until the upper limit of the cervix has been reached. The same procedure is now repeated on the right side, and, when both sides have thus been ligated and separated, the uterus remains attached only by the upper portion of the broad ligament and the connection with the bladder. The finger in the abdominal cavity now pushes forward the anterior cul-de-sac on one side, and an incision is made transversely through the vaginal wall, and the bladder pushed up with the index finger of the right hand or with the handle of a scapula, a sound being kept in the bladder at the same time for greater safety. The peritoneum, between bladder and uterus, is now sharply pressed upward by the left index finger in the abdominal cavity, and opened, by scraping with blunt scissors. The fingers enlarge the opening transversely, and nothing now remains to do except to ligate by successive stages the remaining attachments between the uterus and the upper portion of the broad ligament. Usually, the ovaries and tubes come into view during these last stages, if the firm traction on the organ, which should be kept up during the whole operation, is not relaxed; and, of course, it is best to include these organs in the ligatures, and remove them with the uterus. This is not always done, it is true, but we have always endeavored to do it, and have usually succeeded. To leave the ovaries behind is simply to subject the patient to the annoyance of the continuation of an entirely unnecessary function, namely, menstruation. We have found the last stages of the operation, that is, the ligation and division of the upper portion of the broad ligaments, to be among the most difficult and misleading of the whole proceeding; still, a perseverance on the lines indicated above can but result in perfect success. It will be noticed that in this description the uterus is neither retroverted nor anteverted, except at the last moment, when the upper portion of the broad ligament is divided, but that it is removed in precisely the axis which it occupied in the body. As soon as the uterus has been removed, the anterior peritoneum and vaginal walls should be sewed together with catgut, if this has not already been done when the peritoneum was opened; and it is a good plan to stitch the stumps of the broad ligaments to the vaginal incision on either side. Any bleeding vessels must be caught up and tied, or the bleeding stopped by sutures passed beneath them, and the operation should not be considered complete until every vestige of bleeding is entirely arrested.

The sponge is now removed from the abdominal cavity, and it will be found that, quite to the surprise of the novice, the opening in the vaginal pouch is comparatively small; indeed, many operations are performed without the intestines or omentum ever appearing to

view. Some operators recommend closing the vaginal vault entirely, but it is preferable to provide for the drainage, and the majority thereof leave it open, packing the vagina lightly with iodoform gauze. The ligatures are carried out of the vagina, and tied together in bundles, separating those of the anterior, posterior and lateral walls separately. The patient is now put to bed, and an ice bag may be applied over the abdomen if the operator thinks it desirable. The operation, according to the skill of the operator and the greater or lesser difficulty of the case, may last from twenty minutes to an hour. The after-treatment consists in carefully drawing the urine, if the patient cannot void it herself, keeping her carefully in the recumbent position, although allowing her to turn on either side, if she desires, moving the bowels after the third or fourth day by mild laxatives or enemata, and scrupulously avoiding any interference with the gauze packed in the vagina until at least the fourth day, even though the gauze may be saturated by the secretion, usually sanious, from the wound. On the fourth day, or, perhaps, even later, the gauze should gently be removed, and need not be replaced. Vaginal injections should be scrupulously avoided for at least a week, and, even then be postponed until the complete closure of the vaginal vault seems assured. Cases are on record where early vaginal injections re-opened adhesions, permitted the entrance of the injected fluid into the peritoneal cavity, and caused death. In place of ligatures to compress the vessels of the broad ligament, stout, long forceps have been used by Pean and Richelot (both of whom claim the priority of this suggestion), which were left *in situ* for from forty-eight to seventy-two hours, until complete obliteration of the compressed vessels had been attained. In using these forceps the posterior vaginal vault is first opened, and all bleeding vessels secured by catgut ligatures, as already described; the anterior vaginal vault is then opened on the finger into the peritoneal cavity, the bladder separated, and the peritoneal and vaginal walls sewed together with catgut. The broad ligaments having been isolated on either side, one large clamp is passed from above and the other from below, effectually grasping between them all the tissue of the broad ligaments. The uterine attachments are then divided, and the same manœuvres repeated on the right side. The handles of the clamp should be secured by ligatures, and, if thought best, the blades of the clamps may be prevented from slipping by passing a deep silk ligature through the broad ligaments on either side and tying it over the clamp. Special clamps of proper thickness and length have been devised for this purpose by Pean, Richelot, Cleveland, Polk and others. Undoubtedly there is a great saving of time by the use of these clamps, but, unfortunately, not every case permits of their employment. They are said to produce sloughing and adhesions of the intestines and omentum to the edges of the wound, and hence we believe that many operators who formerly employed them have returned to the use of the progressive silk sutures as described above. Some operators have employed as many clamps as appeared



necessary to compress all bleeding vessels, using a clamp in place of each ligature, as described above in the operation practiced by us. Thus a dozen clamps or more might be left in a wound. The handles are carefully protected by being wrapped in iodoform gauze. It is curious to notice the entire absence of shock, pain, and of any evidence of a severe operation having been performed in patients who have undergone a successful vaginal hysterectomy; they appear like women after a normal labor. It is scarcely safe to allow the patient to sit up under two weeks. The ligatures should be removed gradually as they become loose, gentle traction being made every now and then after the first two weeks. We have seen them retained as long as six weeks after the operation, requiring finally to be removed with scissors.

*Dangers.*—The chief dangers from this operation are primary and secondary hemorrhage, shock, septicæmia and peritonitis. Both primary and secondary hemorrhage can be controlled or guarded against by careful employment of sutures and ligatures, and the precaution never to leave the patient until all trace of bleeding has been completely arrested. Shock should really never occur, and, indeed, we doubt whether, when it does take place, it is not due to concealed hemorrhage rather than to what is really known as shock—that is, acute nervous prostration. Septicæmia is a very rare occurrence, if careful antiseptic precautions—that is, irrigation by a very weak bichloride solution, 1 : 10,000, or, what is safer and equally good, the Thiersch solution—has been kept up during the operation. Peritonitis, likewise, is rarely to be feared. One danger, the avoidance of which lies almost entirely in the hands of the operator, is the accidental injury of the bladder and uterus during the operation. This accident has occurred with some of the most skillful operators, and therefore by no means necessarily implies carelessness or want of skill on the part of the surgeon. If the bladder is opened, it should be immediately sutured with catgut and the wounded ureter, if possible, restored to its continuity by the same method. Occasionally the ureter has not been wounded, but has been included in one of the ligatures; if this accident has occurred on both sides, acute retention of the urine and acute uræmia, with convulsions, coma, and rapid death, have been the result, the cause of the fatal issue not being discovered until the autopsy was made. This accident can almost always be avoided, if care is taken to push up the bladder sufficiently, so that it and the ureters are always beyond the reach of the knife and ligatures.

