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the bovinine company, 495 West Broadway, New York.

Supplied Blood "in Extremis" -A killpי of Septiciemia, and of Siphilitic Virus.-I. Miss B., age 16, of Iincoln, Neb., was admitted io hospital in Kansas City, Mo., June $9 \mathrm{~g}^{2}$, 18 Bl . Laparotomy for ovarian cyst was performed on June 12th. She was anemic in the extreme when admitted, and generally in bad condition for an operation, but the case demanded immediate relief and the operation was deemed particularly successful ; but the low vitality and extreme nervous irritability of the patient gave no promise of a favorable outcome. Shortly after the operation the stomach became so irritable that all nourishment and even cold water were rejected. The temperature and other grave symptoms indicated sepsis. On June :8th, the date of my first visit to the hospital, the patient's life was despaired of, and the last rites of the church were being admin-
istered at the time of my arrival. Dr. G., the surgeon in charge, kindly gave me a history of the casc. Rectal feeding had already been tried with unsatisfactory results, beef tea and milk having beea used. At my earnest request I was permitted to test the value of the blood treatment, the doctor saying at the time that the patient would not live forty eight hours. Bovinine, one ounce, sterilized water, one ounce, pancreatine, five grains, raised to a tempcrature of $100^{5} \mathrm{~F}$., were employed and forced high up into the rectum. This was retained, and the same dose was repeated after an interval of two hours. After eight hours the distress and painful retching subsided, and if food was not alluded to the stomach remained tranquil. For twelve days the only nourishment administered was bovinine every threc hours day and night, and by this process of nutrition alone, the vitality of the



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patient was restored, so that at the end of that period she sat up in bed and, for the first time since the operation, expressed a wish for food. On July 3 rd , this moribund girl was pronounced convalescent. II. In St. Louis, a lady had pricked her thumb with some poisonous product, and blood poisoning in its most virulent form supervened, and in spite of the best efforts of several leading surgeons, the case came to a point where amputation at the shoulder seemed the only alternative. The hand and arm were swollen to their fullest capacity, and honey-combed with scores of sloughing ulcers. Upon my advice the hand and arm were dressed six times each day, after having been thoroughly cleansed with pure bovinine; the ulcers being packed with soft lint saturated with the same, and the entire arm and hand dressed with it. In thirty hours a change was manifest, and in sixty hours healthy granulations began to appear, dis-
eased tissue to slough out, and in twelve days her hand and arm were as good as new. III. A man in St. Joseph, Mo., wounded himself in the hand while dressing dead hogs at the yards. Blood poisoning set in in earnest. In six days all dressings, etc., had failed, and amputation was suggested. I was in the attending surgeon's office when he related the case to me. I suggested wrapping the arm and hand in bovinine blood, changing every four hours. In twelve hours the change was so marked that the doctor sent for me to see the case. In four days he was well. The doctor thanked me, as did the man, who was about to lose his arm and probably his life. IV. A man in St. Joseph's Hospital; Oneota, had his arm smashed in a railroad accident; the fractures were compound and badly comminuted, and in a few days an erysipelatous condition set up, which threatened his life. I was in the hospital, and the attending

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surgeon, an old friend of mine, Dr. E. $W$. Lee, chief surgeon of the B. \& M. Railroad, called me to view the case. It was truly desperate. I advised taking off all dressings, put the arm on a pillow, cleanse it thoroughly with hot bichloride, and wrap the entire arm in pure bovinine. After some hesitation it was done, and in four days the condition had so far changed as to allow the arm to be put back into the dressings. Another life saved, and another victory for Blood. V. Soft chancroid involving the glans and prepuce. The soft ulcer had been doing its work for four weeks; appeared almost malignant; various dressings had failed, such as iodoform, etc., etc. This ulcer was packed in pure bovinine and soft lint, changed every two hours the first three days, then every four hours. In thirty-six hours the diseased tissue sloughed out, healthy granulations set up, and in ten days he was well.

This, in brief, is my experience along new lines (that is, new to me). - W. H. Parsons, M.D., Omaha, Neb.

Editorial Comments on the Action of the New york Board of Health in Connection wifh Tuberculosis.- Peaiatrics says: " W'e believe that the action of the Board of Health is timely to a degree, and in no way can we subscribe to the criticism that has come from certain quarters of the profession that we are not yet ready for such fin-desiècle legislation. A judicious, tennperate, and determined enforcement of the newly-framed rules will en$h: n c e$ the faith and trust that the citizens of this municipality have in its ability to guard their heaith and their lives. The action marks a step forward in the annals of civilization, and we believe that the example will be promptly followed by health boards of other cities."


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Walter's Park, Pa.

Urethritis Due to Bacteriem Coli Communi. -Josipovice (Centralbl. f. d. Krankh. der Harn- u. Sexualorgane) reports two cases of urethritis in which he found the bacterium coli commune in the urethral discharge. In one of the cases, which he relates in detail, he was able to establish the identity of the microorganism by cultivation. Three days after sexual intercourse the patient noted a urethral discharge, which he believed to be gonorrhœeal. There was increased frequenci of micturition, with burning, and also constitutional disturbances, with headacle and anorexia. There was slight fever and the tongue was heavily quoted. The entrance to the urethra was œedematous and reddened. On pressure a drop of dirty yellow viscid pus escaped. On irrigating the anterior urethra and then receiving the urine in two parts in separate vessels the wash water was found to contain an abundance of flaky pus and threads,
while the urine in both receptacles contained no threads, but was turbid and deposited a considerable sediment on standing. Seven and a half minims of sandal-wood oil in capsules were prescribed thrice daily, with rest in bed, and a diet of milk and other bland food. On the second day, although the temperature remained high, no complication could be discovered. The discharge continued in abundance, and the increased frequency of micturition was a source of distress. On the third day the patient appeared brighter, with impruved appetite and without fever. The discharge persisted', but it had lost its dirty color, and the burning in micturition was less. By the fifth day scarcely a drop of pus could be expressed from the urethra. The first portion of urine passed now was turbid and contained threads, while the second was practically clear and free from threads. The swelling abuut the orifice of the urethra having sub-

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sided, injections of zinc chloride (one grain to six drachms) were begun and the disease soon came to an end. Microscopic examination of the secretion on the first day of observation disclosed the presence of bacilli coli commune but not gonococci. The examination was repeated on the following day and with similar results. Cultivation of the bacilli confirmed their identity.

Some Unusual Causes of Cough.-Dr. Emil Mayer, of New York, says that, according to Thomson, there were fourteen varieties of useless cough. A persistent, dry, hollow, cough, coming on without the usual antecederits of acute disease, not associated with the physical signs of pulmonary disorder, and obstinate to treatment, was undoubtedly of reflex origin. Five cases illustrative of different varie-
ties of cough were reported as follows: Cough due to the presence of adenoids and hypertrophied tonsils; cough due to follicular pharyngitis and decidedly relieved by the curette; cough due to adenoids and follicular pharyngitis; cough due to hypertrophy of the lingual tonsils, immediately relicved by cauterization; and cougb due to the Leptothrix pharyngealis. Cough might be considered to be reflex when it was spasmodic, practically constant, and without expectoration or elevation of temperature; when there were no physical signs of pulmonary disease; when it was persistently resistant to all medication; and when the general health was hardly disturbed.

Think. when you treat a child, and give no medicine unless you have good reasons for it, and above all things rest its body and its mind.

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## The Trade Supplied

Consctousness in Epilersy:Prof. E. Siemerling (Berliner kilin. Wochenschrift, Nos. 42 and 43, 1895), in a paper on "The Transitory Disturbances of Consciousness in Epileptics in their Forensic Relations," draws the following conclusions: 1 . In the epileptic psychoses a dreamlike altered condition of consciousness is probable, and not by any means total or partial amnesia, 2. The most various transition forms occur between the different forms of so-called acute and chronic epileptic psychoses. Epiloptic and epileptoid conditions and psychoses must alike be reckoned as symptoms of cerebral disease. 3. The transitory, dreamy states are characterized by the rapidly recurring, apparently orderly, indifferent, and inconspicuous mani-
festations, and by unusual, unex. pected, often violent acts. 4. There is no epileptic or epileptoid psychosis without epileptic or epileptoid antecedents. Epileptoid conditions are more frequent than is commonly sup. posed, especially vertiginous attacks. 5. With the lack of epileptic or epileptoid manifestations, all other symptoms, such as amnesia, similarity of attacks, peculiarity of action, sensory hallucinations, will serve to make the diagnosis of epilepsy most probable.

Rontography.-A writer in the Lancet suggests that the pictures obtained by means of the Roentgen rays be called, as a tribute to the discoverer, rontographs, and the process rontog. raphy.

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[^1]The Health Board of Greater New York.-In commenting upon the provisions of the new charter with reference to the Health Board, Dr. Stephen Smith says : " It is especially provided that of the three commissioners appointed two shall be physicians and onea layman, and that the layman shall be president of the Board. Under no consideration can a physician hold that . Iffice. Thus a lawyer, grocer, cobbler, pedlar, or any tramp, just so he has no medical knowledge, is declared qualified for the positicn, and the only disqualification is being a physician. In dcfence of this the superannuated theory is set up that a physician has no cxecutive or busincss ability; but experience has proved that this is a fallacy. The president of the National Board of Health is a physician, and the report submitted by him to Congress was declared a model of accuracy and conciseness."

As a remedy for these evils, Dr. Smith suggests that the charter be si amended as to provide for the repre:entation of the three essential requisites, namely, medical science, sanitary engineering, and law, in the Health Department, and to that end he advocates the appointment of three physicians, one lawyer, and one sanitary engincer, all of ripe experience and residents of the boroughs of Manhattan. Brooklyn, Bronx, and Quecns as commissioners, with the health officer and the President of the Police Department as ex-officio members of the Board, so as to provide a restricting power, the president of the board to be elected by the commissioners themselves.

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ness, but must give praises in this instance, as it has given me in my practice much better results than solutions of carbolic acid, corrosive sublimate, etc., and ought to be, I think, in every physician's medicine case. It has no caustic properties, but is certainly the "Fitz" amongst germ killers.

Wm. Caspart, M.D. Mitchellsburg, Ky., March 31st, 1897.

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Aidvance Waiver of Privilege Under New York Law.-The New York law providing that information acquired by a physician while attending a patient in his professional capacity, and which was necessary to enable him to act in such capacity, shall not be disclosed by him, was amended, in I891, making the exception where such provisions are "expressly waived upon the trial or examination" by the patient. An application for insurance made in 1893 stated that the provisions of the New York law, and of similar provisions in the laws of other States, were thereby waived, and that it was expressly consented and stipulated that, in any suit on the policy applied for, any physician who had attended, or might thereafter attend, theinsured, might disclose any information acquired by him in any wise affecting
the declarations and warranties made in such application. This. the appellate division of the Supreme Court of Ne, York holds, in Holden v. Metropolitan Life Insurance Company, December 2,1896 , was a good waiver of the patient's privilege, which would pre-cludehislegal representatives from afterward objecting to the admission of the testimony of his attending physician as to his having previously had bronchitis.

The Use of Drugs.-" What drugs are most useful in general practice?" was recently answered by every member of Willesden Medical Society, and from the list the following are selected: Potassium iodide, Fowler's solution, tincture digitalis, solution of strychnine, calomel, and opium.-The Lancet (London).


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Medical

# Ontario • Medical • Journal 

Vol. VIII.
TORONTO, MAY, 1897.
No. 5

## ORIGINAL ARTICLES.

No paper pablished or to be published elsewhere as original, will be accepted in this department.

FIBROID TUMORS.*

By Dr. Shaw, Clinton, Ont.
Mr. President and Gentlemen,-The case which I wish to report to-day accidentally came to my notice while being called upon to treat a case of herpes zoster, and while making an examination discovered the tumor.

History-Miss H., aged forty-five; of a nervous temperament ; thin, pale woman; has for three years been a grumbler, growing more irritable; has had some discomfort with bladder, necessitating her getting up several times. during the night, becoming more aggravating recently; her bowels were very much constipated; often only one evacuation in four or five days; her sleepwas very much disturbed, not getting to sleep before three or four o'clock in the morning; indigestion, rarely relishing her meals. All of these symptoms, were supposed to be caused by the menopause, as her women friends had told her these things accompanied the change of life, and she had never consulted a physician for twenty years except for nasal catarrh-so, of course, had not the advice of a physician to direct her. She had felt this hard lump there for the past six months, and thought it was growing, but attributed it to the state of her bowels. She had to enlarge the bands of her skirts for comfort. On December i4th had the herpes, and on the 2Ist, discovered the tumor. Next day I called Dr. Gunn as counsel, when a thorough examination was made. By external examination a large, rounded, hard mass, lying toward the right side, was distinctly felt and a smaller body on the left, not so inelastic. By vaginal examination, discovered, the fact that the masses were connected, also attached to the uterus, also that the divisions could be felt between the large and smaller tumors, also divisions between the smaller again. The feel of the left tumor was elastic, reșembling a cystic; but a clear diagnosis of the right portion could not be made as to the nature of the tumor. We informed the patient of her condition. She asked if an operation would be necessary. We advised

[^2]her of the risks of the tumor, and of the risks of the operation, and recommended an operation in order to relieve her condition and improve her future health.

## Indications for Operation fok Fibroids.

Mortality is the first thing that attracts the surgeon's eye in performing an operation. In the hands of properly cualified surgeons, I find procecding. from the point of mortality, is as justifiable as any other major operation.

Grigs Smith, the most modern and universally recognized writer on abdominal surgery, says: "Some surgeons urge that uterine fibroids is not a fatal disease, that palliative measures will always tide the patient over periods of danger; others, that they are often fatal ; in many cases medicinal treatment is futile, and often they go on growing long after the menopause, ,causing danger."

The indications are the aggregate amount of cvil that a turnor produces; the summing up of various symptoms must be taken into account in coming to a definite conclusion : The patient's desire for relicf; if growth be rapid; the size of the tumor. In all cases where cysts develop, they grow more rapidly, and when cysts appear it is a clear indication for operation. Their occurrence is the beginning of a pathological change that spreads through the tumor: So it is wise to scize the first opportunity for removal after the diagnosis of cyst formation,-pressure on viscera, obstruction of bowels, pressure on bladder.

Dr. Price, of Philadelphia, says no operation in the whole range of surgery requires more endurance, more courage, surgical nerve and skill in its right and successful performance, than hysterectomy. He also says, "No method of operation for the removal of the hard tumors of the uterus, primary or final, has given the pleasing results as by the extra- peritoneal method of operating."

Dr. E. C. Lewis, of New Orleans, says, in a paper on "Hysterectomy for Fibroids" (when Dr. Howard Kelly, of Baltimore, was present, and concurred with the remarks of the paper), says: "Hysterectomy for fibroids is now a justifiable and recognized operation for the preservation of health, the prolongation and saving of life. The element of risk is now minimized, and has reached the present enviable position." He uses the Koeterlic clamp because he thinks he can do the operation much quicker.

Dr. Cullingworth, President of the Obstetrical Society, London, England, in discussing a paper on "Hysterectomy," March, I896, says there is a gradual change being effected in the attitute of the profession towards operations for fibroids of the uterus.

There could be no doubt that these operations were more frequent.'y due to diminution in mortality consequent upon antiseptic methods. There are cases on record in which, so far from the tumors ceasing to be a source of trouble.and inconvenience at the menopause, as is usually considered to be the case, dangerous complications, such as extensive odema, malignant changes and even gangrene, have set in many years later, with consequences fatal to the patient. He himself sonsiders sui ical interference necessary. In weak patients the wire clamp operation gave best results. It has yielded the greatest number of final recoveries, and is safer than the Baer method for the inexperienced.

Dr. Penrose says: "Hysterectomy is advisable in the vast majority of cases of fibroid tumors of the uterus. (I) In all cases where there are urgent symptoms from pressure, or in which there are urgent subjective symptoms referable to the uterus. (2) In all fibrocystic, œdematous and myomatous
tumors. (3) In all tumors of intraligamentous or subperitoncal growth. (4) In all large tumors which have become decidual abdominal."

Now, in reference to the patient, the herpes zoster, no doubt, had a connection with the tumor, for not until its removal did it subside, as often pressure on the ganglia of the pelvis will cause such neuralgias as this. The size of the tumot being so noticeable and solely ebdominal, the obstruction of bowels, the bladder symptoms, the uncertainty of diagnosis as to cystic portion, the patient's desire for relief from her symptoms, we deemed it advisable that an operation was necessary.