*Results.*—The results of vaginal hysterectomy may be divided into immediate and remote. Immediate results mean the percentage of recoveries from the operation. While the early operations showed a comparatively large mortality, recent statistics seem to prove that the operation is not a very dangerous one; the most recent figures being those of Leopold, who, out of a total of eighty operations, had only four deaths, or a mortality of only five per cent.; Kalténbach, out of fifty-five, but two deaths, or four per cent.;

Ott had thirty operations, with no deaths; Pean twenty-five operations, with no deaths. Unquestionably, the percentage of mortality will depend very greatly both upon skill of the operator and upon his choice of favorable cases; still, we have operated upon several in which the extension of disease to the broad ligaments (not recognized until during the operation), rendering them very unpromising and difficult, with complete and uneventful recovery.

Remote results—that is, permanency of cure. Accordingly as the indication for the performance of vaginal hysterectomy for cancer, either of the cervix or body, has been correctly followed, a complete cure—that is, non-recurrence of the disease—is to be expected. If the operator is perfectly sure that his line of incision has gone through entirely healthy tissues, and that he has succeeded in thoroughly extirpating the cancerous material, so far as his finger and eye permit him to judge, he should reasonably expect to have effected a permanent cure. Cancer, being at its outset unquestionably a purely local disease, can be undoubtedly permanently cured, if all the diseased tissue, with every possible ramification, is thoroughly removed. The difficulty of making a correct estimate of the limit of the cancerous infiltration is as yet the great obstacle, not only to the formation of an infallible indication for hysterectomy, but also to the absolute certainty of a complete removal of the diseased tissue. Hence, for the present, it is almost impossible for us to say, in a large number of cases, whether we have succeeded, by the complete extirpation of the diseased uterus, in effecting a permanent cure, or not. Even though we firmly believe that this has been the case, we may find, to our regret and surprise, that, sooner or later—even after as long an interval as two or three years—the disease reappears at some point of the cicatrix. This recurrence cannot be considered in the light of a new cancerous infiltration, but merely as a cropping out of latent germs of the disease, which were not apparent at the time of the operation. We are still, therefore, obliged to judge of the justifiability of vaginal hysterectomy for cancer and of the permanency of the cure thus effected by statistics reported by surgeons who have a large number of cases of this operation to record.

Among the latest of this series is that published by Leopold, who lost but four out of eighty vaginal hysterotomies. Of the seventy-six women who recovered, the first dating back five and one-half years, fourteen have since succumbed, of whom ten, only, died in consequence of a recurrence of the cancer. Of the sixty-two still surviving, three only have been attacked by a recurrence; the others are cured, the time since the operation varying from five and one-half years to one year and three months. Of the seventy-six patients remaining under observation after recovery, there were free from recurrence—

At five and one-half years,	. . . . .	3.
At two and one-half years,	. . . . .	2.
At four and one-fourth years,	. . . . .	2.



At two and one-fourth years, . . . . .	2.
At three and three-fourths years, . . . . .	3.
At two years, . . . . .	3.
At three and one-half years, . . . . .	1.
At one and one-half years, . . . . .	3.
At three and one-fourth years, . . . . .	6.
At one and one-fourth years, . . . . .	3.
At three years, . . . . .	2.
At two and three-fourths years, . . . . .	3.
Between one year and three months, . . . . .	4.

It will thus be seen that seventy-two of these seventy-six cases are still well, without recurrence of the disease, from one to five and one-half years after operation. Certainly, one cannot ask for much better results in a disease which invariably proves fatal if allowed to proceed undisturbed. Our rather limited experience with vaginal hysterectomy leads us, unfortunately, to deplore the fact that we but rarely see cases of cancer of the uterus in which the indications laid down in the preceding pages can be scrupulously carried out. The vast majority of cases of this disease which come to our notice have advanced so far that there is little or no prospect of entirely removing the diseased tissue by any of the methods which we have described. There can, in our opinion, be no doubt whatever, if the cancer of the cervix or of the body of the uterus is observed at a stage so early that the surrounding tissues are absolutely healthy, a complete cure can be achieved by an entire removal of the affected parts, or the whole organ. This rule, we believe, applies to cancer situated in any part of the body where its surgical ablation is practical, without interference with the vital functions.

Before concluding the discussion of the justifiability of the radical operations for cancer of the uterus, we wish to state our conviction that whenever there exists a reasonable chance that the disease can be entirely eradicated by the removal of the cancerous cervix, or of the whole uterus, the patient should be given that chance. But we are unquestionably of the opinion that to remove the whole uterus, or even to perform high amputation of the cervix, when the cancer has already invaded neighboring tissues, which it is impossible for us to excise or destroy, it is not only useless, but unjustifiable. Furthermore, we are inclined to say the removal of the entire organ by the vagina, even in cases of cancerous disease of the cervix alone, rather than to take the chances of a high amputation of the cervix, when possibly the disease has already extended beyond the internal os. The mortality of the vaginal hysterectomy (Leopold, five per cent.) is so low that it need not be feared.

Merely as a matter of record, we will state that Zuckerkandl and Woelfler have proposed and practiced the removal of the cancerous uterus by means of an incision made over the sacral region, claiming that it is much easier in this manner to expose and extirpate this organ. Those operators who have had occasion to perform vaginal hysterectomy will scarcely find it necessary to adopt this new procedure, and it is very doubtful whether it will gain many adherents."

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SOME EDUCATIONAL PROBLEMS.\*

BY WILLIS G. TUCKER, M.D.,

ALBANY, N. Y.

GENTLEMEN—The course of lectures in the College of Pharmacy has always been opened by the delivery of an introductory address. The custom is, perhaps, a somewhat antiquated one, and I think it might be urged with some reason that it would be “more honored in the breach than the observance,” and that the time thus given to formal greetings and generalities might be more profitably spent in beginning the real work of the course; but, be this as it may, it is none the less a real pleasure for me to greet you in the old way this evening, and possibly the observance of the custom may be not entirely devoid of all advantages. It, at least, serves to bring together class and faculty at the beginning of the session, and prepares the way for that free intercourse which should thereafter exist between teacher and pupil; for the time has gone by when the duty of the teacher, in such a school as this, is fulfilled by delivering, and that of the pupil by hearing, formal lectures at stated times. Between them there should be a closer bond of union than the mere existence of such mutual duties implies, for both are engaged in a common pursuit, and should, with common aims and purposes, work side by side in full and hearty sympathy. We hope to feel that you are here, not of necessity nor from caprice, but because you have freely chosen for yourselves this vocation to which you are, in very truth, called, and are therefore prepared to make the most of the opportunities which this school offers you for perfecting yourselves in your chosen profession; and we further hope that you will feel that this faculty desire to aid you in the accomplishment of this end in every way in their power and by the employment of every

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\*The introductory address delivered at the opening of the eleventh lecture course at the Albany College of Pharmacy, October 5, 1891.



means which they can command. If, then, this introductory exercise shall bring us at the outset nearer together, and shall serve to establish between us lasting friendly relations, helping us the better to understand each other's aims and needs, the hour thus passed will not have been spent entirely in vain.

We enter, this evening, upon the second decade in the history of this school. Founded in 1881, it began its work of instruction in October of that year, and last year saw the largest class matriculated and graduated which the institution has known. The growth of the school has been steady and its progress most satisfactory. The first class numbered three graduates, and then were graduated classes of ten, thirteen, eight, ten, seventeen, eleven, twenty-two, eighteen, and last year sixty-nine pupils were in attendance, of whom twenty-four received full diplomas, and two others, not having completed their apprenticeship, received certificates of proficiency. The trustees and faculty of the school are, however, not unmindful of the fact that mere increase in the size of its classes does not necessarily imply true growth and real progress, and they have therefore sought, year after year, to strengthen the course by increasing and improving the instruction given. Pharmacy, considered either as a science or an art, is making rapid strides, and it is the earnest desire of those who govern this school that it should keep pace at all times with these advances. It is not so much that every new thing must be taught merely because it *is* new, as that those who teach should be cognizant of what is both new and of real value and in full sympathy with the progressive spirit of the age. Much of the elementary work in such an institution as ours is as far as possible removed from novelty, though none the less of the first importance, and the wise teacher is he who gives to each part of his course the time that its relative importance demands, neither confining himself to the foundation principles in his department nor sacrificing these essentials in a search for novelties with which to entertain his hearers or display his own erudition. Under the circumstances which at present exist, the teacher, in a school like this, labors under some disadvantages. The time at his disposal being limited, owing to the fact that most of his pupils devote a considerable share of their time to service rendered employers, he must restrict his course at many points, and, in addition to this, as they come to him very differently prepared to begin the subject to be studied, he has the greater difficulty in deciding where he may best curtail or condense and where his instruction should be more ample and detailed. Much of this

difficulty might be obviated if more time were given to the course and an elementary knowledge of the subjects taught was required of all pupils at entrance, and in this direction our colleges of pharmacy are tending. In the near future, I believe, two or three years will be deemed none too long a time to be devoted exclusively to college work and a better preparation for the work of the course will be required at entrance, but such changes as these cannot be effected in a day; they must be gradually brought about as the public comes to realize more fully the value of a thorough education in pharmacy. In our own school the number of hours occupied by lectures or laboratory work is more than twice what it was during the first few years of its existence, and yet we feel that were it doubled again the time would still be insufficient for the work to be accomplished. During the past summer the pharmaceutical laboratory has been refitted and admirably arranged, and I trust that the improvements which have been made will meet your approval. The courses to be pursued by both senior and junior classes have been systematically planned, and we feel confident that they will prove both profitable and satisfactory and that the laboratory work of the college in the departments of pharmacy and chemistry will be more thorough, practical and in all respects more valuable than ever before. We expect still further to enlarge and strengthen our course from year to year, increasing the number of lectures, recitations and hours spent in laboratory work, and if we are encouraged in so doing by the support of those interested or engaged in pharmacy, we can, ere long, remedy many of the present imperfections of our course. And by this you will understand me to mean the course as given in most of our colleges of pharmacy to-day—a course not long enough nor thorough enough to satisfy those who desire to see pharmacy raised to a higher level than it occupies at present among the sciences, though I would by no means be understood as implying that it is too brief or superficial to be of real value, for such certainly is not the case. With all its imperfections and limitations it is yet fairly well adapted to present legal requirements and the demands of the public; is vastly better in many respects than that given in our schools ten years ago, and is one which, if diligently pursued, must be of great value to the student. And, when all is said, what course can be of value to any pupil who does not apply himself with diligence to its prosecution? Often as I have emphasized the fact, I am again constrained to reiterate that teachers and books, no less than the most elaborate apparatus for imparting instruction, are use-



less to him who will not devote himself with assiduity to the acquisition of knowledge. No external equipment, no mere possession of titles or degrees, can make a learned man. Personal effort and natural capacity are more than school or teacher. "A man that is young in years may be old in hours," says Bacon, "if he have lost no time." Treasure these golden words, and remember that success in life, worthy of the name, is chiefly dependent upon individual effort.

It has long seemed to me that many of our ideas concerning educational methods and the management of our schools and higher institutions need decided modification, and I ask you this evening to consider briefly with me some of these educational problems. Wide differences of opinion among educated men and educators of course exist, and during the last few years we have seen the value of the present college course, as a preparation for the after-work of life, again and again called in question, and yet I think it must be admitted that the great majority of educated men, so called, meaning chiefly those who have pursued higher courses of collegiate instruction, hold very conservative views as to the value of such courses, the management of our schools and colleges and the methods employed in teaching. Sentiment and tradition have influenced us in too great a measure; a disposition to take as our model, in a new and growing country, the educational methods long pursued in older lands with different institutions and social orders, and an indisposition to adapt our system to the real needs of our own time and our own people, have had much to do with some of our failures in education. But these factors, however important, have by no means been the only influences which have been at work. So rapidly has our population grown that in some cases our high schools and colleges have become little else than great instruction mills for grinding out at wholesale men and women all of much the same grade of intellectual fineness. We need some method by which the individual capacities and peculiar needs of each pupil may be earlier distinguished, so that the course of study may be adapted to the pupil, rather than that the pupil should be conformed to the methods and the curriculum of the institution in which, very often, chance or the desire of others has placed him. It is true that the young pupil often does not know his own needs, and is by no means always the best judge as to the studies which he should pursue, but, nevertheless, I think that at an earlier day those studies which are related to the business or profession which he proposes to follow should be selected by him or for him. My experience has been that those boys who at