1 hope this Association will pardon me for going into so much detail in regard to the history of this case--the diagnosis, the operation and treatment, as there is a difference of opinion as regards performing the operation where it was not justifiable; then in doing an old-fashioned and out-of-date operation-as I have gone into particulars and descriptions that are usually omitted in such cases, in order that you can judge for yourselves whether oar diagnosis justified interference, and whether the conditions found rendered such an operation suitable, and whether the operation was not only justifiable but necessary.

## The Operation.

Dr. Gunn performed the operation, assisted by Drs. Elliot, of Detroit, Dr. Freeborn and myself, while Dr. McKay administered the anresthetic. The usual median line incision was macie, and on making an examination in the abdomen there were found very few adhesions-a few with the bladder. The portion on the left side was composed of very friable tissue, so much so that in removing it some hæmorrhage occurred in several places. After the removal of the tumor in the ordinary way the cervix of uterus was cauterized - with carbolic acid.

## Treatment of Pedicle.

It has been said that the extraperitoneal treatment of the pedicle is oldfashioned and unsurgical.

Dr. Grigg Smith says: "To this I would answer that as the end of surgery is the saving of life, the best surgery is that which saves most lives. That it creates sloughing is an incident but not an objection from the surgeon's point of view, if more lives are saved thereby. The great error that has prejudiced some surgeons is in comparing the pedicle in ovariotomy and that in hysterectomy for fibroids they are far from being identical and equally amenable to ligation. The whole difficulty rests in the nature of the pedicle, its physical and physiological character. If hæmostasis were the only difficulty to be met with, every pedicle might safely be cast loose into the cavity, but the chief dangers begin when the hæmorrhage is over-softening and sloughing, with loosening of discharges into the peritoneal cavity, are what we have to dread."

The mortality, according to Vantrin, with the intrapreritoneal method, is 52.2 per cent., and with the extraperitoneal 33.3 per cent. His figures have not been disputed-almost twice as great-and Grigg 'Smith says he has definitely come to this conclusion, that after amputation no pedicle which contains myomatous tissue should be left inside the abdominal cavity. The condition of the patient often decides which method to use.

Dr. Meredith, of Cbstetrical Society, London, England, says the question of extra- or intraperitoneal treatment of pedicle must be decided for the present on the grounds of relative mortality. If the clamps still give the best results it could not be justly described as an obsolete operation. The choice,
must be made on the grounds of safety; for each one of us would prefer to have his life saved by a "barbatous proceeding" to being killed by the mont advanced surgical triumph.

Treatment of pedicle, extraperitoncally.-1. This involves attention to constriction of pedicle ; 2. Arrangement of parts around it; 3. Subscquent treatment of necrosing tissues.

The method adopted in this case was the wire constrictor. We tricd aluminum wire first, but it would not stand the strain of the serre-nceud, w, had to resort to the steel piano wirc. The pouches or loose folds of peritoncum were arranged so that nune would be behind or in front. The serre noeud rested upon and over the pubes, the shaft in the bottom of incision. The wire was tightened as tight as could be short of cutting, so that complaianemia of tissucs above wire would result. The screw was not tightenced much afterwards, as this would have a tendency to cause necrosis to extend downward too far. The serre-nceud was removed on the fifth day. The pedicle skewers were now placed parallel, just above the wire, to prevent slipping downwards. They are so placed that the wire is well within the wound, so that the parietal layer of peritoneum will be below the downward limit of nccrosis. The pedicle was now trimmed with scissors close to wound. The pedicle was packed with little squares of sublimate gauze. The wire wa, left for ten days, so as not to disturb the new adhesions. Drainage tube was inserted. The parictal incision was closed in the usual way, only the stitches included the peritoneum with the rest of the tissues. The lowest stitches were drawn close, but not tight around the pedicle, and dressed with iodoform and sublimate lint with the usual strapping.

## After-Treatment of Pedicle.

The drainage tube was taken out on the third day, having been drained daily from the time of operation. The dressing was changed on the fifth day, then daily frem this out. The patient did well, temperature averaging $99^{\circ}$ all through convalescence; pulse, 72 to 80 , and respirations 18 to 24 . The vomiting was only slight from the beginning. The stitches were left in for two and a half weeks. On the eighth day the wound was healed up with the exception of a round pedicle; not a drop of pus found in the wound. The patient could sit up in a chair at the end of the fourth week, and is still doing well.

## OVARIAN CYST ENDING IN SUPPURATION.

By A. B Stewart, M.D., C.M., Duck Lake, N.W.T.

Patient, Betsy B., a half-breed aged 29, unmarried. Visited May 26th, 1896; found her suffering severe pain over region of left ovary; no appreciable enlargement; temperature normal, pulse 90 ; bowels constipated, micturition difficult and painful, also suffering from painful hæmorrhoids. Anodynes were given to relieve pain and an enema to clear out the bowels; nothing gained on examination per vaginam, except that there was pain and tenderness. June ist, she called at my office for further treatment; she felt better but still had painful micturition. July 16th I was again called to see her. She had been brought in a distance of ten miles and was living in a tent with her mother. She stated that she had not suffered much for three weeks after I last saw her. Now I found her greatly emaciated and suffering a good deal of pain; on
examination I found a very large fluctuating swelling in the abdomen resembling pregnancy at full term, which she stated had commenced three weekn ago, and three weeks after I last saw her. Her moral status was hazy and she had had two children. As they were very poor I had her removed to an old house where she could be made more comfortable. Temperature normal, pulse 90 . On examination I concluded there was no fear of pregnancy this time, but found a large hard tumor pressing down between rectum and vagina. almost occluding both, and it was with difficulty that a finger could be introduced into cither, and defecation was infrequent and painful. There was no soft spot or evidence of suppuration. After ascertaining the contents of the swelling in the abdomen with a hypodermic needle, I aspirated and drew off two hundred and forty ounces of serous fluid which, under the microscope, contained no pus. This greatly relieved her, but a large hard mass could now be felt through the abdominal walls, low down and larger to left of median line. July 2oth, swelling was almost as large as ever and she begged me to draw off fluid again, which I did, aspirating over one hundred ounces. July 22 nd, pulse 110 , temperature $100^{\prime \prime}$. July 23 rd , pulse 100 , temperature normal and she felt easier. July 24 th, abdominal swelling diminishing but increasing below and distending perincum; large hot poultices. to be frequently applied, were ordered. August 2nd, temperature normal, pulse 85. August 8th, felt fairly well but appetite poor, and sore from lying on hard bed on the floor. August ifth, called in a hurry to see her, found temperature $103^{\circ}$, pulse 120 ; pains very severe over region of tumor; she had sent for a priest, as she thought she was going to die; $1 / 3$ grain morphia was given hypodermatically, also quinine and stimulants, as pulse was small and wiry. August 12th, temperature $104^{\circ}$, pulse 125 , and again suffering severe pain; Io grains antipyrin reduced the temperature and relieved pain in the head. August I3th, temperature $103 \tilde{z}^{\circ}$, pulse 1 IO. August 16 th, temperature $100^{\circ}$, pulse 100. August 18th, in severe pain, temperature $100^{\circ}$, pulse 110 . August 20th, severe pain and rectal tenesmus frorn pressure of tumor; temperature $100^{\circ}$, pulse iro. August 23rd, pains severe, she looks bad; temperature $101^{\circ}$, pulse 120. August 24th, condition much the same, poultices kept up regularly. August 25 th, fluctuation detected in vagina and opened at once, when there was a great flow of putrid and offensive pus; syringe was used with hot permanganate of potash solution and a piece of bichloride gauze inserted for drainage. August 26th, syringed with permanganate ; patient much improved. August 29th, temperature up to $102^{\circ}$; pus still corning away, after irrigation; temperature lowered towards evening. August 30th, still doing well, able to eat a little. September 3rd, swelling almost gone. September 5th, she went home ten miles in a waggon. October 26th, saw her at her home; she looked well and strong, and was nursing, her mother, who had pneumonia.

It might be mentioned that this case had very little care in the way of nursing during the summer, and it shows how some cases pull along under the most unfavorable circurnstances.

British Medical Association Column.

## MONTREAL MEETING, 1897.

Since our last issue, the list of officers for the Montreal meeting of the British Medical Association has been completed, Dr. Herman M. Biggs, of New York, having accepted the invitation of the Council to deliver the address in Public Medicine. Dr. Biggs, the scientific head of the New York City Health Department, physician to Bellevue Hospital, has done much to advance his subject. His address will be one of the features of the meeting.

By an order in council the Provincial Government has subscribed $\$ 2,000$ for the purposes of the Association. Altogether, therefore, through the public spirit of the Dominion Government, Provincial Government and Montreal City Council, $\$ 10,000$ has beengranted towards the expenses of the meeting. These, with a guarantee fund which is being obtained from members of the profession in Montreal, and with private acts of hospitality on the part of the citizens, should be ample.

Sir Donald Smith, the High Commissioner, has invited the members of the Association and its guests to a reception at 1157 Dorchester Street, upon the Wedresday evening of the meeting. Other leading citizens are offering afternoon er tertainments. The Montreal Golf Club has also thrown open its links to members during the meeting, and in very many directions generous help is being offered by those unconnected with the profession.
All this äctivity in Montreal is, we are glad to learn, being met by a very promising condition of affairs upon the other side of the Atlantic. We learn that several steamship companies already have their best berths engaged by members, while some have already a full complement of prospective travellers. The invi-
tations to the leading members of the profession in the United States have already been forwarded, and now the various sections are busy preparing their programmes.

We herewith print the provisional programme corrected up to date, it being understood that this is provisional and liable to further modification :

Provisional Programae.
Wednesdiay, August I 8th, to Thursday, August 26th.-Mecting of the British Association for the Advancement of Science at Toronto.
Thursday, August 26th, to Monday, August 30th.-Excursion for members and guests of the British Assnciation, from Toronto via Niagara, Kingston, the Thousand Islands, Ottawa, etc., to Montreal.

Monday, August 30th.-Meeting of the Canadian Medical Association at Montreal.

## british medical Association.

Tuesday, August 3ist.-12 a.m., Service in the English Cathedral; 2.30 p.m., Windsor Hall: Opening ceremonies and addresses of welcome; 3 p.m., Address by the Presidentelect, T. G. Roddick. M.D., M.P.; 4 p.m., Garden parties, excursions around the mountain, etc.; 9 p.m., Soiree at Laval University.

Wednesday, September rst.- 10 a.m., McGill University : Opening of sections ; 3 p.m., Windsor Hall : Address in Medicine, by Dr. Wm. Osler; 4 p.m., Excursion down the St. Lawrence, etc.; 9 p.m., Reception by the Hon. Sir D. A. Smith, K.C.M.G.

Thursday, September 2nd.-9.30 a.m., McGill University: Sectiona! meetings; 1. 30 p.m., Lunch on the mountain ; 3.30 p.m., Windsor Hall: Address in Surgery, by Mr. T. Mitchell Banks ; 4.30 p.rn., Excursion across the Islanc, etc.; 7.45 p.m., Annual dinner of the Association, Windsor Hall.

Friday, September 3rd.-9.30 a.m., McGill University: Sectional meetings ; 3 p.m., Windsor Hall: Address
in Public Medicine, by Dr. Herman M. Biggs, and concluding General Mecting ; 4.15 p.m., Excursion to St. Anne's and down the Lachine Rapids; 9 p.m., Soiree at McGill University.

Saturday, September 4th.-Excursions to Ottawa, Quebec, Kingston, Lake Memphremagog, etc.

## British Columbia.

Under contrul of the Medical Council of the Province of Uritish Columbia. Ikt. McGuigan, Associate Editor for British Columbia.

## DR. DUNGAN'S APPOINTMENT.

The appointment of Dr. George H . Duncan to be Secretary of the Provincial Board of Health, vice Dr. Watt, resigned, meets with general approval. Dr. Duncan was made City Health Officer in the fall of 1892, just as the small-pox scourge was passing away, and the manner in which he discharged his duties met with the highest endorsement on all hands. His handling of the cases which uccurred after the first stage of the epidrmic was passed was so skilful that, when the number of cases treated by him was made known, the public was surprised that so much had been accomplished without alarming anyone. Believing that the pestilence had its origin in Chinatown, Dr. Duncan devoted a long time to the sanitation of that portion of the city with very great success. After this he directed his attention to the sanitary concerns of the city generally with such excellent results that small-pox and other infectious diseases have since given very little trouble and absolutely no public anxiety. Both Mayor Beaven and Mayor Teague, who had every opportunity of observing Dr. Duncan's method and the success attending his work, have privately and officially borne testimony to his efficiency. The press of the city, without exception, united in pronouncing him a capable and reliable health officer. His removal from the control of the William Head
station, for political reasons, was regretted, and it is a mattel for general congratulation that the public will have the benefit of his services in a field of wider usefulness.
It is more than strange that the Times of this city, which until less than a year ago had nothing but warmb praise for Dr. Duncam, has felt called upon to attack him personally, and to assail the Provincial Government because of this appointment. The motive and mamer of the attack are alike despicable. It says :
"The Provincial Government possibly believes that it will have use for Dr. Duncan in one capacity or another. At all events Mr. Turner has shown that he disapproves of the course taken by the Dominion Government in dismissing Dr. Duncan."
It is perhaps sufficient to say that this remark is worthy of the source from which it cmanated; but since the Times invites a reference to the course pursued by the Dominion Government we would suggest that it might with advantage examine into the results which have followed from that course. To make the examination complete it would be necessary to send to Port '「uwnsend and Tacoma in order to ascertain how the disinfecting at William Head worked in one recent case of a small-pox infested vessel. We do noः desire to press the matter any further and shall not do so a.t present. As for the insinuation that the appointment of Dr. Euncan was made so that his official position might be used to political advantage by the Government, it is not worth any reply. If the appointment were rnacle expressly to show that the Dominion Government had not done Dr. Duncan justice, it wouid be defensible on that ground alone, seeing that his fitness for the office is known to everyone. Victoria Daily Colonist, Friday, March 5, 1897.

The people of British Columbia are to be congiatulated on the appointment of Dr. George H. Duncan, of

Victoria, as Secretary of the Provincial Board of Health. Dr. Duncan has had great experience in sanitary: affairs, having been for several years Health Officer oi Victoria, and late Medical Superintendent of the William Head Quarantine Station. A couple of years or so ago the doctor visited China and Japan, and had an opportunity while in those countries of secing for himself the condition of health matters as they exist in these Oriental climes. At that time the bubonic plaguc was raging in Hong Kong and Canton, and in the former city the troops had to be cailed ont to enforce the regulations of the Board of Health in consequence of the resistance of the Chinese population thereto. Dr. Duncan accompanied the authorities on their rounds and saw some appalling cases in the filthy quarters of that tropical city. The experiences he acquired then will be of eminent service to bim now in his new position; for though we depend largely on our quarantine protection, if disease should break the first line of defence the real struggle then begins when the officials on shore grapple with a deadly epidemic. Even if bubonic plague does not imminently threaten us, still there is always a possibility of it doing so on this coast ; but leaving it out of the question there still remains other forms of disease that are not to be despised, and one of them is smallpox. Dr. Duncan found during his investigations in Hong Kong that small-pox is always more or licss prevalent in that city amongst the Chinese, and on his return he sounded a note of alarm which put both Dominion and Provincial authorities on the qui vive. The population of British Columbia at the present time is rapidly growing, especially in the vast interior, but health regulations

- are not improving pari passu wich the increase of inhabitants, and from the accounts one reads in the papers there is great need for occasional vigilance on the part of the health
officers, especially those on the Pro. vincial boundary, and an active Secretary is the great desideratiom under such circumstar ces; and just such an officer is ideally represented in the person of Dr. Duncan. We trust that the medical practitioners everywhere in the Province will give him their cordial suppert in all his efforts to enforce sanitary regulations throughout its broad boundarics; and we feel assured that with his tact, experience and activity, he will if he grets fair play make British Columbia in its hygienic condition. equal to any of the sister Provinces rf the Dominior.

Dr. J. M. Lefevre, after more than two years; absence in Europe, has returned to Vancouver and resumed practice. While in England the doctor passed successfully the examinations for M.R.C.S., and continued his elinical studies in the great hospitals of Paris, Berlin and Vienna. He is looking well, though he has all the appearance of a student who has just: graduated from his alma mater, his avoirdupois having been considerably reduced since his departure from Vancouver. We are glad to see the doctor back again and congratulate him on his success.