an early age show a decided liking and aptitude for a particular calling succeed best in after life. Such boys often educate themselves largely, and easily acquire a knowledge of those subjects which are congenial to them, for, say what you will about the value of disciplinary studies, we profit little by applying ourselves to subjects for which we have no liking and which seem useless to us, and as we grow older we find that it is easy to comprehend and remember those things which it is essential for us to know, and easy to forget that which has no bearing on our work. A century ago a man who desired an education might obtain it, in a way, by following a prescribed course of study, but so greatly has knowledge grown that it is no longer possible for any course of study, which the limit of human life admits of pursuing, to impart even a tithe of what is known to-day. To hold fast, then, to ancient traditions, asserting that every educated man must of necessity have acquired just so much Latin, Greek and mathematics, is to adopt an untenable and unreasonable position. The prospective banker or man of business, lawyer, engineer, clergyman, physician or pharmacist, each needs instruction along different lines after the preparatory school has been left behind, and it seems to me irrational to assert that the same mental pabulum should be supplied to each during the most valuable formative period of life. The increase in the number of elective studies in the college curriculum has been a step in the right direction but it does not go far enough. Much still has to be learned by the average pupil which is relatively of little importance to him, and this is a positive injury in that it entails a loss of invaluable time. My contention is, in part, that too long a time is now required of the student in doing preliminary work. He leaves his academy at eighteen; college at twenty-two or twenty-three; professional school at twenty-six or twenty-seven, and then devotes two or three years more to post-graduate study or foreign travel to "complete his education," when he should have finished this preparatory work long before and been well established in the real business of life, before youthful ardor and enthusiasm had cooled, energies relaxed and ambition ceased to be a powerful incentive to action. I believe that at the present time young men select and enter upon the line of work which is to be theirs for life at too late a day, and I have little hope for the success of a man who at the age of twenty-five is not yet in some sense a producer, by which I do not mean merely a money-maker, though the acquisition of wealth is by no means to be despised, but that he should be doing something more



than merely getting ready to do something. The man who at twenty-five is not yet taking care of himself and at least making ready to do his share in adding to the world's knowledge, comfort or wealth, may have certain uses in this complex life of ours but it is not easy to discern just what these uses are.

Now if it be said that there will always be a certain class of educated men, living by the labor of others, benefitting by their toil and themselves doing no useful thing, I answer that perhaps it may be so, but that I must not be asked to believe that such men are very useful members of society and that our educational institutions should seek to increase their number. They exist, as yet, in large numbers in other lands and by the influence they exert, chiefly through the property they control, constitute a far too important element in the community; but we need no such class in a country founded upon the principles which underlie this government of ours and, I think, we must needs look not only with disfavor, but with something akin to alarm, at any tendencies which in this land threaten to create an educated, indolent and wealthy class; for such a class, when it becomes an important element in the population, will always seek, through the natural selfishness of its members, to put additional burdens upon those less intelligent and fortunate than themselves, for upon their labors such a class depends for the luxuries, even the necessities of life. Within a few days, Mr. Gladstone has warned the House of Lords of the folly of opposing public opinion and measures of reform originating with the people. "I, myself," he says in his Newcastle speech, "in 1860 and 1861, had the felicity or infelicity to be in conflict with the House of Lords. We had a great battle upon the repeal of the paper duties, one of the most difficult and important questions in the whole free trade controversy. You know what the consequences have been in the establishment of a free press, which has done more than any other single cause to educate the country, and to which we mainly owe the vast extension of the franchise which has enabled us to multiply ten-fold those who take part in elections." The English hereditary chamber rests upon an unstable foundation—is liable at any time to be overthrown, and its abolition will not long precede that of the crown. Such meetings as that at Newcastle point plainly to republicanism in the near future in England. At home and abroad, on every side, are signs of coming change. Liberal ideas, socialistic ideas, Christian ideas—call them what you please—are coming to the front more and more. Questions, which a few years ago would have been treated

by the press, the pulpit, and the people generally, either with contempt or severest denunciation, now receive respectful consideration in the same quarters; and yet there are many still who, blinded by self-interest, entirely fail to recognize the great changes that are taking place in public sentiment and would shut out, so far as they may, the new light which is shining more and more brightly in the world. This very summer I met an educated gentleman, American born, the son of a New England teacher of note, who deliberately asserted that universal suffrage was a mistake, our presidential elections a menace to the stability of the government, our institutions a failure and the foundation principles underlying our government too antiquated to last much longer. In his opinion, we needed a standing army, like that of Germany, to put down the uprisings, which he feared, of what he was pleased to call "the people" or "the masses," and he held the opinion that if a president chosen by the people could be replaced by an emperor, of the Czar of Russia type, it would be better for the country, by which I take it he meant that the people on top of the coach, to use Bellamy's phrase, would sit in their places with a greater sense of security. And there are plenty of men, educated men, who hold similar opinions. With sounder teaching in our schools we should have less of this frothy nonsense, I think, and little or none of it were the education of the people more directly under the control of our national government.

This is, perhaps, neither the time nor the place for a discussion of any of those social or economic problems which are forcing themselves upon the attention of thoughtful men to-day, and yet, in a sense, many of these questions are closely related to educational problems and it seems to me that it behoves all educated men to recognize the existence of the tendencies to which we have referred and to do their part to avert the untoward results which may flow from them. If we are desirous that our present social order should be not merely maintained but improved by the correction of existing abuses and wrongs, rather than that existing wrongs should be righted by a social upheaval, which will bring disaster of all sorts in its train, then we must not close our eyes to these wrongs but must seek a remedy for them, and, I believe, that in the better education of the people will be found the cure for many ills. Our youth must be thoroughly equipped for the work of life, and the avenues of learning must be opened to the poorest student who is deserving of instruction. It is not so much that we have not at present great colleges and universities with large endowments and extended courses



of study, but these are under essentially private control, are hampered by many traditions, and appeal to a limited part of the community only. We need other institutions, or more room in those that we have, for worthy students who are unable to meet the present expenses of higher courses of study. It is true that we have scholarships and a variety of helps already for indigent students in most of our institutions of learning, but the number thus benefited is comparatively small. Many believe that the needed relief should come through state aid and, for myself, I can see no reason why education by the state should generally stop with the common school and seldom extend beyond the high-school. Is it not possible that the time may come when our national government will control many of our institutions now managed by individuals, corporations, or states, and expend part of the revenue derived by more equitable and reasonable methods of taxation than those which now exist, in establishing and maintaining great universities, with preparatory schools in connection therewith, in which any pupil may obtain education in any department, poverty being no bar to entrance, and capacity and industry being alone necessary to maintain standing. Such a conception may seem visionary to some, but I am fain to believe that to others, to those who hold that the state should be in a greater degree the distributor of the wealth yielded by its natural resources and owes it to its citizens to minimize their burdens and equalize, so far as possible, their advantages and opportunities, such a possibility will seem worth the endeavor to transform into a reality.