## Reports of Societies.

## HURON MEDICAL ASSOCIATION.

The regular meeting of Huron Medical Association was held in the House of Refuge, Clinton, on Tuesday, April 27th. There was a very large attendance. The president, Dr. Mackay, presided, and in his opening remarks thanked the members for the honor conferred upon him, and expressed his pleasure at the large attendance. He explained the benefit to be derived from such meetings.

Dr. Shaw then gave a paper on "Fibroid Tumors" (page 393). The
paper was ab'y discussed by Drs. Sloan, Mekerizic, Bethunc, Campbell, Burrows and Turnbull.

After this, several interesting cases, inmates of house, were presented to the members, among them being congenital dislocation of hip, in two members of one family. Some disputed the dislocation, while wethers held that view. All agreed chat there must be something hereaitary, as all the family were more or !ess affected Hernia was another. Dr. Gunn uperated; operation successful.

Dr. Sloan grave an interesting dissertation on "Appendicitis." He thought operation in many cases could be dispensed with. He had had several cases in his experience that subsided without operation. Hc treated several cases with I grain of calomel every hou: till 10 or 12 grains had been given. Also enemas every six hours with rectal tube three feet long; morphia for pain. He says the commencement of the trouble is a loaded colon; relicve that and the trouble subsides. The discussion was participated in by Drs. Agnew, Campbell, Burrows, Turnbull, Shaw, Taylor and l3ethune, all agreeing that operation in many cases could be dispensed with.

Dr. Shaw then read an addrcss to Dr. Graham, late of Brussels, expressing regret at the loss the Association was sustaining by his removal.

It was decided to hold all further meetings in the House of Refuge, at Clinton.

The Mignonette as a Vermi-Fuge.-The Journal de Medécine de Paris states that in Russia the mignonette (reseda luteola) has long been held in high popular estcem as a remedy against tapeworm, and tells of a woman who, fasting, took a very strong decoction of the flowers and then a huge dose of castor oil, and three hours afterward voided the tapeworm in the form of a ball.-New York Medical Journal.

# Special Selections. 

## HAS THE PHYSICIAN EVER THE RIGHT TO TERMINATE LIFE?*

BY CLARK BFtht, Esta, Ll.. I) . I'resident Medioothejal Congrexs.

Perhaps no part of the procecdings of the late Medico-Legal Congress held in the Federal Court rooms in de city of New York, September; 1 Son5, gave rise to more criticisn! than the comments upon this subject introtroduced by Mr. Albert Bach, of the bar of New York city, and one of the officers of that congress, in the discussion of the papers of Mr. Gustave Boehme, and of Dr. L. Forbes Winslow, on the subject of suicide, in which the author, Mr. Gustave Boehme, had asserted the right of every human being to end his life under certain conditions.

As it is in such cases better to go by the record, I quote from the language used by Mr. Bach in that discussion, from advance sheets of the bulletin of the Medico-Legal Congress:

The question of the right of a human being to end his own terre:trial life has been frequently mouted. There is opened up, by the mere putting of the question, a broad field of argument-and there have been and are able advocates of both the affirmative and negative sides of the propositions involved. In behalf of the niegative side, it has been asserted that God's given life is too sacred to be terminated by the willful act of man ; that the duty we owe not only to our dependents but to our fellowbeings in general, is too imperative to be shirked by the so-called cowardly act of suicide ; that the commandment "Thou shalt not kill"

[^3]applies as well to the act of self destruction as to the wrongful slaying of another; that the welfare of humanity at large demands that the continuance of human life should in no way be interfered with by man, unless under sanction of law; and that our laws not only ncither permit self-killing nor recognize any justification therefor, but specifically prohibit it, and provide a punishment for attempted suicide. Those holding the affirmative side of the question contend that under certain circumstances and conditions suicide is justifiable, and in support of their contention they paint and present to us pictures of human suffering so agonizing, so irretrievably hopeless and irremediable in the light of experience, as to make many waver in their opinion that earthly pains and woes should be forever evidenced, no matter howsoever excruciating, rather than be ended by suicide. The advocates of self-killing cite history to prove that the act in the past, and among certain people at present, has been considered the only honorable, manly and respectable way to meet defeat or disgrace, and they ridicule those who enact laws providing punishment for attempted suicide, and scoff at such laws as stupid and ineffectual. There is not sufficient time afforded me to make a comprehensive statement of my views on this subject. I will merely say that I deem our statute law appertaining to attempted suicide absurd and farcical, for the reason that it will not deter anyone irom attempting suicide, and, furthermore, it insuces would-be-suicides to see to it that their efforts in that direction are entirely successful.

Personally I can conceive of conditions that would justify a person in ending his life, and in some instances I am convinced that such self-inflicted death would be beneficial to the community at large. There is considerable cant and hypocrisy connected with the discussion of this subject, but before a scientific body such as
this is, we should express our views fearlessly. I admit that the advocacy' of advanced and progressive doctrine before weak-minded persons may do harm, but feel that I will not particularly shock any one here present by stating that I believe that there are cases in which suicide is morally justifiable, and that there are also cases in which the ending of human life by physicians is not only morally right, but an act of humanity. I refer to cases of absoluteiy known incurable, fatal, and agonizing disease or condition, where death is certain and necessarily attended by excruciating pain, when it is the wish of the victim that a deadly drug should be administered to end his life and terminate his irremediable suffering. And I may add that I know physicians do so end life, although they term it "producing euthanasia." If those very physicians were to use English words rather than their Greek equivalent, we would find them producing an easy, painless death, instead of euthanasia.

These sentiments were met then by Dr. Isazc N. Quinby, of New Jersey, who said :

I must disagree entirely with the learned jurist in his statement regarding the right of any human being under any circumstances to take his own life-and there are no culmination of circumstances that would justify a physician in taking the we of his patient. The agony of the sufferer, or even his consent, in no wise alters the case ; neither does the certain fatality of the disease change the matter. Human life is sacred, and no law, human or divine, can be found that would justify a physician terminating the life of a patient, and I must protest and dissent in behalf of my profession from the statements made by Mr. Bach.

The physician who errs in a fatal case or where agonizing pain is endured by the sufferer, must not do so to end life, and he would be amenable both to the law of God and the

State if he attempted to do so. No self-respecting physician would even consider such a murderous proposi. tion.
Judge Abram H. Daily took part in the discussion thusly: "I ask Dr. Quimby this question : Is it right to prolong the ago.ny of a.patient if the physician knows positively that death is inevitabie in a short time?"

Dr. Isaac M. Quimby (with great emphasis) replied: "To the bitter end. A physician has no right to terminate the life of a patient, even when to prolong that life is to cause the most agonizing tortures."

Dr. Forbes Winslow added: "I quite agree with Dr. Quimby in the views he expresses as to such a case."

The sentiments avowed by Mr. Bach were denounced in vigorous terms by the New York Suni, editorially, and that branch of the discussion was continued in the Sun newspaper, between the editor of that journal and Mr. Bach. And on both sides of the Atlantic. the views of M Mr . Bach met with general disapproval from medical men.

Among many medical criticisms that have fallen under my eye, one of the most interesting, to me, was the views of Sir Benjamin Ward Rici, ardson, giving an incident of his own practice, in No. 44 of Vol. xi. of his journal the Asclepiad-which will form an interesting part of the discussion here, under the heading of "Lethal Death in Painful Diseases," and from which I quote :

## OPUSCULA PRACTICA.

"There are mites in science as well:as in charity."

> Benjamin Rush.

Lethal Deailh in Painful Diseases.The New Yoríh Medical Journal for Septembc 2I, 1895, has a paragraph on what it calls "Euthanasia by Homicide," and in which it says, that at the Medico-Legal Congress lately held in New York, it was implied, if not directly stated, that physicians often killed patients deliberately in some
merciful way, when they were suffering from inevitable fatal disease or injury. One speaker found no fault with this alleged practice, but rather commended it, as well as the destruction of new-born monsters, which was also said to be resorted to by physicians. Such practices, it was stated, especially that of taking the life of monsters, had occasionally found advocates among members of the medical profession, but had never been sanctioned by any representative body of medical men; indised, they had been utterly condemned by the great body of the profession, and physicians all over the world would resent any statement to the contrary, no matter if it were made approvingly. The writer supposed, "That there are conceivable instances under which it would be justifiable to kill a person for his own sake; but these are no more apt to involve physicians than persons of other occupations. Medical men aim to prolong life; they do not destroy it because it is painful to such a degree that the sufferer thinks he would prefer death:"

This paragraph brings to my mind a case which occurred to myself, in which the facts were of singular import. The late Mr . Jervis asked me to go to an hotei, not far from here, where he was attending a patient, in conjunction with the late Mr. Casar Hawkins. He wished me to go without him or Mr. Hawkins, but I declined until Mr. Hawkins himself sent. me a short letter to the same effect, and in which he pressed me earnestly to concede. I was informed that the patient was suffering from malignant discase of the throat, and had taught himself to administer chloroform to himself with the intention of relieving pain, or, if it so happened, of destroying life. It was felt that if he destroyed life he would be guilty of suicide, and that not only would the feelings of the family be harrowed, but that tlere might be a dispute about property in the administration of the estate. The
patient had read my addition to Dr : Snow's work on "Chloroform and Anæsthesia," a work that was then attracting a good deal of notice, and he wished to see me, hoping that I would ratify his treatment, while the others, including both practitioners, trusted that I should have infiuence enough to stop hin:. On my visit I found a deep, wide, malignant ulcer at the back of the pharynx of the sick man, involving a pulsating vessel, which could be seen pulsating. The patient inquired of me how long lie should be likely to live, and if an operation were possible. I was obliged to confirm what my predecessors had said-namely, that an of $\begin{aligned} & \text { ration was impossible, and that }\end{aligned}$ death might be imminent from the rupture of the vessel, whilst, unfortunately, it was certain under any circumstances. He, then, lying down in bed, took up an inhaler which he had primed with chloroform, and put himself to sleep, on which the inhaler fell from his hands. It seemed a very happy sleep, and I watched him for half an hour or more. On his recovering consciousness, he explained that he had no other mode of relief; that he could not swallow properly ; that he spoke with difficulty, but was soothed at once by the chloroform when he inhaled it, whilst any kind of medicine, administered by the mouth, produced such intense pain, that he would rather die than bear it. I explained to him all the difficulties in the proposed hypodermic injection, which was not very well known at that time, and injected him twice with morphia, but without affording the same relief as he had obtained by the chloroform. He said that he had used the chloroform for seventeen days, and that, according to his own judgment, the ulcerous surface had contracted, and was much less painful, so that he could swaliow better. I went séveral times, and myself administered the chloroform, but, in spite of everything, he not
infrequently got it for himself, and slept under it for the greater part of day and night. This went on for three weeks, with a skilled attendant; and, I am bound to say, as a matter of precise fact, that he improved. I have no doubt that contraction of the open surface occurred; that the pulsation was not so marked ; that he spoke better and more cheerfully; and that he swallowed better, more freely and with less pain. I should have been content to go on with the treatment, being deepiy interested in seeing how prolonged sleep would act in such a case. Also, I lost my dread that death would follow the application, and I was given to feel that if I were exactly in that man's state of hopeless misery, I should like to be treatad: precisely in the same way. He was removed, however, from our care, taken to some health resort, was there peremptorily refused the chloroform, and in about four weeks died from pain, sleeplessness, inability to swallow food, and the consequent exhaustion, with wide extension of the malignant mischief.

The question is: "What is the right thing to do in an extreme case of this kind? I hold tenaciousiy to the general opinion of the profession, that it is best not to recognize what may be considered slow suicidal attempts, but I think the plan carried out by this patient was justifiable. It was so on all grounds, and it was, perhaps, consistent to attend to the wishes of a patient in such a dilemma. But what was most important was. the circumstance that the method seemed useful, and straightforwardly was useful, as a mode of cure: Menader said that all diseases were curable by sleep-a broad statement, in which, nevertheless, there may be something that is true, for good sleepers are ever, as I think, the most curable patients; and I would always rather hear that a sick person had slept, than had taken regularly the prescribed medicine during sleeping hours.

There has always been a popular ${ }^{\ell}$ impression that a physimian had the right to prevent the birih of monstrosities or monsters, when they occur. Such has been the popular belief, and, so far as I know, none such are permitted to live by medical attendants. Medical men can best State what their own practice would be in such cases. If the cord was not tied, it would usually prove fatal.

Neglect to tie the cord properly would result in death. Some physicians may neglect to tie a cord when they are unwilling to kill, knowing that death would probably ensue.

This has been he'd to be manslaughter in the mother, and would be so held as to the physician who acted from intentional design. (Reg. v. Conde 10 Cox C. C. 547 ; Reg. v. Bubb, 4 Cox C. C. 455 ; Reg. v. Mabbitt, 4 Cox C. C. 239 ; Reg. v. Edmds. S C. \& P. 6ir).

The English law, however, does not allow the destruction of life in monstrous births. (Tay'er's Medical /urisprudence, 566.60I, ith Bell's American edition.)

Though a monster could not inherit under English law and tenancy by the curtesy would not vest.-Id. 598.

But able medical men have insisted that the Cæsarian operation, hysterotomy, is legally justifiable when the life of the mother is in danger.

It was by an ancient view in England, however, usually supposed to be performed only after the death of the mother, but cases have occurred where it has been successfully performed, and the life of the mother and child both saved : but the act could not be classed as criminal, ceven though the death of the living child had to be sacrificed to save the mother's life.
The courts have sustained the right of a physician to destroy a living unborn child, in order to save the life of the mother, as in a case of deformity of the pelvis in the mother, where normal delivery of the child was impossible.

As this rests upon judgment and opinion as to the physical ability of the mother, it should be exercised with great caution, and only on full consultalion; and even then, not if any doubt exists, because :
a. The Casarian operation in such a case might save the mother and the child.
b. Because, in many cases, after experienced physicians have decided that natural birth was impossible, by reason of pelvic malformation, and the Cæsarian operation decided upon, natural birth thas followed before the operation was performed. (Cases cited by Tayler in a French hospital, p. 507, I2th Am. edition, Tayler's Medical Jurisprudence.)
c. The operation of symphyseotomy, or enlargement of the pelvis by separating the bones by which an enlargement of the pelvis, at the brim, is made of more than an inch, is effected without serious risk, and even larger temporary expansion in the pressure of delivery.

Also a case in Scotland in 1847 is reported in Edinburg/h Monthly Journal, 1847, ii. p. 30 , and is quoted by Tayler.

## MEDICAL RESPONSIBILITY.

Medical responsibility in this class of cases arises, usually, at an earlier stage than at the full period where the Cæsarian operation would be possible. It is usually performed by what is called among medical men "inducing premature labor."

It is regarcied as justifiabie by physicians in three classes of cases:
I. Certain cases of cisease.
2. Deformity of pelvis preventing natural normal delivery, and
3. Excessive vomiting in pregnancy, which threatens the mother's life.
Casuists have denounced this as both immoral and illegal, but high medical authorities justify its morality and its legality. (Ramsbothann's Obstetrical Med., p. 32 S , 5 th ed.)

Tayler's Medical Jurisprudence( 12 th ed., p. 529) fully justifies this practice, on both moral and legal grounds, because medical men claim that when it is hona fide applied and with the hope of benefiting the mother, and not with a criminal design, it can not be held to be unlawful.

And this view is maintained under English law, notwithstanding the fact that no statute law in England makes any exception in favor of medical men in such cases, nor is there any exception in the statute regarding wounding as to surgical operations.

And this even when the death of the child is actually intended and accomplished, but fuily believed to be necessary.

The Roman Catholic Church forbids the sacrifice of the child, even though the life of the mother might in all probability be saved thereby.

This would doubtless control or affect the action of a surgeon of that faith, but medical authorities in England and America justify the destruction of even a seven-months child to save the mother of the child. (Vide Dr. A. F. Currier, Vol. in., Hamlin's Work, p. 460-I.)
The question raised by Mr. Bach as to the right of a physician to terminate the life of a patient suffering from an agonizing and fatal disease, on the request and even entreaty of the patient to end his agony and terminate his sufferings, presents some peculiar ethical questions.

Take the case of a man suffering from cancer of the throat, near the fatal moment, when the disease will eat into the carotid artery and the act is demanded as one of humanity and friendship to the afflicted sufferer -as substantially that presented by Mr. Bach in his remarks at the Medico-Legal Congress.

Dr. Edward P. Thwing, one of the most charming of men, and a highly esteemed physician, and also a clergyman who recently passed to his reward in China, read a paper on
this subject before the Medico-Legal Society in 1888, entitled "Euthanasia in Articulo Mortis," from which will read a ferw selections as indicat. ing the conduct, motives and action of one medical man of the highest standing and purity of life. (Medico. Legal Journal, Vol. vi., p. 282):

Death is ordinarily painless. The phenomena: which precede it often indicate extreme suffering, but the final juncture of dissolution measured by moments or hours is generally one of physical or mental placidity. And yet we have in medical nomenclature the word "euthanasia." It expresses a fact. Some deaths are agonizing. The spectacle is harrowing to sur. vivors, even if assured that the convulsive movements are partly or wholly automatic or intelligent. The propriety of an anæsthetic in such cases is naturally suggested.

Now the question arises just here, Has a dying man a right to demand euthanasia thus incluced? Or has his family this privilege? How far can a medical man extend relief to the dying? Is a soup de graal allowable? Clearly enough he cannot, morally or legally, abridge life by an hour.

Common law guards this point by the most sacred sanctions. It rests on the Divine precept, "Thou shalt not kill." The character of the pa-; tient's sufferings, whether resulting from some terrific casuality or from hopeless disease, their intensity and probable duration are matters not relevant to the issue in a legal point of view.

The patient's prayer to be put out of misery must be disregarded. Galens, dictum, "Dolor dolentibus inurtillts est," we admit. Equity, which is good sense used in the interpreta tion of law on the part of its adminis trators, will regard the intent of the physician who humanely assists the patient in or out of his sufferings; still the letter of the statute stands We may not give the mercy stroke.

Hence the cynic phrase of long ago, "Durum sed' ita lex scripta est."

Ots the other hand, while a criminal suit might be brought against a practitioner for hastening death, a civil suit for damages might be brought for professional neglect if he does not do for his patient all tinat he should do, even in the article of death.

The following case presents no novel features in its medical aspects, but it is cited to elicit a discussion, here and elsewhere, of its forensic relations:

Last June a telegram called me to a distant city to a person stricken with apoplexy and hemiplegia. The age of the patient, a widow of sixtysix years, the severity of the attack and her plethoric inabits promised a fatal issue within a day or two. She lingered, however, five days, speechless from the first and comatose. Her vigorous constitution yielded but slowly. Automatic movements like pulling of the clothes, lifting the hand to the head and other signs of restlessness, continued until near the !end. The head and eyes were turned to the paralyzed side-which is un-usual-the pupils were equal, the face flushed and livid, pulse dicrotic and loud rhonchial, stertorous, respiration twenty-seven, extremities cold, and the bruit humorique in the precordial region marked. Signs of suffocation appeared.

The attendant physician had left the case in my hands forty-eight hours before, believing that life would soon be extinct. The reality of suffering I could not admit, but the appearance of its actions purely reflected ivas painful to me. As her surviving kinsman, I took the responsibility of administering a mild anæsthetic, moistening a handkerchief at intervals from a vial containing two drachms of chloroform and six drachms of sulphuric ether. The Bandkerchief happened to be one just saturated freely with cologne by the nurse, so that the substance in-
haled, as well as the method of inhalation, produced a bland, anodyne effect.

Essential oils have sometimes been used, in foreign practice, to cover the repulsive odor of ether. The handkerchief was not held so near the nostrils as to prevent the ficee admisture of atmospheric air, and the factal expression of the unconscious sufferer was carefully studied. In two or three minutes the stertor ceased. The spasmodic actions of the arms were arrested. Respiration became easy and a general quietude secured. Euthanasia was gained and apparently painful dissolution avoided.
Fifteen minutes after drawing the anæsthetic, the final breath came, without the slightest spasm of the glottis or respiratory muscles, without any other physical struggle or sound. At the autopsy was revealed excessive sanguineous effusion, red softering and clot in the interior, ascending convolution, calcic and fibrous degeneration, thrombosis of the basilar vein, and other vascular obstructions. One of the five physicians present gave a case where he had, at the request of the parents, administered ether to a child suffocating in membranous croup, and produced euthanasia, not less to the relief of the parents than to that of the patient.

The queries therefore again return. Has the dying man a right to ask of us this or some other form of assistance? If he is speechless, may his family demand it? How far may the medical man extend this boon to the dying?

This paper created as much remark as did the view of Mr. Bach at the Medico-Legal Congress, and Mr. Leslie Stephens assailed the author of the paper and the Medico-Legal Society for allowing it to be presented, by a very strong denunciatory article entitled "Murder According to Law."

I am of those who regard it as be-
yond the right of the physician at law to intentionally destroy life in cases of this character.

And I believe that the advance of scientific knowledge has been so great in the use of anesthetics and remedies to allay human suffering, that it is now in the power of the intelligent physician to relieve suffering and pain in all stages of disease, however agonizing, and it is the right not alone of the physician, but his bounden duty, not to terminate human life, but to extend the relief of well-known remedies to assuage pain in all stages of disease; but that this right and this duty exists even in alleviating the agonies of death itself, not as a cause of death, but of robbing it of its terrors and its agonies.

An old doctrine has recently been brought forward as to the hopeless and incurable insane and some others of the defective classes of humanity, and the power and right of society in its own interest and defence to consider the propriety of arresting life in the interest and for the welfare of the living.

The savage regards it a sacred duty to end the life of any member of the tribe who becomes incurably mad, and I recall a tragic description of the method employed among. an aboriginal tribe of American Indians, witnessed by a lady long a resident and teacher among them, where, from a high sense of public duty, all the men became the ministers of a rite that ended a life, no longer of value to its possessor, or of the slightest use in the tribe, in the chase or in war.

The doctrine of Malthus rests on a lower plane than the ethics of the aborigines, and it is difficult for us, with our training and environment, to pass judgment upon it.

If a great man is smitten with paresis, and he commences that living death, "that dying at the top," as Dean Swift died, who shall say that philanthropy, humanity or the sacred teachings of religion demand the
extension of a life past consciousness, past even suffering, and that duty makes its prolongation a necessity ${ }^{\circ}$ higher than the humanity which kills our beast when it has suffered irrecoverable injury?
We shoot a favorite, highly prized and loved horse which has broken a leg, or met with such an accident as can not be cured, to, as we say, "end its misery"; but we do not thus reason of the man or woman, who, stricken with a suspension of all the faculties of consciousness, lives on unconscious of suffering or the value: of life.

Under our civilization no power is given by the law to end even such a life ; but the inherent right of society to regulate its affairs in its own best interests must be conceded to be broad enough to justify any legal enactment, $i$ assed under the forms of and not inconsistent with the organic law of any community, authorizing the terminating of human life in such cases. This would require legislation in England, and, incierd, in all Eng-lish-speaking countries where the principle of the common law was the basis of the organic law of the land.-From advance sheets of the Medzco-Legal Journal.

## THE BACTERIOLOGY OF BALDNESS.

Sabouraud's discovery that there are varieties of ringworm caused by a plurality of fungi was only recently made, and before we have had time thoroughly to grasp the bearing of this important gain to our knowledge, another discovery by this indefatigable investigator is brought before the scientific world. That seborrhoea is invariably associated with a specific microbe is a fact which is not only new to us, but which was probably scarcely suspected. That this microbe should not only be found in seborrhœa but that it should also be
found in alopecia areata adds to the surprise with which these anneuncements must be reccived.

The facts on which they are founded are explained in some detail in a paper by Dr. Wickham.
M. Sabouraud tells us that if we scrape from the skin the oily exudation obtained by pressure from a part affected by seborrhoea, and spread it on a coverglass, after dissolving the fat by ether and coloring for five minutes in gentian violet, and then discolorizing by Gram's solution, alcohol and aniline oil, we can detect myriads of a special microbe which is a very fine bacillus. This bacillus when young is punctiform and almost resembles a coccus, having, after coloration by Gram's method, a length of less than I $\mu$. The adult forms are $1 \mu$ long by $0.5 \mu$ in diameter. The sigmoid forms, which are in short chains, are rare in the exudation. They may reach the length of the tubercle bacillus. This microbe is the bacillus, of seborrhoea, and it is foun $\dot{\text { ', as }}$ Dr. Wickham explains, in rounded masses in the upper third of the hair follicle. When to this bacillus of seborrhœa are added other organisms, which is often the case, we get secondary affections of the hair follicles-various forms of acne. The same bacillus affects the sebaceous glands of the scalp, where it produces depilation or baldness. The hair of the affected follicle dies, and it is seen, when examined under the microscope, to be normal in its oldest part and atrophied in its youngest. The scales and crusts that are formed on a seborrhœeal head are due to the superposition of other microbes, but here they do not as a rule cause acne.

The mechanism by which the seborrhœa bacillus produces baldness is not understood: Anatomically it leads to progressive hypertrophy of the sebaceous glands and an exudation of leucocytes around the papiila of the hair. After this condition is established the hair falls, and each
new hair that takes the place of one that is lost is weaker and smaller than its predecessor.

Inoctilations in anmals with this microbe present great difficultics. That is why Sabouraud states in his paper, in the Annalis de l'Institut Pasteur, "I have been able to state that the micro-bacillus of seborrhcea, unique in kind and innumerable in amount in the lesions, is the constant microbic feature of this affection, without nevertheless being able to prove that it is its cause, since I have not been able to reproduce with it at will the type of the disease in which it is met."

From seborrhœa to alopecia arcata there is, clinically, a widc gulf, which is, however, apparently bridged by Sabouraud's investigations. The essential difference between the hair affected with ringworm and the hair affected by the disease which causes. alopecia areata is this: In ringworm the hair papillæ manufacture the hair in the ordinary fashion, but as soon as it is made the ringworm fungus destroys it, while in alopecia areata the fall of the hair is caused by a suspension of the formative power of the hair papilla. A similar state of things is the cause of the loss of hair in seborrhoeal baldness. The atrophied hairs of alopecia areata differ very slightly to the naked eye from those which are killed by seborrhœa. The process is essentially identical, there being a difference only "in time and in place and in degree." In seborrhoea the depilation is chronic, incomplete and diffuse, and its seat of predilection is the vertex. In alopecia areata the baldness is complete, localized, and may occur at any part. A patch of alopecia areata is an acute local affection of seborrhœe. This is proved by the fact that if a section is made through the skin affected by alopeciar areata in an early stage, the hair follicles, without exception, are found to be infected by the micro-bacillus of seborrhœa, whilst around the affected surfaces
the scalp is healthy and the follicles are not affected. Sabouraud has found this condition present in all the cases he has examined, sections of no fewer than thirty-two pertions of skin having been investigated, and a whole year given up to that special work. Up to the present time, he tells us in a footnote, he has obtained in the sheep, the guinea-pig, and the rabbit, characteristic patches of alopecia areata by using cultures of its microbe. For him, therefore, seborrhoea and alopecia areata are "essentially identical." The patch of alopecia areata is only an attack of acute circinated seborrheea, and inversely the bald only become bald by a diffused process of chronic alopecia areata. "I understand well," he remarks, "how much this opinion will appear anarchic and monstrous to dermatologists, and I believe will be received by them with incredulity, but so did the statement that a boil and osteonyelitis are caused by the same organism meet with incredulity. The statement of every new fact is thus met."

It has not been our object, in giving this brief summary of Sabouraud's researches, to enter at all into the question of previous investigations regarding the nature of seborrhoea and alopecia areata, but it is interesting to observe that Unna had, as Sabouraud himself states, seen in seborrhuea of the scalp the micro-bacillus which he has described. He had also seen it in comedunes and described it; therefore it appears as the bacillus of acne, an affection which is due, according to Sabouraud, to another micro-organion which is associated with it, the acne being in fact an epiphenomenon. Fourteen years ago Dr. Thin stated in our pages* that in the roots of hairs extracted from the margins of patches of alopecia areata and between the root sheaths and the hair shafts he had found bodies coinciding in appearance with bac-

[^4]teria, and he believed that alopecia areata was caused by the development in the hairs of a minde organ ism or bacterium; carrying this belicf into practice, he showed that sulphur ointment thoroughly rubbed into the margins of the patches in many case arrested the disease. The same observer had described $\dagger$ what he believed to be an organism that caused alopecia arcata. He describes this organism in the following words:
"The difficulty of distinguishing - . . granule: from micrococci or from the spore forms of rod bacteria is so great that it was only when the characteristic appearances of eloligating spheroids, or small rod-shaped bodies containing spheroidal elements arranged linearly, or rod bacteria were observed, that the evidence of the presence of organisms was deemed conclusive. . . . The result of the examination of a large number of hairs prepared by these methods hdo been to satisfy me that minute objects can be detected in them similar in size and form to those which I have recognized as organisms on the borders of freshly-extracted hairs, and preparations were obtained in which these objects were found in positions, and so arranged as to show that they were distinct from the rows and agyregations of minute granule, which are found in healthy hairs. The objects referred to were seen either as round or as elongated rounded bodies."

The objects described by Dr. Thin as organisms do not seem to have been situated exactly in the same position as the micro-bacillus so carefully studied by Sabouraud. He considered that the bacterium described by him as "decalvans," penctrated downwards between the internal root sheath and the shaft towards the root of the hair. It then penetrated the hair substance, and as it

[^5]multiplied it ascended upwards in the substance of the hair. Dr. Thin does not state that he had made any sections of the scalp, and did not succeed in staining the organisms, which renders an accurate comparison with such complete researches as Sabouraud's very difficult-Britis/a Medical Journal.

## CHLOROFORM AND THE HEART.

In an address delivered before the Society .: Anesthetists on February ISth, which was published in the British Mcdical Journal of April 17th, Mr. Lconard Hill brought forward additional evidence of the incorrectness of, the doctrine, promulgated by the Hyderabad Chloroform Commission, that chloroform has no direct action on the heart. This new evidence is the outcome of his researches into the influence of the force of gravity on the circulation of the blood, which were communicated to the Royal Society in Novembei, 1894, and published in detail in the Journal of Physiclogy in the following year. When an animal is turned from the horizontal to the feet-down position, the cannula in the artery being ingeniously placed in the axis of rotation there is a fall of blood pressure in the carotid and a fall of intracranial pressure. The fall of blood pressure is not great, and in a normal animal under morphine it soon rises to but a little short of the pressure recorded in the horizontal position. The mechanism of this recovery or compensation has been carefully investigated by Mr. Leonard Hill, and he has shown that it depends upon the integrity of the vasomotor and respiratory systems, together with the efficiency of the heart. In the feet-down position the blood accumulates in the vessels of the abdominal viscera, and it is "lifted" on to the heart by an increase of tonic
constriction of the splanchnic vesscls, aided by an increase of abdominal pressure brought about by contraction of the muscles of the abdominal wall. Previous section of the splanchnic nerves, or division of the dorsal spinal cord, by removing the tone of the splanchnic vessels, leads to a much greater fall, and does away with the power of compensation, although the animal endeavors to drive on the blood by powerful contractions of the expiratory abdominal muscles. When these are also divided the blood pressure falls still lower. If the chest is opened the heart is seen to be bloodless and empty, but can be immediately filled by pressure on the abdomen. Increased activity on the vasomotor centre is the main factor in bringing about the recovery of pressure.

It is interesting to note that in an "upright" animal, such as the monkey, the compensating mechanism is very efficient and prompt, and, in fact, there is frequently over-compensation, so that the carotid blood pressure is higher in the upright than in the horizontal position. The same is the case in man, and this has been clearly shown by Dr. Gcorge Oliver with his ingenious instrument, the arteriometer. This instrument gives an indication of the pressure in an artery by measurement of its diameter, and shows that the diameter of the radial artery of a healthy man is greater in the sitting than in the recumbent position. In the upright position the heart beats faster, for it has more work to do in sending the same quantity of blood through the brain aid through the abdominal viscera back to the heart again. The increased work of the heart is the third factor in bringing about compensation on change of position. As long as the heart is able to do this very small increased amount of work the pressure recovers; but if it is not able to do it, only an incomplete and poorly-sustained compensation is brought about.

Now, Mr. Leonard Hill finds that chloroform is a most powerful agent in doing away with the power of compensation. With moderate anresthetization the fall of blood pressure on turning the animal into the feetdown position is very considerable, and that the blood largely accumulates in the splanchnic vessels is shown by the considerable recovery of pressure, though short of normal compensation, brought about by compression of the abdomen. This compression drives blood on to the heart, and the heart forces some of it on into the arterial system. Very different is the result whon the airesthetic is pushed; a very great fall of pressure is produced, and compression ${ }^{\circ}$ of the abdomen, or even turning the animal feet up, leads to no adequate rise of pressure. The feet-up persition does not restore the pressure to as high a level as that which was maintained in the feet-down position before the chloroform was pushed. It is no use squeezing blood on to the heart, for it is incapable of dealing with it. A heart under the influence of chloroform is not able to do the small additional work required to maintain anything like the same pressure when the animal is turned from the horizontal to the vertical position.