We need, then, a sounder common school system throughout our land; a greater uniformity in the methods of imparting rudimentary instruction, and attendance upon school required of all children of proper school age. Without regard to color or nationality; whether in the cotton-growing or the coal-mining regions, in city or country, the children must be educated if we are to expect them to make good citizens. Ignorant foreigners crowd to our shores, and only by educating their children can we hope to make them Americans other than in name only. We need better methods in our high-schools and academies; better drill in the fundamental English branches and less of languages and science, music and literature in our lower schools; and I think that a recent editorial writer in one of the New York dailies, commenting upon the public schools of that city, says, with reason, "It is painful to reflect upon the time and tissue, and mental, if not moral, strength, that are wasted upon studies which have no place in the popular curriculum. And it is

discouraging to find how small is the foundation of sound and thorough knowledge beneath. \* \* \* What proportion of all our children as they leave the schools forever are able, for instance, to read English aloud with fluency and understanding, and to write it with simplicity, clearness and ease? We venture to say that one in ten would be a sanguine estimate. And yet not only is there no other single acquisition to be compared with this in utility, but there is no other test of fitness to teach a child so simple, so direct, and so conclusive. This is a broad statement but we believe it will hold good under all circumstances. To read and write in the way we have indicated means good eyes, quick ears, a clear head, a trained voice, delicate perceptions, self possession, and knowledge of many things. We are not afraid of the test, and we earnestly commend it to those who are in large measure responsible for the future well being of this community."

Many reforms then are needed in our preparatory schools, and in our higher institutions the case is not otherwise. In them we need an earlier adaptation of studies to the pupils' needs and less time wasted in the acquisition of a mere smattering of comparatively useless things, and more than all we need great schools where special training in higher branches and technical pursuits may be afforded to all those worthy of advancement, without regard to wealth, influence or position. Could our whole educational system be placed under the control of the national government, instead of being left to states and localities, many of the desired changes might be quickly effected. We might then have common schools throughout our land well taught and of uniform grade; high schools without politics or favoritism; colleges no longer catering to the rich, selecting their presidents with a view to the money they can raise, and making athletics a principal part of their curriculum; and professional schools which should be more than private money-making enterprises. I mean to bring no general and indiscriminating charge against the educational institutions of our country, but I do say that, admirable as our public school system is in some of the states, it is entirely inadequate to the needs of the people in others\* ; that many of our high-

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\* A recent report of the Connecticut State Board of Education gives the result of an exhaustive investigation of the condition of the public schools of New London county, administered under the regulations of the "district" system. It was found that "about two-fifths of the children in school above ten years of age cannot write;" seventy-one schools were considered "utterly inefficient;" one hundred and seven were doing "some good;" fifty-eight were rated as "useful," and only twelve called "efficient." About fifty school houses in the county were found "unfit for use" and many of the teachers were "untrained and incompetent." That such a deplorable condition of affairs could exist within an hour's ride of Yale College seems almost incredible, and yet in many parts of our eastern states things are no better and in many of the southern states they are much worse.



schools and colleges are not so managed as to benefit the community as they might, and that, of our professional schools, many colleges of medicine at least are purely business enterprises, maintained, first, to make money or reputation for those who conduct them and, second, to educate their patrons in the shortest time and with the least trouble.

And the control of our educational institutions would be but one of many advantages which would result from a greater centralization of power in the general government, in which direction, I trust, we are tending, ever remembering that this government is of the people, by the people and for the people, and that if this be so we need not be jealous of the rights of the states nor fearful that individual immunities will be abridged, nor alarmed at the cry of paternalism so often raised, for whatever may have been for the intent of the framers of our constitution, we are to-day first a nation and then a confederation of states, and whatever is best for the individual must be best for the nation. The admirable manner in which the general government collects its duties on imports and internal revenue taxes, manages its postal service and controls the national banking system; the general superiority in brief of our national to our state legislation or municipal management, is, to my thinking, sufficient proof that it may safely be trusted with greater powers, and I could wish that not only our educational system but our railroads, reformatory and penal institutions, asylums for paupers and the insane, together with the inspection of foods and drugs and the protection of life, health and property in a hundred ways might be placed under the direct control of the national government. It is an extraordinary thing that the passing of an arbitrary geographical line should alter the legality, and in a sense the morality of many an act, and with our widely differing laws in our different states citizens are subjected to numberless annoyances and bewildering complications and their natural rights and privileges are frequently hampered and sometimes seriously infringed. Our widely differing divorce, excise and interest laws, and varied legislation relating to the practice of medicine and pharmacy and the conduct of various trades, illustrate my meaning. Why should the pharmacist in one state be required to pass a rigid examination and secure a license before he can pursue his vocation, while in another the veriest ignoramus is allowed to dispense medicines and deal in poisons? Why should one state protect its citizens from ignorant medical

practitioners while another places no check upon the charlatan and raises no bar against quackery, and why should one state educate its children efficiently and another provide means so inefficient that a large proportion of its youth grow up in ignorance and consequent vice? These things ought not so to be and I cannot but believe that the rights of the individual and the well-being of the people at large would be promoted by such an abridgement of state rights and enlargement of national powers as should secure greater uniformity and simplicity in our laws, and especially in those which relate to education and a proper supervision of those professions and occupations which need regulation by the state in order that the public may be protected. The properly educated physician or pharmacist should have the same right to pursue his calling in one state as in another. His credentials should pass anywhere, like a government note, and the only way in which this can be brought about is to affix to these credentials the government stamp of approval.

And this is no novel or revolutionary proposal, for our government has always insured to its citizens certain rights and privileges. It has guaranteed these rights at home, and abroad has protected their persons and their property, and under the constitution it accords to "the citizens of each state" all "privileges and immunities of the citizens of the several states." Why, then, should it not control the education of the people, and especially of those who are to deal with the public as physicians, pharmacists, lawyers and the like who must needs be thoroughly trained before they assume the responsibilities which their callings involve? Should it not, at the very least, test the fitness of such to pursue their callings and set its seal of approval upon those who are competent, by granting licenses which should have a definite value at home and be respected abroad? The holder of an English, German or Italian medical diploma or license possesses credentials which have a definite value, everywhere recognized, but the owner of an American diploma or license, in this or other professions, has something the value of which must be demonstrated, and such credentials are seldom recognized in foreign countries and perhaps not even in an adjoining state. The graduate of West Point or Annapolis is known to have completed a special course of study and training, but the graduate of one of our colleges or professional schools may or may not be an educated man. So fully do we realize the truth of this statement that diplomas are seldom exhibited by their possessors except it be



necessary in order to comply with some law, and are not generally considered as being, in themselves, any real evidence of scholarship or special fitness to pursue a particular calling. State legislation has, in some cases, it is true, established grades and added to the value of the diplomas of our schools, but how much better would be the uniform standards and easily determined value of the credentials which the national government might grant. If to obtain the license of the Board of Pharmacy of the State of New York be a desirable thing, how much better would it be to secure a government license recognized in all the States and respected abroad.