The experiments show the essential difference between a low pressure produced by vasomotor paralysis and one produced by chloroform, and leave no doubt whatever that the dangerous fall produced by the drug is due to direct action on the heart. So that from an entirely different standpoint the work of MacWilliam, Ringer and others, and the results obtained by the elaborate cross-circulation method of Gaskell and Shore are completely confirmed. Mr. Leonard Hill points out that the tracings of the Hyderabad Commission also show that failure of the circulation is really the cause of death. For the respiration stops, not because the centre is paralyzed but because the
blood pressure has fallen to a certain amount, and it recommencer when this is by any means raised to that amount again, although the centie is thereby supplied with as much chloroform as before. In fact the tracing; of the Commission, as Dr. Gaskell and Dr. Shore have pointed out, are, so far as they go, as good as any others; they are infallible records made by the animals themselves, and when read by competent physiologists tell the same tale as all others do.

Mr. Leonard Hill has not omitted to point out the practical bearing of his experiments on the treatment of that commonest cause of death from chloroform - syncope in an early stage. In one year, out of forty-onedeaths from chloroform syncope, thirty-nine occurred in the primary stage before the patient had been touched by the knife. The sudden application of concentrated chloroform vapor causes struggling and holding of the breath, the glottis is closed, and intrathoracic pressure is raised; the lungs are thereby compressed and largely emptied of blood; this leads to engorgement of the right heart and congestion of the venous system, until at last two or three very deep respirations are taken. and there is a sudden rush to the left heart of a mass of blood surcharged with chloroform. The heart, already dilated, is then paralyzed. Holding strong chloroform vajor to the nostrils of a struggling patient is to court disaster.

When syncope has occurred the chief thing to do is to relieve the heart of blood and not to drive blood to it, as is so often done by inversion or flagellation. Artificial respiration is to be applied in the horizontal position by forcibly compressing the chest rhythmically, with the object of bringing pressure to bear oa the heart. If this is not immediately successful the same manœuvre must be carried out in the vertical feetdown position, and under no circum-
stances must the abdomen be compressed or the patient inverted. If only a little blood can be forced through the heart and the pressure on the right: side be sufficiently relieved spontancous contraction will soon occur, and as the blood, ,ressure rises sespiration will begin again. Mr. Leonard Hill's experiments afford additional proof of the difference in action of ether and chloroform. With ether the fall of pressure is much more gradual, and when the animal is placed in the feet-down position the drop of pressure is comparatively small; but even when the cther is pushed and a low pressu $c$ produces it can be at oncc raised by compression of the abdomen or by the resumption of the herizontal position. The heart is comparatively little affected, and as the blood is brought to it, it can pass it on, but the chloroformed heart cannot. As to the physinlogical action of chloroform and to the comparative safety of cther, recent experiments on animals are, we are glad to see, in complete accord with clinical experience. British Medical Journal.

## FEMALE INEBRIETY.

In these days of sceptical criticism and unbiased investigation, not a few of our most cherisherl traditional beliefs have been unable to stand the tests of truth and fact. To those exploded traditions must, we fear, now be added the faith in the superiority of Continental over British people as regards sobriety, at least if we are to accept statements made by high medical authorities at a meeting of the Society of Public Medicine in Paris. The increase of inebriety has of recent years been the despair of the thinking members of the profession as well as of ine judicial, philanthropic and governing classes in the principal European countries. At this moment drastic special legisla-
tion for the involuntary therapeutic detention and care of habitual drunkards is occupying the attention of the Austrian and other governments on the continent of Europe. The discussion to which we refer arose on the report of a scientific commission, with Dr. Duclaus as president, which had set forth that, beyond a certain dose, alcohol of whatever origin, and whether in wine, beer, cider or spirits, is a poison of which the effects are deadly on the physical and moral health of the population. Subsidiarily, drinking caused the growing expenses of hospitals and asylums for the insanc. The commission pointed out that the injurious effects produced by alcohol were heightened by the imperfect rectification of alcohol and by the addition of toxic essences; while they strongly recommended the eduction of the number of places for the sale of liquor, and the enlightenment of the people on the perils involved in the abuse of alcohol, and in the special toxicity of somic beverages consumed, by courses of instruction to all from the period of school onwards.

One of the most remarkable features of the discussion was $\mathrm{Dr} . \mathrm{F}$. de Grandmaison's statements as to the extent of female inebricty, of which few except those who have given special attention to the subject could have any suspicion. He characterized as an illusion the tradition that ethylism was confined to the stronger sex, which he at one time believed, till painful experience had disillusioned him. Of the first 500 women who had presented themselves to him for treatment at the externe department of the Laënnec Hospital, 156 showed undoubted signs of chronic alcoholism (3I per cent.), while of the men 70 per cent. were similarly affected. These patients did not all confess to alcoholism, but the symptoms were unmistakabletremors of the hands or of the tongue, muscular cramps, morning phlegm,
business dreams and nightmare, with dyspeptic troubles. Of the objective symptoms the hand trembling was the oftener observed. Of the subjective, the gencral identity of the professional dreams wis most striking. The dreams of non-alcoholized nervous women were differentiated from those of the alcoholized, by the former subjects secing themselves pursucd by animals-generally sinall animals, like cats or rats-and by the latter dreaming of falling down precipices, drowning in water, or throwing themselves from heights. The muscular cramps and the paresis of the limbs, which were less frequently seen, were indicative of a peripheral neuritis, a late as well as very gradual manifestation of alcohclic poisoning. Fifty-one per cent. of these women were between twenty and forty years of age, the active period of existence. though there were five cases below twenty (three at eighteen and two at nineteen), or 3 per cent. Above sixty, 7 per cent. were met with. Of the 118 female cooks attended, sixty were incbriates (in round numbers 50 per cent.), thus not belying their reputation. Of the twenty-seven laundresses, nine were alcoholics or onc-third. Of the seventy charwomen, thirty-four were drundards ( 48 per cent.). Of nine itinerant dealers (costermongers), all were chronic alcoholists; and among seventy-two seamstresses, six (or 8 per cent.) were excessive drinkers. Of the 156 treated, only four had phthisis; twentytwo were cither hysterical or neuropathics, confirmiry the opinion that female hysteria is often of alcoh.lic origin. Of six suffering from arteriosclerosis, in tivo (cooks) the symptoms seemed to have arisen from alcohol ; three had gastric ulcer, apparently due to spirits. In nine of the 150, a!cohol had appeared to predispose to influenza.

Dr. Bourneville stated that of $\mathrm{I}, 000$ children at Bicêtre (1880-1895), in 47 I only the father had been a drunk-
ard, in eighty-four only the mother; but in sixty-five both parents were intempcrate. Alcoholism was not known to have been present in the parents of 200 children, while there wes no family history in 171 caves. in fifty-seven instances conception had taken place during the intoxication of the father, and in wenty-four other cases there was a strong probability, but no certainty, of this having occurred.
M. Yvon, who maintains that even the most highly rectified and unsophisticated alcohol is always hurtful, -the more hurtful the greater the quantity taien-has calculated the daily quantity of absolute alcoho! consumed in the form of beverages by a drinker whose sonsumption "was not exaggerated." The daily allowance comprised onic bottle of wine (half a bottle at each of the two meals) containing 10 por cent. of alcohol; one bottle of beer between meals (ditto); and one petit verre of cognac (at 50 per cent.). The wine contained $66 \mathrm{c.cm}$. of alcohol, the beer $40 \mathrm{c} . \mathrm{cm}$., and the cognac 12 c.cm., making a total of $118 \mathrm{c} . \mathrm{cm}$. This quantity of alcohcl represented 237 c.cm. of brandy, which, with an alcoholic strength of 50 (onc-half), would be equivalent to about a quarter of a litre.

The information thus elicited points to a grave state of matters in 1 rance, but these efforts of the medical profession to arrive at truth and enlighten public opinion are a hopetul augury of success in what Dr. Laborde calls "the struggle against the true enemy." Already it is understood that the Supreme Council on Education for France will approve the propesal that the dangers of alcoholism should form part of the teaching in schools of all grades. The teaching is to be given by means of dictation, composition exercises, and arithmetical problems on the material losses caused by intemper-ance.-Britis/h Medical lourral.

## ON PROGRESS IN CATHOGRAPHY.

Nikola Tesla, i: the Optician, says: In my opinion, no experimenter need be deterred from carrying on an investigation of the Rentgen rays for fear of poisonous or generally deleterious action, for it sterns reasonable to conclude that it would take centuries to accumulate enough of such matter to interfere seriously with the processes of life. But I look confidently to the demonstration of actions of a purely qualitative nature. Vor instance, despite of the danger of such an assertion (by encouragement which might be given to quacks), I would say that I expect with confidence the demonstration of a germicidal action. In addition to the physiological effects, to which I have sealy drawn attention, I have more recently observed with powerful tubes that a sensation of pain is produced in the forehead above the eyes just as soon as the current is turned on. This sensation is very similar to that one frequently experiences when stepping from a dark room into the glare of bright sunlight, or when walking for some time over fields of fresh-fallen snow.

As to the hurtful actions on the skin, which have been variously reported, I note that they are misinterpreted. These effects have been known to me for some time, but I have been unable, on account of pressing matters, to write on the subject. They are not due to Rœentgen rays, but merfly to ozone generated in contact with the skin. Nitrous acid may also be responsible to a small cxtent. Ozone, when abundantly produced, attacks the skin and many organic substances most energetically, the action being no doubt heightened by the heat and moisture of the skin. After exposing the hand, for instance, for some time, the skin loses its elasticity, which causes a
tension and pain, and subsequently an inflammation and blistering. Owing to this, I have always taken the prectation, when getting impressions with the rays, to guard the person by a screen made of aluminum wire which is connected with the ground, preferably through a coadenser. The radical means, however, of preventing such actions is to maike impossibim the access of the air to the slim whule exposing, as, for instance, by ymmusing in oil.

The attion of the ozone on some substances, when placed near the bulb in such a way that the gas is generated on their surfaces, is so powerful that the substances are practically de woyed in a few minutes. When a wi. heavily insulatec with rubber is connected to the terminai of a high-frequency coil, sometimes an exposure of barely a minute i: sufficient to completely wreck the rubber insulation. There are cortain commercial insulating compounds which are even more quickly destroyed, but which I will not enumerate, because of a possible injury to the manufacturers. Guttapercha, beeswas and paraffin stand the attack very well, and wires insulated thereby should be used with high-frequency coils.

This powerful action of the ozone was observed by me first about two years ago, when performing an experiment which was shown to many persons in my laboratory. The exfieriment consisted of charging a person standing on an insulated stand, with a potential approximating one and one-half million volts, which was alternated several hundred thousand times a second. Under such conditions lumincus streams break out on all parts of the body, especially abundantly on the feet, hands, hair, nose and ears. I' subjected myself a number of times io the experiment. I then noted on myself and others after effects resembling those attributed to the ?Rontgen rays.
"Tic Douloureux," Facial Neuralgia, and Migraine.-Gilles de la Tourette (Sem. Med.), describes some typical cases. (I) Tic douloureux and netialgia. From a therapeutic point of view it is most important to distinguish two classes of facial neuralgia : the first transitory and usually due to cold and peripheral irritation, the second refractory and perhaps incurable. First form : The pain during attacks is less intense, but is seldom entirely absent between them. The onset is sudden, then there is an acme and a decline. Second: Tic doulour'eux is completely paroxysmal, pain being entirely absent in intervals; its maximum intensity is reached quickly, and it ceases as suddenly as it came, the whole attack bring of short duration. There may be ten to one hundred attacks in the day, which are often brought on by physiological acts, such as blowing the nose, laughing, mastication, etc., or come on spontaneously. The patients compress the painful spot, and the face is contorted. Secondary vasomotor symptoms are injection of the eye, œdema of eyelids, discharge from one nostril, etc. If the lingual nerve is affected the mouth fills with a copious secretion. Herpes along the nerve is common. Most often the neuralgia lasts some time (weeks or months), and then vanishes completely for a period. However, as age advances these intervals tend to become shorter and the painful periods longer until the disease is permanent. A hysterical form can be distinguished from the true by the irregular occurrence of the attacks, perhaps one a day and then no more for some time, by the actual duration being longer, by the usual presence of an aura, and by terminating frequently with hysterical convulsicns which latter are never provoked by truc tic, though hysteria and tic may coexist. Hysterical neuralgia is curable by suggestive treatment. Treatment: The first form of neuralgia is always benefited by analgesics (antipyrin, phenacetin, hydro-
bromate or valerianate of quinine); the second, or true tic, is quite uninfluenced by them. The only drug which can be relied on in the latter is opium :n large doses. The author gives it in pills containing 2 centigrammes of the thebaic extract of the French pharmacopœia, made freshly and not too hard. Three a day are given at first, and the effect being carefully watched one pill is added every other day until the desired effect is produced. Trousseau gave in one case 14 and 15 g . a day. This dose is continued for a few days, and then diminished by one pill every other day. Prognosis: The attacks cured for a time almost always recur, and intolerance of opium is usually more marked during a second than in the first course. Still it is the best drug unless syphilis is present, when antisyphilitic treatment is indicated. (2) Migraine differs radically from trigeminal neuralgia; the two may coexist in the same person and be quite distinguishable. The treatment of severe cases, accompanied by aphasia, etc., used by the author succeeds where antipyrin and even opium fail. Bromides are given as follows: Starting with 2 g a day for a week, the daily dose is raised by I g . every week, and after a time reduced progressively by the same amount, when it is again increased. Up to 7 g . a day may be tolerated. By this means migraine of years standing may be completely cured, but the treatment must be absolutely continuous, and may extend over more than a year. Thus it is not suitable for slight cases, owing to the inconveniences attendant upon a long course of bromides, and is useless during the attack. As an aid to treatment alcohol is forbidden. The treatment is the same as for epilepsy, and the author considers migraine to be a neurosis.

Airol, Dermatol, and Iodo-FORM.-Haegler(raprint from Beitrage zur klinischen Chirurgie) reports the results of a comparative chemical, physiological, bacteriological, and clinical
study of these antiseptic powders. The replacement of antisepsis by asepsis has lessened the field of usefulness of iodoform, the most particular indication for which is found in the case of tuberculous abscesses. Dermatol, a compound of bismuth with gallic acid, is more valuable for its astringent than for its antiseptic qualities. Ludy conceived the idea of forming a compound of dermatol with iodine, and thus airol was produced as a tasteless and odorless powdci, unaffected by light, and containing 44.5 per cent. $\mathrm{B}_{2} \mathrm{O}_{3}$ and 24.8 per cent. of iodine; its .color is greygreen, but moist air, or the discharge from a wound, rapidly converts it into a red substance, with liberation of iodine. It is insoluble in ordinary reagents, but readily dissolves in strong caustic soda or weak mineral acids. Haegler's first experiments related to the toxic effects of these antiseptics, weighed quantitics of which were injected under the skin or into the peritoneal cavity of animals. The lethal subcutaneous dose of dermatol was 5 to 6 g . per kilog. of body weight, of airol 3 to 5 g ., of iodoform I g. ; intraperitoneally the respective doses were 1.2 to 2 g., I. 2 to 2 g., and I g. Airol and dermatol both killed by chronic bismuth poisoning ; nevertheless, out of over two thousand patients treated with airol by the author, not one showed a single sign of bismuth intoxication. The three drugs were next administered to animals in food, and here again it was fuund that iodoform was by far the most toxic, although the amount taken was the smallest owing to the subjects being repelled by the smell. With regard to dermatol and airol, the latter was the less poisonous, and it was noticed that both were better borne by carnivora than herbivora. In fatal cases of dermatol poisoning perforation of the stomach was frequently observed; this was not seen in animals killed by the administration of airol. Haegler finds that the delay in the growth of organisms produced
by airol is slightly greater than that resulting from iodoform, and infinitely more than the effect of dermatol. It is found that the influence of antiseptic powders is greater the earlicr their use is commenced; in acute phlegmonous processes, however, they do but little good, while themore chronic the inflammation the better the results obtained, whence their special indication in tuberculosis. The two great advantages in this respect which airol has over iodoform arc, first, the fact that a small quantity of its iodine is liberated immediately it comes in contact with the tissues, and, secondly, that the presence of bismuth exercises a powerful desiccating influence upon the secretion, thereby greatly aiding antisepsis. With regard to the preparation to be used, both iodoform and airol are disintegrated by attempted sterilization, but the powder is a perfectly safe form if dust is carefully excluded. The autlior also uses airol gauze ( 20 per cent.) as a dry dressing, and describes its effect in producing a small, hard scab in one to two days as marvellous; its value is particularly striking in superficial lesions, such as ulcers and burns. In tuberculous abscesses the form employed is a 10 per cent. emulsion in equal parts of glycerine and water. A final point in favor of airol is that it is extremely bulky, being four times as light as iodoform, and twice as light as dermatol.

A Smple Methol of Distinguishing Diabetic from NonDiabetic Blood.-R. T. Williamson, M.D., London, medical registrar, Manchester Royal Infirmary (Medical Press), describes a simple method of distinguishing diabetic from non-diabetic blood. He has found that diabetic blood is much more powerful than non-diabetic blood in removing the blue color from a solution of merhyl blue. The reaction is so sensitive that the difference can be
detected by the examination of a drop of blood obtained by pricking the finger. When certain proportions of blood and a warm alkaline solution of methyl blue are mixed together, the blue color is removed in the case of diabetic blood, but remains when. non-diabetic blood is used. The following is the exact method employed : In a narrow test-tube are placed forty cubic millimetres of water (the capillary tube of a Gowers hæmoglobinometer, which is marked for tiventy centimetres, may be used for measuring thefluid), twenty cubic millimetres of blood are added, and then one cubic centimetre of a I in 6,000 watery solution of methyl blue and afterward forty cubic millimetres of liquor potasse. The tube is then placed in a capsule or vessel containing water which is kept boiling. At the end of four minutes the blue color disappears and the fluid becomes yellow if diabetic blood has been used; but in the place of $n \cap n$-diabetic blood the blue color remains. In over thirty examinations of diabetic blood (from five cases of diabetes mellitus), the methylblue solution was always decolorized; while normal blood, and the blood from one hundred patients suffering from the most varied diseases never decolorized methyl blue when mixed in the above proportions. Hence, by this simple method, a drop of blood from a well-marked case of diabetes mellitus may be readily distinguished from non-diabetic blood.

The Army Medical ExamnaTION. - Mr. Brodrich's reply to Sir Walter Foster confirms the rumor that unsuccessful candidates at the army medical examination, hitherto limited to two trials, are now to be allowed three. We must regard this -whether acquiesced in by the medical authorities or not-as a virtual lowering of the examination; even although the present minimum qualifying number of marks, which is certainly not too high, be maintained. For while in a genuine competition a
really good man may, through accident, once fail, he is not likely to repeat the failure on a second trial; but this examination having lost all semblance of competition, and become merely qualifying, two failures should clearly stamp a candidate as at least undesirable for the service. But the relaxation of the rule was probably forced on the department by military authorities, seemingly deaf, as they certainly are dumb, to suggested army medical reforms. The object of the change on the eve of an examination is all too obvious; by admitting past double failures i better show of candidates versus vacancies will be made, and so prevent a so-called competition from appearing a complete fiasco. Probably the next step will be to reduce the minimum qualifying standardanything to stave of such concessions as good candidates will alone accept. The army was never more in want of "good doctors," but how are they to be got, if, by the obstinate refusal of reasonable reforms, "good candidates" are deterred from coming forward ?-British Medical Journal.

Colored Spectacles.-Pergens (Klin. Monatsbl.f. Augen.) finds that smoked or neutral glasses allow red rays to pass through more easily than other rays, and for that reason they are not to be recommended as protecting glasses, the red rays causing most irritation of the retina. For the same reason, ordinary blue glasses are also faulty; whereas a combination of a dark blue-green glass with a Number 6 blue glass, excludes red, and is to be recommended. In measuring smoked and blue glasses, he takes as unity the weakest glass which at one metre does not transmit the light of a Hefner amylacetate candle. Contrasting glass and rockcrystal, he remarks that glass absorbs much more of the ultra-violet rays and is therfore to be preferred for cataract glasses.

The United States Pharma-copgeia.-Dr. Eli H. Long, of Buffalo, read a paper before the Medical Society of the State of New York, in which he recalled the fact that in I8IS the Medical Society of the State of New York, at the suggestion of Dr. Lyman Spaulding, of New York, had issued: a call to other State societies, looking toward the adoption of a national pharmacopœia. Although the pharmacopœia originated with the medical profession, to-day pharmacal institutions and societies predominated in the work of its revision: For instance, in the Pharmacopoial Convention of I 840 there were twenty physicians; in I 870 there were sixty delegates, representing eight colleges of pharmacy; in IS90 there were one hundred and ninety relegates, eightyfive of whom were medical and one hundred and five.pharmacal: It would seem right and proper that the representation of the two professions should be equal. Recently the question had been raised as to the expediency of indicating doses in the pharmacopœia and of introducing pharmacal preparations of known value and purity, irrespective of any proprietary rights connected therewith. In the author's opinion it would be better to omit doses from the body of the work in any case. If their introduction was demanded, they should be placed in a list where they would not be recognized as setting a standard: Regarding the other question, it should be said that foreign pharmacopœias admitted proprietary remedies, and inadvertently salol had been allowed to creep into the present edition of our pharmacopoeia. At the present time our knowledge of new drugs had to be obtained from the circulars of the manufacturing chemists and pharmacists. These preparations should, he thought, be treated of officially in the pharmacopœia, and in this respect our pharmacopœia did not keep pace with practical medicine. He suggested that a section should be devoted to furnishing
reliable information regarding new drugs that had been tried. This could be supplemented by annually issuing an appendix. He suggested also the appointment of a committee on pharmacopœia, so that these and other matters of moment might receive due consideration before the society was called upon to send delegates to the new pharmacoposial convention.

Treatment of Acne Rosacea -Ohmann-Dumesnil (Tri-State MTed. Journ.) says that treatment directed to the rensoval of any underlying constitutional factor and careful regulation of the diet are generally essential. Among local remedies are the reducing agents, or such as have a tendency to contract the capillaries, and thus reduce the supply of blood to the parts. Sulphur and its various combinations are among the most valuable. The best form in which this can be used, in the author's opinion, is the following lotion: B Calcis viver, $\begin{aligned} & \\ & \text { ss }\end{aligned}$; sulphuris sublimate, $\bar{j}$; aquæ, $\xi \mathrm{x} ; \mathrm{M}$. Coque ad $\xi \mathrm{vj}$, divide et filtra. The boiling must be carefully done over a water bath in a graduated vessel. The filtration must also be carefully looked after, and the filtrate should be perfectly clear. If it is not clear, the boiling has not been thorough, or the process of filtration has been imperfect. The color should be ruby red. This should be applied thin at night, and be followed in the morning by an ointment. If preferred, an ointment may be applied both night and morning. The ointments may contain any of the folluwing reducing agents in varying proportions: Sulphur, ichthyol, resorcin, or salicylic acid, either alone or in combination. The following formulæ are given as types: BX Sulphuris precipit., 3 ss to 3 j ; ung. aqure rosæ $Z_{j} \mathrm{j}$ M. $\mathrm{B}_{\mathrm{k}}$ Sulphuris precipit., 3 ss resorcin, gr. xv; ung. aquæ rosæ, $\bar{\xi} \mathrm{j}$, M. B Ichthyol, 3 j ; lanolini puriss.; ung. aquæ rosæ, āā そ.ss, M. R Acidi
salicylici, $\exists \mathrm{j}$; ichthyol, 3 ss; ung. aque rocæ, $\mathcal{Z}^{\mathrm{j}}$, M. The amount of active agent employed must be governed entirely by the susceptibility of the skin to its irritating influence, for every one is an irritant. On this account the factitious redness produced by the remedy must not be confounded with the color due to the disease. In more advanced cases electrolysis, linear and quadrilled scarifications, by means of Vidal's scarifier or Unna's microbrenner, an instrument constructed on the plan of the Paquelin thermocautery, whose point, however, is practically a needle, may be useful. In the most advanced stage or rhinophyma the hypertrophied mass can bc dealt with only by the knife.

Thyreoantitoxin.-Grünfeld (Wien. med. Blütter) has investigated the action of thyreoantitoxin in three cases of exophthalmic goitre, four of obesity (one complicated with eczema and one with psoriasis), two of bronchocele, and one of simple psoriasis. In seven of the cases the drug induced a marked diminution of the body weight, usually in a few days, and afte the administration of quite small doses ; the subsequent decrease in weight was not proportional to the increased dosage. In one of the cases of exophthalmic goitre, however, the body weight rapidly increased, while in another it remained practically stationary; it increased also in one of the bronchocele patients, who, however, suffered from bulimia. The author reserves his judgment as to the value of thyreoantitoxin in exophthalmic goitre. In one case there was rapid improvement at first, followed by a severe relapse ; the patient then left off the drug, the causal relation of which to the symptomatic variations consequently remains undetermined. The other two cases improved markedly under the drug, but in both of them there was already slight amelioration when the treatment commenced. The
action of the thyreoantitoxin on the enlarged gland was in all cases the same, namely, a distinct softening of the lobes withuut any marked diminution in size. Its influence on the skin in eczema and psoriasis remains doubtful, as in the author's cases, in order to bring about a rapid improvement, the ordinary standard remedies were used at the same time ; in two of the exophthalmic cases, however, it produced a marked inhibition of the sweat secretion, in one of them also considerable decrease in the pigmentation. With the exception of the relapse in one of the exophthalmic cases no unpleasant after-effects were noticed, though doses of 2 grains per day were in some instances administered. Grünfeld considers that his results show that thyreoantitoxin has considerable therapeutic importance, and that Baumann's view that iodothyrin is the only thyroid preparation of medicinal efficacy is thereby disproved.

Massage and Movements in Treatment of Fractures. Davis (Annals of Surgery) discusses these adjuncts to treatment in some varieties of fractures, and summarizes as follows: (I) Massage and passive movements are not used to their proper extent in the treatment of fractures. (2) Immobility of the fractured ends favors good union with little deformity. (3) There are some cases in which, owing either to peculiarities of the fracture or to impaired constitution of the individual, the tendency to callus formation is increased. Motion in these tends to form exuberant callus and causes deformity. (4) There are others in which bony union is unduly delayed ; disturbance in these hinders union. (5) It is wise to wait till fractured parts are glued together, usually in eight or ten days, before attempting any except the lightest massage, and any extensive passive motion after that time should be used carefully but diligently. (6) Passive motion and massage when
first attempted should be of the most gentle character, and not so violent as to disturb the relations of the broken bones. (7) Any marked pain or inflammatory reaction following passive motion and massage is eridence of too great violence. (8) The limb should receive massage and manipulation at each inspection or change of dressing, often daily. (9) In some cases such massage as is possible should be administered without removing splints. (10) Persistent stiffness, particularly in fracture or injuries of the wrist, is often due to a rheumatoid affection locating itself in the injured region. Massage is valuable in the treatment of this. (II) Massage should be given to that part of a limb beyond the seat of fracture to preserve it in a normal condition. (12) Such dressing and methods of treatment should be adopted as will allow of the greatest use of massage and movements consistent with proper retention of fragments in position.

The Plague.-Up to February $4^{\text {th }}$, according to the official returns, there had been in Bombay 2,098 cases of the plague, with 3,841 deaths. Several of the European governments are sending commissions to India to study the disease. It was announced that Koch was to head the one sent by Gerniany, but a dispatch from Berlin says that he has telegraphed from South Africa his refusal to go to Bombay. Yersin is now on his way there, having been invited by the government to make a trial of his intiplague serum which was found so effectual in Amoy last year. A sanitary conference has been called to meet in Venice on February 12th. It is announced that the British delegates will refuse to sanction the adoption of stringent quarantine restrictions, urging iather upon the delegates from southern Europe the prophylactic virtues of cleanliness, both personal and municipal. It is announced by
the governor of the Transcaspian territories that the bubonic plague has appeared at Candahar, Afghanistan. A force of Cossacks has been sent to the Amu Dara River to prevent, if possible, the introduction of the disease into Russian territory.

Cerebro-Spinal Meningitis.A discussion recently took place on this disease (Munch. med. W'och., at a Vienna Medical Society. Schlesinger showed two cases which had recovered. The disease generally began in this epidemic suddenly, with high temperature and vomiting. Herpes soon appeared. Ptosis, oculomutor paralysis, or other ocular palsy or facial paralysis supervened. There was passing paralysis of the bladder and rectum. Rigidity of the neck was very marked, and appeared early. Once spinal puncture was practised. The fluid contained pus cells, but revealed no characteristic microorganism. The puncture was not repeated, because there was no improvement after it. Convalescence was protracted. Schlesinger emphasized the value of hot packs. The hot cloths are applied for three-quarters to one hour. The rigidity of the neck and hyperæsthesia particularly diminished under this treatment. The fever was not influenced by it. ${ }^{\text {V}}$ ?uffmann spoke of the relation of meilingitis to deafness. Berdach saw two cases in the same family, both fatal. In two other cases the disease was preceded by sore throat. The cause of the disease was Weichselbaum's meningococcus. The symptoms were variable. In one case improvement occurred, but on the nineteenth day there was a relapse, which proved fatal in twenty-four hours. In one case the patient first had pneumonia, then general furunculosis, and then meningitis. Schlesinger, in conclusion, said that this meningitis had been more common in Vienna recently, and had no doubt been introduced from without. He had not seen sore
throat precede it. In early cases the diagnosis was difficult, and perhaps spinal puncture might be useful here. The prognosis was serious, the number of fatal cases being considerable. Hot packs were more easily carried out than hot baths.

Alloxur Bodiesand Leukhema. -Gumprecht (Centrablatt fur allgemeine Pathologie und Anatomic), taking the term "alloxur bodies" in Kossel and Kruger's sense as meaning those bodies which have an alloxan and a urea nucleus and therefore as meaning beside uric acid, also xanthin or nucleus bases (xanthin guanin, hypoxanthin adenin, or their derivatives) found that in leukrmia in the cases where uric acid excretion is normal or diminished (it is generally increased) the alloxur bodies are increased, and that their amount varies directly with the amount of leucocytosis. He gives one case of his own in which this is shown very clearly, and points out that it forms an additional support to Horbaczewski's view that uric acid comes from degeneration of leucocytes. being formed from their nuclei. The "alloxan nucleus" or erythric acid, is a substance obtained from uric acid by the action of nascent chlorin or nitric acid, in the form of colorless crystals, large and small, that impart a red color to the skin. This substance has been found in the intestinal mucus of catarrhalenteritis.-Britis//Medical Journal.

Etiology of Mastitis.-Rudolf Köstlin (Arch.f. Gynak.) discusses the question of the relation between the germs contained in human milk and the production of mastitis. He has investigated bacteriologically the milk from the breasts of 100 pregnant women, of 137 patients in the puerperium, and of 60 children. Micro-organisms were found in the milk in these groups of cases in the proportion of 86, 91 and 75 per cent. With few exceptions
these were of the nature of staphylococci, and especially the staphylococcus albus. The immigration of bacteria takes place from the outside from the mammary areola; their entrance along the line of the blood current has not yet been satisfactorily established. The entering germs are relatively innocuous; they injure ncither the mother nor the infant. Mastitis without micro-organisms does not occur. The infection in mastitis takes place from the outside along the line of the lymphatic vessels from injuries in the skin. The result is the development either of the ordinary form of mastitis duc to the invasion of staphylococci, especially the staphylococcus aureus, or of the much rarer form of psendo-erysipelas and of retromammary abscesses caused by streptococci. These conclusions are supported by bacteriological, clinical, and pathologico-anatomical evidence. Mised infections are, of course, quise possible. A metastatic mastitis developed along the line of the blood current has not yet been certainly established. The paper closes with a useful bibliography of eighty references.