And so also in many other professions and trades, but time will not admit of further consideration of this topic and I wish to say only, in concluding this subject, that a greater centralization of power in this country, a truer nationalism, is in no wise inconsistent with a true socialism. The centralization of which I speak does not mean a centering of power in individuals, nor in the government, as meaning a body of rulers with despotic powers; it does not mean a standing army to awe the people into subjection, nor a naval armament to terrorize weaker powers and vie with greater; it does not mean any kind of imitation of monarchical methods, for these things can never exist in a democracy like ours and are universally abhorred. But it does mean a closer union of the States; a greater uniformity in our laws; enlarged rights, privileges and opportunities for individuals, and a better government by and for the people. Let those who believe that the existing order of things should continue unchanged *because* it exists; that there are no wrongs to be righted, no better methods possible, rest satisfied, but those who hold that much of the existing ignorance, degradation and vice may be ameliorated by education; that abuse of power, whether by individuals or corporations, can be checked, and that in a country like ours a greater number can enjoy the common comforts of life than now possess them, can scarce be expected to feel the same satisfaction.

Doubtless some will be inclined to ask what reason there is to believe that the national government may more safely be trusted with the control of educational and other public affairs, not now in its keeping, than individuals, corporations, cities or states. Those who raise the question will tell us that the government is only the people and not a mystical power superior to human kind, and this is of course true, but the fact must not be lost sight of that in this country the higher the position the better, as a rule, is it filled. As

a general truth I think that this proposition will stand and I believe that the permanence of our political system chiefly depends upon it. As a man advances in political life, step by step, he must see to it, if he would rise, that his record is clean. That many of our cities are badly governed, admits of no argument, but our state government is better and our national affairs are managed best of all. I have no sympathy with those who denounce our representatives at Washington, and our office-holders generally, calling them thieves and swindlers or at the least a horde of hungry politicians, fattening at the public crib. The newspapers are full of such talk and it is in the air all about us, but have those who bring such accusations and utter such sweeping denunciations ever really thought how admirably, all things considered, our national affairs are conducted? Do they remember that defalcations are vastly more frequent in our banks with all their careful management, than in our government offices. Do those who cry out so clamorously for civil-service reform stop to consider how many millions of dollars are collected by our internal-revenue department, dealing chiefly with those who conduct a business into which conscientious scruples little enter, without the loss of a single dollar, and how many thousands of postmasters throughout the country render honest service for one who turns out a thief. Compare for a moment our present telegraphic facilities with the excessive rates, arbitrary regulations and frequent double tolls to points near at hand, with our almost perfect and yet constantly improving postal service, and this comparison alone, it seems to me, ought to remove all doubt as to the desirability of multiplying the functions and increasing the powers of our national government. I hope the time may soon come when it shall control our educational system throughout the land. Even in England free education in the common schools is now an accomplished fact, but the higher institutions are still closed to the great mass of the people. Advances in this country ought to be more rapid. The age in which we live is an age of change. Let us hope that it is an age of evolution of better things and that the near future may see the correction of many of the imperfections which now exist in our educational methods.

To-morrow evening we take up the real work of the course which you have come here to do. Some of you have come to this place for the first time and the occasion marks a real epoch in your lives. For such it is a new departure and no new course in life ought to be



entered upon without thoughtful consideration. Is it not a good time to indulge in a little mental stock-taking; a good time for abandoning some habits which may have been hindrances and forming some resolutions as to future action. You are all anxious to succeed, and if you were to ask me what qualities, in my opinion, most contribute to success in life, I should say these three—earnestness, perseverance and sincerity. Unless a man be in earnest little is to be expected of him. Study the lives of inventors, discoverers reformers, and you will see that they have all been in dead earnest, as we say. They have put into their work the best that was in them and they have not counted the labor nor the cost. Be in earnest, then, if you would win success. The man who is content to do as well as his neighbor; who looks about for an easy berth where the pay is good and the work is light, is not the manner of man that you should take as a model. There are plenty of such. Do not add to their number. If you have chosen a congenial occupation and feel that you are adapted to it, work at it early and late; strive to excel; aim at the highest mark and never rest satisfied with mediocrity. And if your earnestness be real it will of necessity be linked to perseverance. There are doubtless men, here and there, who hit upon bonanzas, who draw lucky prizes in the lottery of life, but the number of those who are all their lives trying to discover some short cut to wealth and fame is out of all proportion to those who succeed in finding it. Most of us have to work for what we get. The man that wins is the one who enters the race to stay. Do not, then, waste your time and your energies by a fickle devotion to different interests, but stick to your real work whether it be your preparatory work now or the conduct of your business hereafter. And to your earnest devotion to your work add perseverance and sincerity. Some one has said that this word “sincere” comes from the latin *sine cera*, from the practice of filling up flaws in furniture with wax, so that it really means pure, not vamped up. Remember this and do not try to cover up the flaws in your work with some deceptive filler or gloss over your deeds with a thin varnish of pretense. Be honest with yourselves; recognize your own deficiencies and shortcomings and you can the better surmount them, and be sincere, genuine, unaffected in your dealings with others and you will win their confidence and merit their esteem. Real success in life depends upon character, and each man builds his for himself. See to it that you build yours upon a good foundation, and for this you can have no better corner-stone than honest, persevering, earnest effort.

## MEDICAL PROGRESS.

PROLONGED LACTATION: LONG INTERVAL BETWEEN PREGNANCIES.—M. Loviot (*Archives de Tocol.*, Nov., 1890) read before the Obstetrical Society of Paris notes of a case where a woman, aged 39, had borne her first child when 23 years of age and suckled it for thirty months. During that long space of time no period occurred. Recently, sixteen years after the birth of the first child, she was safely delivered of her second, which she was able to suckle.

THE INDUCTION OF PREMATURE LABOR.—Professor Balandin (*Annales de Gynecol.*, Oct., 1890) read at the Berlin Congress a thesis on forty-three induced labors, undertaken by himself, with the able assistance of an experienced midwife. Strict antiseptic precautions were enforced, and the two methods habitually employed for inducing labor were the introduction of the bougie and puncture of the membranes. As auxilliary measures, electricity and douching were practiced. Injections were thrown up between the uterus and ovum, either two per cent boric acid solutions being used, or else sterilized water at a temperature of about 100° F. The bougie often acted but slowly, after several days or weeks, or even not at all. Its efficacy appeared to diminish with the rigor of the antiseptic precautions. On the other hand, it never set up febrile reaction, nor caused any other complications. After the puncture of the membranes, uterine contractions did not invariably set in. This was mostly the case when the uterus was but slightly excitable, and had relaxed parietes. In one case, intermittent flow of the waters continued for eight days after puncture, without contractions setting in. In an instance of this kind, more radical courses were needed. Dr. Balandin usually dilated the cervix with his finger, turned by the combined external and internal method, drew down a foot, and slowly extracted the fœtus. Not a single mother was lost. No reaction even followed the turning cases. In the last series of twenty cases, nineteen children were saved.

ANTIPYRIN IN CHOREA.—In a paper recently read before the Société Médicale des Hôpitaux de Paris (*Bull. et. Mem.*, Dec. 25th, 1890), Dr. Charles Legroux states the results of the treatment of chorea by antipyrin in sixty cases observed throughout their course. He found that antipyrin had a beneficial effect in two-thirds of the cases, rapidly diminishing the intensity of the disease, and shortening its duration; recurrence, however, took place in three-fifths of the cases. In the cases in which the drug failed, this was found to be due in some instances to intolerance (vomiting, diarrhœa, etc.), or to cutaneous eruptions; in a few cases, the drug seemed to have no effect on the disease. He found it necessary to give large doses, and to reach the maximum dose in a short time. Between the ages



of six and fifteen, doses as high as three to six grammes (about 3 iss to 3 iij) a day were well tolerated for several weeks. Serious symptoms of poisoning were never observed, and in some cases in which an eruption or vomiting was at first noticed, when the use of the drug was resumed after a short interval, these symptoms did not recur. None of the cases treated had any rheumatic symptoms, but none were of a serious character.

TOXIC POWER OF THE URINE IN PREGNANCY.—Dr. Emile Blanc (*Annales de Gynecologie*, Oct., 1890) has experimented by injecting urine taken from healthy women during the last months of pregnancy into the veins of rabbits, in order to determine the truth of the theory propounded by M. Rivière, namely, that puerperal eclampsia depended on an autointoxication due to the formation of poisonous matters in greater quantities during pregnancy than in the non-gravid state. The result of thirteen experiments brought the author to adopt the conclusion that a pregnant woman, under ordinary conditions of health, does not form and does not eliminate more poisonous matters than the non-gravid female. Dr. Blanc has also made eight experiments to determine the toxic power of the urine in women recently delivered, that is, during the first five days of the puerperium. In this latter condition he found the toxic power of the urine somewhat increased beyond the normal standard (45 cubic centimetres per kilogramme), but not to any great extent. Such slight increase could, however, easily be accounted for by the special conditions which exist, in women who have been recently delivered.

RADICAL CURE OF HERNIA.—Haidenthaller (*Centralbl. f. Chir.*, 1890, No. 50, p. 973) gives some statistics of the results of operations for the radical cure of hernia in Billroth's practice. They comprise 136 cases of inguinal, femoral and umbilical rupture in both sexes. In 93 cases an operation had been performed, whilst in five instances the patients were treated by injecting alcohol into the sac. The operation employed was Czerney's, and consisted in ligaturing and removing the neck of the sac, and uniting the deep and superficial parts of the wound with silk sutures. The mortality in the non-strangulated cases was between six and seven cent, and the causes of death when it occurred were entirely of septic origin. As to the final results, they were mostly true cases of radical cure, though occasionally the herniæ returned, in one instance six years after the first operation, and in three cases after a lapse of five years. The cases of alcoholic injection of the sac seemed at first to yield excellent results, but they were not permanent. The surgeons owed a great deal of the success of their operations to the thickness of the silk ligatures. The stouter ones seemed to hold the edges of the wound longer in apposition, hence the success which it seems to yield.

DRAINAGE OF THE VENTRICLES IN HYDROCEPHALUS.—M. A. Broca reports (*Rev. de Chir.*, No. 1, 1891) a case of hydrocephalus in which he practiced drainage of the ventricles with some amelioration of the symptoms, and with complete success so far as the operation was concerned. The patient was a boy aged three years. Symptoms of nervous disorder were first noticed at the age of about seven months, when he had convulsions, and at about that age the mother noted that the head began to enlarge. When about two years old he had another severe attack of convulsions, affecting the right side, followed by temporary partial right hemiplegia with contracture of the right upper limb. After a few weeks the contracture passed away, and the child, who had never walked or talked, began to "feel its feet." But, when nearly three years old, he had a series of severe convulsions of the left limbs, followed by hemiplegia and contracture of the left side. The child came under M. Broca's treatment about two months later. The aspect of the head was characteristic; the fontanelles were closed and the sutures united. The child was dull, could not speak, uttered inarticulate cries, and presented convulsive movements of the upper limbs. It could not stand, even when assisted, and with difficulty sat up. The left upper limb was flexed in contracture. While in this condition, on September 19th, 1890, it was submitted to operation. The scalp having been shaved, washed and disinfected with sublimate solution, M. Broca made a crucial incision, the centre of which was 3 centimetres ( $1\frac{3}{16}$  inch) above and 3 centimetres behind the right external auditory meatus. A trephine, having a diameter of 1.5 centimetre (about  $\frac{5}{8}$  inch), was used to commence the removal of a circle of bone. This was completed with a gouge and mallet. Into the opening thus made the dura mater projected; it was divided by a crucial incision. The brain then projected into the wound; it did not pulsate. A large aspirating trochar was pushed freely into the brain in the direction of the auditory meatus of the opposite side. At a depth of about 4 centimetres (about  $1\frac{1}{2}$  inch) resistance was felt to diminish, and on withdrawing the trochar, a liqueur-glass full of clear liquid escaped. The cannula was then detached from the aspirator, but a gentle flow of liquid continued. A drainage tube was introduced along the cannula into the lateral ventricle. Altogether about three ounces or more of liquid escaped during the operation. At its conclusion the brain ceased to project into the opening in the bone, and the normal pulsations were observable. The dura mater was replaced, but not sutured; the skin was sutured around the drainage tube, which was cut flush with the skin. An iodoform dressing was applied; it was soaked through on the following morning. The next two dressings remained two days before they were soaked through. The sutures were removed on September 26th, the dressing was renewed on November 3d, and the drainage tube removed. Little or no fluid had escaped during the previous eight or nine days. The last dressing was applied on November 10th, on which day the child left the hospital considerably



improved. It appeared more intelligent, slept well, and the contracture had disappeared, the convulsive movements of the upper limbs had diminished, it did not utter inarticulate cries, and when supported, attempted to stand. M. Broca adds the notes of a fatal case, communicated to him by Dr. Thiriard, of Brussels. He also gives a translation of the paper read to the International Congress at Berlin by Dr. W. Keen, of Philadelphia.