Guaiacol in Puerperai Eclampsia.-J. F. R. Appleby (Boston Med. and Surg. Jour.) prefers guaiacol in the treatment of puerperal eclampsia. He has used it in two cases with "surprising and happy" results. Forty or fifty drops were poured upon the abdomen and gently rubbed in. In a few minutes the pulse became soft, free diaphoresis set in, and the convuls ons died away. In both instances there was albuminuria and cedema, and in both the recovery was good. Guaiacol possesses the advantages of ease of application, certainty of action, and speedy relief of urgent symptoms. Its physiological effect is to cause rapid and marked lessening of arterial blood pressure, lowering of temperature, and free diaphoresis.
porrós Supravaginal Amputation of the Uterus for Uncontrollable Hemorihage. Taendler (Wunch. med. Woch.) records the case of a woman, aged thirty years, who in both her confinements lost much blood. On the fifteenth day of the puerperism following the second labor, when making a slight exertion, she had a severe flooding. This recurred twice, and when Taendler saw her (about six weeks after confinement) the pulse was weak and quick, the temperature subnormal, the fundus uteri midway between the symphysis and the navel, the uterus formed a fluctuating elastic swelling, and the os uteri internum was closed. The finger passed into the uterus allowed a large quantity of blood to escape, and discovered one large and a number of small placental polypi on the uterine mucous surface. These were removed by the fingers and curette, and during the process there was much bleeding. The uterus was washed out with hot water and plugged. Next morning the plug was removed, when another hæmorrhage took place, and the uterus refused to contract notwitstanding active measures of various kinds. The patient was so anæmic that it was determined to remove the uterus by laparotomy. This was done, and the left ovary, which was cystic and fixed by adhesions, was also taken away. The patient's recovery was interrupted by a pneumenia on the sixth day. Six weeks after the operation the woman was in the best of health. The uterus showed signs of endometritis decidualis and chronic metritis. The cause of the want of contraction of the uterine musculature was not clear.

Puerperal Biliary Colic.Eiermann (Munch. med. Wock.) says that the records of cases of biliary colic occurring after labor are few. He relates a case occurring in a primipara; aged twenty-nine, who sufferéd from albuminuria and œedema of the legs during pregnancy. Deliv-
ery had to be completed by forceps. There was a rupture of the prineum almost into the rectum, which had to be stitched up. During the first four days the temperature ranged about $38.7^{\circ} \mathrm{C}$., and only fell when the bronchitis from which the patient suffered improved. In five days' time the odema of the legs disappeared, but now the author was suddenly summoned by the patient, owing to shivering and severe pain in the upper part of the abdomen. On the next day there was distinct jaundice, which disappeared in two or three-days. After this the patient had thrombosis in the veins of the legs, but ultimately made a good recovery. In this case therc had been no previous history of gall-stenes. The author would attribute the colic to the suddenly-altered pressure relations in the abdomen after labor. It is not possible to speak very definitely about the frequency of gall-stone colic in the puerperal state, but it is not so rarc as has been supposed. Gottschalk has seen nine or ten cases in ten years. In one case the colic reappeared after a subsequent pregnancy, the patient having been frec from it in the meantime. The diagnosis may be difficult if there is no jaundice. Kraus has recently stated that the first attack of colic occurs in a large number of cases during pregnancy or after parturition. Freund has seen undoubted cases of gall-stone colic after the removal of large pelvic tumors.

Auraland Nasal Hemorrhage in Brigitt's Disease. - Haug (Deut. med. Woch.) after referring to the literature of the subject, relates a case occurring in an alcoholic aged thirty-nine. During the previous eighteen months he had suffered from cardiac weakness and arrhythmia. Three-quarters of a year ago he had a profuse epistaxis. The urine was then free from albumin. Quite recently he had a still more severe nasal hæmorrhage, which could be
stopped only by plugging the nares from the front. The plugs had to be continued for a week. The urine now contained both albumin and casts. There now occurred very severe pain in both ears, together with tinnitus and some deafness. Hremorrhage was found to have taken place in the tympanic cavities and membrane tympani. An albuminuric retinitis with hemorrhages was also noted. In three weeks' time the blood in the ears was absorbed without the hemorrhagic otitis having become purulent. In this case epistaxis along with cardiac symptoms were among the earliest indications of Bright's disease. These hæmorrhagic manifestations were all more pronounced on the left than on the right side. They must have been brought about by vascular disease. The prognosis of these local manifestations in themselves is not so unfavorable, but when such hemorrhages occur they usually indicate an early unfavorable termination of the kidney disease. The occurrence of such hæmorrhages should at once draw attention to the possibility of Bright's disease. The author thinks that these hæmorrhages are the result of diapedesis rather than the outcome of rupture of vessels. It is thus correct to speak of an albuminuric tympanitis or myringitis. The apparent rarity of this affection is to be explained by insufficient examination of the patient's ears; often the patient does not complain about these aural symptoms, so that it is easy to overlook their real cause.

The Infectious Character of Rheumatism.-In a clinical lecture on this subject (Journ. de Med.). Jaccoud pointed out that in very many cases of rheumatism some preceding local process has been observed which may serve as a point of invasion to the organism, whatever it may be, which is the cause of acute rheumatism. Among these by far the most important is tonsillitis, and a striking fact is that the organ-
isms found are exactly the same as those found in the tissues which are the seat of the lesion. For this reason the pharynx, the tonsils, in fact any tissue showing a lesion, may allow the organism to enter, and a case has been quoted in which a wound of the foot seemed to be the lesion to blame. Although nothing defnite is known concerning the origin of acute rheumatism, there is such a series of circumstances connected with the discase that its bacterial origin is rendered practically certain. Jaccoud looks upon the infectious nature of rheumatism as beyond doubt when its mode of evolution, its diffuse character, and the fact that there is intrauterine transmission from mother to the foetus are taken into consideration. One such case is recorded by Jaccoud himself in which a mother suffering from a severe attack of rheumatism gave birth to a child who in twelve hours developed pyrexia with pain and swelling of the joints, all of which gave way to salicylate of soda by the end of a week. This evidence the author looks upon as strongly showing the infectious nature of this disease.

Suppositories-Lewin and Eschbaum (Deut. Med. Woch.) describe a new method of preparing suppositories. The objects to be obtained are (i) that the drug should be equally distributed through the basis; ;(2) that it is easily liberated from it ; (3) that the suppository should be sterile and easy to introduce; and (4) that it must admit of being accurately prepared as regards the dose of the drug. (a) Cacoa butter suppositories. These fulfil the above indications the least of any. Experiments show that the drug is unequally distributed through the mass. An improvement is effected 'by adding a little fat or oil to the cacoa butter so as to form a plastic mass. (b) Glycerine gelatine suppositories. These are mostly not sterile. and owing to the uncertain source of the gelatine, they often contain basic
and other products which are not harmless to the individual. The amount of glycerine present may also produce irritating effects upon the intestine. (c) The authors have used agar as the basis for suppositorics for nearly two years, with good results. One part of agar is heated in a water bath with twenty-nine parts of water until it can be casily poured out; it soon solidifies again on cooling. Agaragar is acid, and thus 1 g . of sodic bicarbonate is added to 10 g . of agar. It is best to make the agar as required. If it is desired to make a 0.1 g . potassic iodide suppository, I g. of neutral agar and 1 g . of the iodide are placed in a flask with 29 g . of water. The whole is then shaken up to dissolve the iodide and heated in a water bath. When fluid, the mass is poured out into ten paper moulds of suitable shape. Directions are also given for the making of antipyrin, tannic acid, and other suppositories. An examination of the suppository shows that the medicament is even distributed in it. Agar-agar is also a better vehicie for suppositories containing insoluble powders (such as bismuth subnitrate) than cacoa butter.

Direct insurflation of the Newborn with the Stethoscope. -G. Fieux (Rev. Obstét. Internat.) proposes the ordinary stethoscope as a means of resuscitating stillborn infants. Insufflating tubes, such as that of Ribemont-Dessaignes, are not always at hand, and, even when available, are not easy of introduction, but all medical men and midwives carry a stethoscope. Further, the stethoscope can be easily applied, and has been proved to give satisfactory results. The broad, bell-shaped end of the instrument is placed over the mouth and nose of the infant, fitting closely thereto like a mask. Through the other end, held in the left hand, the accoucheur blows air into the lungs, whilst he aids expiration by compressing the chest with the right hand after each insufflation. The
head of the infant is kept in an extended position. It is difficuit to understand wherein this method excels the ordinary methods of establishing respiration in cases of stillbirth, some of which-for example, Schultze's method-require no apparatus at all.

Retention of Chlorides in Ukemia.-Bohne (Fortschr. der Medicint has studied the results of retention of chlorides in the animal organism by experiments on mice and guinea-pigs. A concentrated solution of sodium chloride was injected under the skin of the abdomen, and it was found that a very small dose-for example, 2.8 g . per kilog. of body weight, produced more or less violent clonic and tonic spasms alternating with a semicomatose condition, as in uramia, and in some cases death resulted. Clinically, a marked diminution of the output of chlorides was observed in cases of acute and chronic nephritis, and in some other conditions in which uriemia occurred. Analysis of the liver in a case where uræmia had preceded death showed marked excess of chlorides in its substance, as if the diminution of chlorides in the urine during life were due to their accumulation in the liver. The writer considers that retention of chlorides probably plays an important part in the causation of uræmia, and that estimation of the amount secreted may give valuable assistance in prognosis.

Meat Extracts.-Voit (Munch. med. Woch.) discusses the value of meat extract as a nutritive and flavoring or appetizing agent. Meat extract is nothing more than concentrated broth of the consistency of honey. It contains all the constituents of meat which are soluble in water. One kilogramme of pure meat yields 31 g . of extract, and 241 g . dried meat 25.2 g . Meat extract in the market contains 19 per cent. water, 58 organic matter, and 23
mineral salts. It thus contains very little nutritive material, and is chiefly an appetizing agent. These flavoring agents form, however, an important factor in feeding, and meat pixtract is one of the best of them. Recently some have attributed a not inconsiderable nutritive value to the soluble albuminous products present in meat extract, but the most important question lies in how much nutritive material is contained in such extracts. In 10 g . meat extract, which represents a considerable dose, there is at most 2 g . of soluble albuminous products, and this amount is extremely small when compared with the in 8 g . required by the healthy individual. Albumin, fat, meal flour, etc., have been added to meat extract in order to increase the nutritive value. No direct addition of nutritive agents to meat extract is desirabie. The healthy individual should not take the meat extract for its own value, but should take it in addition to other food stuffs which contain a sufficiency of nutritive products. An individual who cannot tolerate ordinary diet should take meat peptones or other peptone preparations in which albu$\min$ is already dissolved. It is better to employ meat extract alone as an appetizing agent, without directly adding to it other nutritive constituents.

FORMOL- Its synonyms are formaldehyde, formic aldehyde, formy! hydrid, mehanal. Preparation (Triliat process): Vapors of methyl alcohol are passed through coke or retort charcoal, heated red hot, in a copper tube. This results in the production of formol in an aqueous solution, mixed with methyl alcohol with possibly traces of formic acid. The alcoholic and other products are expelled by distillation. The formol solution is then concentrated to 40 per cent. and in this form is commonly called formalin. Formic aldehyde is gaseous. It is usually employed in the 40 per cent solution. It can not
be concentrated beyond 50 per cent., as it undergoes in that case a polymerization which transforms it into a solid substance, trioxy-methylene or triformol. In the 40 per cent. solution it is a colorless liquid with a strong, pungent odor, resembling that of the mouse, and a peppery taste. Reaction neutral. Formol dissolves readily in water. It is a powerful antiseptic, preventing ferme, itations and putrefaction of the urine. It is not toxic. It is used in surgery in a solution of 0.25 to 1 gram per 1,000 . As a disinfectant it is evaporated in the infected rooms in shallow dishes containing a litre of formol diluted one-tenth. Traces of formol cause a characteristic white cloudy disturbance in diluted solutions of aniline. It is incompatible with ammonia, alkaline bisulphates, silver and copper solutions and gelatine. Formol deodorizes the hydro-sulpho combin-ations.-From the Annales de la Sor. Méd.-Cliir de Liege.

## Non-Ligation of Umbilical

 Cord.-Kellar (Pacific Med. Jour.) advocates non-ligation of the cord; he has practised it in more than two thousand cases, and after careful observation of these and other cases summarizes as his views: (1) Ligation in man is unnecessary, because (a) it is not required at birth of any other animal ; (b) the imagined necessity to prevent hæmorrhage does not exist; (c) to tie for cleanliness is superfluous; ( $d$ ) it is unreasonable to consider such an imperfection as need of ligature exists. (2) Ligation is in many cases injurious, (a) because it may justly be considered the cause of secondary hæmorrhage ; (b) by interfering with desiccation, and thus preventing separation, it gives rise to ulceration with not infrequent consequences of erysipelas, fungoid excrescence, etc.; (c) it causes inflammation of funicular vessels by keeping them distended with.unnaturally retained blood, hindering their normal obliteration, and laying foundationfor phlebitis, jaundice, pyremia, etc.; (d) by preventing normal cscape of blood and thus causing hyperamia and congestion of portal circulation, it may lay the foundation of numerous infantile affections apparently originating in congestion of these vessels. (3) Certainly in some, and probably in not a few, cases, ligature has been directly fatal; (a) numerous fatal cases attributed to ligation have been recorded by the highest authorities; (b) it can be seen in the newborn that the ligature maintains the right ventricle in a state of distension, otherwise relieved by blceding from the hypugastric arteries, and this prevents renewal of action if the heart has stopped, or hastens its stoppage if it is failing: (c) in many instances removal of the ligature has saved life when other remedies have failed.

Abdominal Section for Perforation in Typhoid. - Price (Philudelphia Policlinic) reports thrce cases of perforation, sutured, with recovery. He states that surgery holds out the only chance in these cases, and that interference must be early, rapid, but thorough; the best necdle is a round one from an ordinary sewing case. Monod, at the Societé de Chirurgie, referring to a fatal case, says that he had found thirty-two operations recorded, with five recoveries, of wi.ich two are absolutely incontestable ${ }_{i}$, but threc are incompletely reported; these results amply justify interference in every case where the patient's general condition allows it. Routier had operated on the eighth or ninth day, basing the procedure on pain localized at a point in the right iliac fossa, finding and suturing two perforations and draining the abdomen; the patient died from subsequent perforations. Brum operated on a child that lived for seven days, when five other perforations were found ; the ligature had held perfectly. Lejars had opeated on two cases, both ending fatally;
the second lived for two days, and apparently died from the course of the fever, the operation preventing the use of cold.

Treatment of epilepsy:Flechsig (Ncturol. Centralblate) reviews the unfavorable results of the Flechsig treatment of epilepsy with a combination of opium and bromides, as reported by sevcral writers recently; he considers that in the fatal cases recorded no causal relation to the treatment has been shown, and points out that a fatal result is common enough in status epilcpticus without any opium treatment. A carcful watch st,ould be kept by the physician for any untoward symptoms, which would indicate withdrawal of the drug; and Flechsig is more inclined to blame the physician than the drug for the fatal results. His own experience of his treatment by increasing closes of opium has been most satisfactory, six cases out of fifty treated thus have had no recurrence for two and onc-quarter years, and all the cases treated were severe cases of many years' duration, which had resisted all previous treatment. He begins with simple bromide treatment, and later, if there is no improvement, adds opium in increasing doses. If, however, the opium be used, the patient must be treated as one who is seriously ill ; skilled nursing .and the most careful medical attendance are essential to the treatment.

Carbonate of Soda. - Thubert (These de Paris) points out that, much in the same way as calomel is changed in corrosive sublimate, so the bicarbonate of soda is in the system converted into the carbonate; it is, therefore, better to administer the latter than the former; the whole amount ingested is utilized in the stomach, a smallar cose is required, and less sodium is introduced into the body.

The Effects of Small-Calibre Bullets as Used in Military Arms.-From a study of the effects produced by small-calibre bullets as used in military arms, Dr. G. G. Davis (Annals of Surgery) reaches the conclusion that the initial force of a bullet is an onward or penetrative one; that when penetration is impeded the onward force becomes transformed into a lateral one; that explosive effect is only another name for lateral action, i.e., outside the track of the bullet; that lateral action is most marked in hard bones (the fragments being carried onward) and in organs containing water (bladder, brain, liver, ctc.); that practically the rotation of the bullet ron its axis docs not materially affect the character of the injury; that the effect of gunshot wounds is not so severe upon the living body as upon the dead; that the destructive power of the small-calibre arm has been roverestimated; that its stopping or disabling power i: less timen that of larger calibres ; thact. wounds in future -conflicts will U e, as a rule, less severe and will heal more rapidly, with fewer - complications than has been the case in the past; that less radical treat:ment will be required and conservation will be followed by most brilliant results.