**TUBERCLE OF THE CERVIX.**—Dr. Haidenthaler (*Wien. klin. Wochenschr.*, No. 34, 1890) describes a case where this rare complication was observed in a patient, aged 29. Her family history was tuberculous, and she herself was afflicted with very diffused tubercle, which involved the lungs, kidneys, ureters, bladder, intestines, Fallopian tubes, and endometrium. A large ulcer was situated on the anterior lip of the os, and extended to the anterior and lateral fornices. The ulcer had eroded the tissues considerably, so that its nature seemed doubtful on superficial examination. Professor Chrobak, however, examined it, and after microscopic and bacteriological investigation, proved that it was not cancerous, but tuberculous. The origin of the ulcer was attributed to the disease in the tubes, secretion escaping out of the uterus and infecting the cervix, but the uterus was retroverted and held back by perimetrial bands, and there does not appear to be evidence that much secretion escaped. As the mucosa of the cervix was infested with tuberculous deposit, the ulcer was most probably the result of the breaking down of some of the local deposits.

**RESTORATION OF THE URETHRAL CANAL IN THE FEMALE.**—Polailon (*Bull. et Mem. de la Soc. de Chir. de Paris*, T., xv, p. 708) describes two cases in which an operation for the restoration of the urethral canal in the female was required. In the first of these a stone had been removed from the bladder by the vaginal method in a girl, aged 19. A fistula resulted, which had resisted all attempts made to cure it. The edges of the wound were so hardened and thickened as to render any further attempts at ordinary plastic operations undesirable. Under these circumstances, a piece of vaginal wall was grafted over the orifice of the fistula and a catheter retained in the bladder, and union at length successfully ensued, partly by granulation. In the second instance, there seemed to have been a congenital defect in a woman, aged 23. A new urethra was accordingly constructed from the labia minora, which were pared and united along their free edges, the posterior extremity of the canal being closed at a subsequent operation. A completely successful result ensued.

## REVIEWS AND BOOK NOTICES.

A MANUAL OF VENERAL DISEASES. Being an Epitome of the most Approved Treatment. By Everett M. Culver, A.M., M.D., Pathologist and Assistant Surgeon Manhattan Hospital of New York City, Member of the American Association of Andrology and Syphilology, and late of the Department of Venereal Diseases of the Vanderbilt Clinic, and James R. Hayden, M.D., Chief of Clinic, Venereal Department of Vanderbilt Clinic, College of Physicians and Surgeons, New York. With illustrations. Philadelphia: Lea Brothers & Co. 1891.

This is one of the best manuals on venereal diseases that has appeared recently. What the authors have undertaken—*i. e.*, to impart a knowledge of the practical aspect of their subject in the latest stages of development—has been thoroughly accomplished. The subject matter is well condensed, yet in no way to be confounded with the “cram” books. There is really very much that is new, and not only can the student, but the practitioner of the present time, gather very much that is thoroughly valuable and abreast of the subject. The authors are to be congratulated upon their good work, as are also the publishers upon the excellent style in which the book is presented.

A. V.

A PRACTICAL TREATISE ON THE DISEASES OF THE EAR: Including a Sketch of Aural Anatomy and Physiology. By D. B. St. John Roosa, M.D., LL.D., Professor of Diseases of the Eye and Ear in the New York Post-Graduate Medical School, and President of the Faculty; Surgeon to the Manhattan Eye and Ear Hospital; Consulting Surgeon to the Brooklyn Eye and Ear Hospital; formerly Professor of Ophthalmology in the University of the City of New York, and of Diseases of the Eye and Ear in the University of Vermont; formerly President of the Medical Society of the State of New York, etc., etc. Seventh Revised Edition. New York: William Wood & Co. 1891.

The seventh revised edition of Dr. St. John Roosa's “Treatise on the Diseases of the Ear” may justly be recommended as a valuable text-book for the study of otology.

The author has eminently well, in every particular, covered the field of anatomy, physiology, pathology and treatment of aural diseases. Detailed consideration has been given to many subjects which, as a rule, are dismissed with brief mention in text-books on



diseases of the ear. The chapter on the relation of diseases of the nose and throat to the ear, the treatment of diseases of the middle ear, together with statistical information of fatal cases of cerebral diseases resulting from aural disease, and statistics of mastoid cases, compiled from the large number of cases observed by the author, gives additional worth to the value of this book.

The chapter on "Deaf-muteism and Mechanical Assistance to the Hearing," coupled with a table of statistics of the examination of the hearing of deaf mutes, adds largely to the merit of this work.

The entire work shows great care and thoroughness in its compilation, and it has evidently been the aim of the author to present to the profession a treatise on diseases of the ear which will stand the test of criticism and merits recognition.

H. B.

ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES. A Yearly Report of the Progress of the General Sanitary Sciences throughout the World. Edited by Charles E. Sajous, M. D., and seventy Associate Editors, assisted by over two hundred Corresponding Editors, Collaborators and Correspondents. Illustrated with chromo-lithographs, engravings and maps, 1891, five volumes, cloth, price \$15.00. F. A. Davis, Publisher, Philadelphia and London.

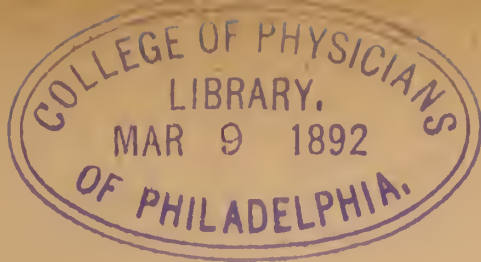
This fourth annual series of this valuable reference hand-book comes as a more welcome guest to the profession than ever before, not because it is so much better, but because it is becoming better known and consequently better appreciated.

There has been no departure from the plan heretofore followed in the work of compilation. The individual articles are more uniform in their outlines, and in many respects are more valuable than those of preceding years. It would be exceedingly difficult to select any series of articles that are better than the rest.

The section on diseases of the brain, edited by Landon Martin Gray, or on rheumatism and gout, by Dr. Davis, of Chicago, are especially interesting. All the articles relating to gynecology and abdominal surgery represent a vast amount of research.

We are satisfied that the Annual has a permanent place in medicine; that its usefulness to the profession is likely to increase rather than diminish. It is even more valuable than our "Index Medicus" as a reference book, especially when we are remote from large medical libraries, or have little time at our disposal for the investigation of current literature.

The whole series reflects great credit upon its editor, Dr. Sajous. The labor has been great, but its accomplishment has been complete.



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