Poisonous Effects of Bro-mides.-At the annual of the Association of American Physicians, Dr. Weir Mitchell reai a paper on this subject. It has long been recognized that the bromides may increase the unpleasant after-effects of epileptic fits, especially the irritability of temper. This will in some cases be accompanied by ptosis and feebleness of the limbs, not rarely more marked on one side than upon the other-just like some drunkards who can recognize that they are distinctly "drunker in one leg than in the other"feebleness and dulness so marked at times as to amount to partial imbe.cility. This was the condition in a
girl of seventeen, whose father, an apothecary, on the principle "if a little helps much will cure," had been giving her 150 grains of potassium bromide a day. The fits stopped, the child nearly did the same, lying for days in a state of imbecile collapse, but recovered rapidly when the drug was stopped. In two children, to each of whom 100 grains of lithium bromide was given by mistake, a similar though milder condition developed. There were curious disturbances of memory, and they were quite unable to walk, the left leg being worse than the right. In many cases the author had seen melancholia and mental depression, even to suicide, produced by the continued use of bromides.-Midedical Times.

Suprarenale Extract in Admisov's Disease--Osler (Johns Hopkins Hospital Bulletin) recently had under his care a girl, aged twenty-one, with well-marked Addison's disease. The pigmenation began eleven months before admission, on the face, and spread over the body; weakness, loss of weight and itching of the shin foilowed. About twenty black spots, like moles, were eventually seen on the skin. She was put on a glycerine adrenal extract, and took the cquivalent of half a gland per diem. On the ninth day of this treatment the girl became delirious and died of collapse. At the necropsy the suprarenal bodies were found to be $a^{11}$ ! caseous, and in parts calcareous; but the solar plexus and the splanchnic nerves were normal. Osler discusses the question whether the toxic symptoms, of which the patient died, were due to the administration of the extract; but seeing, first, that cases of Addison's disease often die in this manner quite apart from this form of treatment, and, secondly, that the dose was not excessive, he came to the conclusion that the treatment could not be held responsible for the fatal result.

#  ONTARIO IIEDICAL JOURNAL 

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## THE GASE OF DR. HAMILTON.

The daily press has containes very full and accurate details of this case. It will be remembered that the policeman who originally brought the girl to Dr. Hamilton was a medical student and class-mate of Dr. Hamilton's. The doctor alleged in his trial that he had no intention of procuring an abortion, that the girl was not pregnant. Absence of pregnancy was vouched for by other medical witnesses. The girl went to the doctor accompanied by her iather, and states that he had attempted to procure an abortion on her, that she proposed to expose him, but would take $\$ 30.00$ and keep.quiet. Had the doctor taken the only correct course in such a case, and handed the young lady over to the police, he would have saved himself much trouble. However, as is usually the case, the testimony of the girl as taken, and the result was that 'ne doctor was sentenced for two and a half years. Whether the physician was crimin-
ally implicated and was liable to the full extent of the law, there were strong doubts as to the full extent of his implication, and he reccived, what the Judge was pleased to term, a very light sentence. We believe in cases of this kind, of patients attacking physicians, that if there is any doubt at all, the physician should be given the full benefit of that doubt, and the moral character of the patient should certainly be taken strongly into account. In this case it can hardly be said that the young lady was entirely above reproach, yet her evidence sends a young physician, at the outset of his career, hitherto with an unblemished reputation, to the penitentiary. Setting aside this case altogether, there can be no doubt, as the Evening Star expresses it, that in cases of this kind both parties should be liable to prosecution. It don't matter how low a man may have fallen in his profession, or how willing he is to commit this crime for
money, he would have considerable difficulty in either receiving his fee or becoming a criminal without the active co-operation of the lady in the case. If the lady has already fallen, and some physician is fool enough, outside of the moral aspect of the case altogether, to full with her, they should both be punished. It has doubtless been the experience of all physicians at some time in the course of an active practice, to have requests for "very early instrumental delivery" and they have had to withstand the tears and entreaties of the lady herself with often the strong pressure of friends, all zeeming to forget the position in which the physician is placed, only thinking of some means of escape from the punishment which in due course would fall upon them for this evasion of the social code, because the greatest crime one can inflict upon society is not to conceal your crime. The easiest way to conceal the crime is to try and induce the family physician to take the burden off the fair one's shoulders, and run chances of putting a fel n's coat on his own. Again, aside from the moral aspect, it would be better for any young physician, if appealed to to save a friend from the consequence of his own sinning, to remember that in this he risks the life of both the born and the unborn, and that the cord, which nature will in due course develop, is altogether a handsomer article than the one which his interference may provide for himself.

## FACTIONISM.

There is possibly no profession which seems to be so split up into factions and sections as the profession of medicine, and especially is this the case in large cities where doctors most do congregate. There is no doubt that the modern exterision of competition in all branches, which is felt also in medicine, is
responsible for much of this. The profession is greatly overcrowded, the schools are turning out many more physicians than either the population or the death rate in the profession demands, and as the supply becomes plentiful, as is the case with all commodities, the goods become cheap. It is all very well for those who are at the top of the profession, earning a good remuneration, having rich patients, lucrative professorships, to uphold the dignity and ethics of the profession, to impress upon the young graduate that he should never advertise, that he should never give his services at less than the regular tariff; but when the graduate procures his sign and fastens it on the wall, for the first few days the gliter of the golden letters pleases him and charms his eye but fails to attract a livelihood, and he soon discovers that the time he thought his troubies ended was the time his troubles began. He finds that in lodge practice-in which first he has to go through the undignified canvass and then the elections to serve as lodge officer, all of which must be revolting to a man of fine feelings-that he receives $\$ 70$ a year if the lodge has that many members, and long before the year is out he discovers that he has sacrificed his standing in his profession to become a poor slave of a lot of men who will, at the next elections, cheerfully turn him down if he is not sufficiently popular with the boys; or he attaches himself to some local clique, some little swim, in the hopes of occasionally being called in to give chloroform to the surgeon of the clique, because we know these cliques or factions all have their surgeon, their physician and their gynæcologist, and Smith the surgeon and Brown the physician both unite in lauding the ability of Jones the gyniecologist, assisted by a chorus of lesser satellites; and Jones the gynæcologist, and Brown the physician unit in upholding the greatness of Smith the surgeon and the sateiiites
join in; Jones the gynæcologist, and Smith the surgeon unite in lauding the ability of Brown the physician, chorus the same. In fact the whole thing smacks of the departmental store. And then the young physician must not advertise, and the country is flooded with the announcements of medical colleges wherein are contained descriptions of the various specialists, and so we sometimes wonder where we are getting to or where the farce will end.

## UNIVERSITY REORGANIZATION.

Again we have war and rumors of war. From the inception of the University faculty, factions have often stood in the way of its efficiency. In the early days the junior members of the faculty, full of ambition and thirsting for glory, acquainted with the experience of the French schools, where it is an old saying that "the professors seldom die and never resign," endeavored to hasten the natural course of events by providing a professorial demise for those in whom nature seemed disposed to play the sluggard. It must be admitted that in some cases nature was improved upon, in others quite the reverse, but this is only to be expected of human interference with the ways of the gods. The professional factions became adjuncts to party factions, while the star of one political leader was in the ascendant, a new star arose and became bright, and some members of the other faction, as in the days of old, drifted starwards, and so we are to have another reorganization, in which it seems that political experience is to dominate the domain of medicine, and the faculty is to be considerably enlarged, thus after the manner of the Canadian Senate, giving the present dominating party permanent control. To the profession at large, and
especially the great majority of the profession who live outside of the city of Toronto, and net on the im mediate streets which contain our local fathers of medicine, these dickerings are extremeiy amusing, free from the heart burnings and jealousy of the question as to whether Smith or Jones is to be the assistant demonstrator of the assistant demonstrator in the administration of calomel, they await in patience the results of the mountain's confinement. Let us hope, in the interests of medicine and the future of the University faculty, that history will not repeat itself.

## THE ONTARIO MEDICAL. ASSOCIATION.

We wish to urge all our readers on no account to miss the annual meeting of our home Association. The Ontario Association now numbers nearly eight hundred members, and is one of the largest and most influential bodies of the kind on the continent. While there are many contra attractions this year, there can be nothing so important as our own annual re union. The Committee have spared no pains to make all arrangements more complete than ever before. The list of papers already promised shows that in this respect the meeting will not fall behind, if it does not exceed all previous ones. The members in the city will extend the usual courtesies of lunch and excursion to the visiting brethren. Many distinguished foreigners will be present. Do not fail to be on hand yourself.

Agricultural College, Mich., March 27.-Among other experiments conducted by the barteriological department in tuberculosis, one has recently been concluded that gives some very interesting results. Last August Dr. Grange was called:
to conduct a tuberculin test upon a herd of cattle. Several cows were found to be infected with the disease, and upon further examination it was found that the milk glands were the parts affected. Dr. Grange brought several gallons of the milk from these cows back to the College for experimental work. The milk was separated, and then the cream and skim milk examined, both of which were found to contain germs in abundance. - After the cream was churned the butter was examined, and that, too, was badiy infected with the disease germs. The skim milk was then fed to three hogs for four days. Two of these hogs were killed one day last week, and examined for the disease. It was found to be prevalent in a well advanced stage in the digestive tract, and in various glands throughout the body. At the same time work began with these three, other hogs were placed under the same conditions, except that none of the diseased milk was fed to them. These, upon being killed this week, showed nu signs of tuberculosis. The third member of the first lot will be kept for some time yet, that some results as to the influence of the disease in its more advanced stag، might be obtained. A singular feature about the case is that those hogs affected with the disease seemed to suffer no inconvenience as a result of it. The hogs when killed were nine months old, and weighed about three hundred and fifty pounds.-Exiract from Sunday Free Press, March 2Sit, 1897.

## The Physician's Library.

Disorders of Digestion in Infancy and Childhood. 377 pages octavo. Price 10s. 6d. London: H. K. Lewis, I36 Gower Street, W.C., publisher.

Dr. Fenwick in this worls has given - us a very valuable insight into a class
of disorders that are little understood and yet most prevalent. This is, in fact, a second of a series of monographs upon diseases of the stomach, the first being "The Dyspepsia of Phthisis." The work before us goes very thoroughly into the subject, commencing first with the physiology of digestion in early life, and the diseases which are liable to arise from interference with those laws which should regulate the diet at this time. Various diseases are then taken up, their whole course and clinical picture carefully described, and full rules of treatment laid down. The book throughout shows that strong clinical backing which we have mentioned ? fore is characteristic of English books. This could not fail to be the case, as the work, as the author states in the preface, is the outcome of over five thousand cases of disorders of digestion, which came under his notice at the Evelina Hospital. The pathological work was carried out in the Royal College of Physicians diuring the time that the author held the appointment of Research Scholar to the British Medical Association. This is a work that every physician cannot have too early in his hands, as the season of the year is rapidly approaching in which the best authorities will often be found not too good.

The International Medicnl Annual and 'Practitioner's Index. A Work of Reference for Medical Practitioners. 1897. Fifteenth Year. New York: E. B. Treat. Cloth, $\$ 2.75$.
The International Annual comes in an enlarged form this year and constitutes a very valuable and thorough epitome of the medical literature of the past twelve months. More illustrations have been introduced than formerly, some of which, however, are not well executed. As a book of ready reference to things that are new and valuable, it can be fully endorsed:

The Practice of Medicine. By HorAtio C. Wood, A.M., M.D., LL.D. (Yale), Professor of Therapeutics and Clinical Professor of Nervous Diseases in the University of Pennsylvania ; Member of the National Academy of Sciences; and RegrNald H. Fitz, A.M., M.D., Hersey Professor of the Theory and Practice of Physic in Harvard University; Visiting Physician to the Massachusetts General Hospital; formerly Shattuck Professor of Pathological Anatomy in Harvard University: Philadelphia: J. B. Lippincott Company. London: Io Henrietta Street, Covent Garden. Pages-X-ıo86. Price $\$ 6.00$. 1897: .
This timely work from the pens of Drs. H. C. Wood and R. H. Fitz is the outcome, as stated by the authors, of an attempt to view the practice of medicine simultaneously from the pathologic and therapeutic points of view. While the subjects have been discussed with constant reference to the best that has been furnished by modern therapentics and pathologic research, there is no lack of symmetry in their presentation. Definition, etiology, morbid aniatomy, symptoms, diagnosi-, prognosis and treatment, have received respectively what seems to us a wise allotment of space, and the careful joint consideration of the two eminent authors, although each author wrote certain determinate portions of the work. H. C. Wood prepared the section on nervous diseases (246 pages), including insanity, the articles on diseases of the muscles, the eruptive fevers, typhoid, typhus, and relapsing fevers, influenza (grippe), and dengue, the chapter on acute and chronic poisoning, and all the therapeutics of the book. The remainder of the volume, namely, the articles on diphtheria, dysentery, tuberculosis, leprosy and syphilis, the chapter on diseases of the blood and of the ductless glands, the chapter on parasites, and the sections on diseases
of the circulatory, respiratory, digestive and urinary systems, except the therapy, are from the pen of R. H. Fitz. The work is a gem on general practice, admi:ably written and exct. 'sonally free from typographical erims. It will prove, we believe, to be a síandard text-book and a most remarkable work of reference for busy practitioners.

## Miscellany.

Obstruction of the Lachrymal Duct in Newborn Children. -Landolt (Annales de Gyivéc. et dr Obstéi.) finds that this condition is not rare, and is often overlooked till much harm is done. The affection should be inspected whenever there appears to be conjunctivitis in one eye only a day or two after birth. The conjunctiva itself is not infrequently cured, so to speak, by appropriate lotions. The obstetrician, mistaking a complication or result for a primary disease, finds to his surprise that the eye continues to water, the lids becorning glued together, and a drop of pus often exudes from the inner canthus.s This condition is yet more alarming in certain cases where noconjunctivitis has been observed. It looks like the beginning of purulent ophthalmia. Landolt lays down as a rule that obstinate unilateral lachrymation in a newborn child usually signifies obstruction of the tear duct. As an ophthalmic surgeon he advocates sounding of the duct with a fine probe; on no account should the canaliculus be slit up. Afterwards weak antiseptic lotions must be injected into the duct by means of an. Anel's syringe : :he infant must be turned on its face directly afterwards lest any of the lotion be swallowed.

The Active Principle of the Thyroid.-Spoto (Giorn. dell Assoc. Napol. di Medici e Naturalısti) believes the chief function of the thyroid is antitoxic, for, as the result
of his experiments on dogs, he found that after removal of the thy roid the urotoxic co-efficient rose to nearly, double. The toxicity of the blood serum also increased after thyroidectomy. The thyroidin of Baumann, when given to athyroidized dogs, caused the urotoxic co-officient to return almost to the normal, and relieved most of the nervous symptoms. Glycerine extracts of the gland were, however, much more effectual in treatment, especially with resrard to the wasting, over which symptom thyroidin had very little effect. Hence the author concludes that although thyroidin is doubtless one of the active antitoxic principles in the thyroid, there are probably other derivatives of therapeutic value which have not yet been isolated.

Albuminuria in Gonorrheea.Colombini (Suppl. al Policlinico) has mace a study of this subject in 372 patients suffering from acute gonorrhœa, seventy-two being complicated by epididymitis. In none of the cases had any drug been adm ristered, and there was no evidence of cystitis or any disease likely to cause albuminuria. The pus was carefully filtered off and five different tests for albumin were appliied to the filtered urine. Out of the 372 cases, albuminuria lasting from four to thirty days was found in sixty-six, and of these forty-two had epididymitis, twenty-four simple gonorrhழea. The author believes that an ascending nephritis could be excluded in his cases as also the influence of any drug, and on the whole he considers that the albuminuria was due to a process of general blenorrhagic infection, comparable to that which occurs in other infectious fevers.

The Toxic Action of Acety-LENE.-Mosso and Ottolenghi (Rif: MIed.) give the results of experiments with this gas on dogs, guinea-pigs, and other animals. They found thạt
acetylene has considerabie toxic power. Small quantities of the gas sufficed to endanger the lives of the animals. Half a litre of the pure gas caused severe symptoms of poisoning in dogs, and even when mixed with air ( 20 per cent.) it proved fatal after an hour. If the gas was administered rapidly, the animals recovered when placed in free air, but if given slowly this did not occur, and the animals died. Large doses act chiefly by paralyzing the respiratory function, and throughout paralytic phenomena preponderate.

Tuberculcsis Treated by the Salts of the Blood.-Stadelmann has suggested in the Therapeutic Gazette that in a certain number of cases of tuberculosis there is a decrease in the normal saline constituents of the body, and he therefore suggests that it will be of advantage to give to patients suffering from this disease an increased quantity of saline material. Thus, he recommends that the phosphate of sodium shall be given in the dose of thirty grains three times a day and that subcutaneous injections of six to seven grains of chloride of sodium be used. He asserts that after the treatment there is decrease in expectoration and the objective signs of disease.

The Cause of Pain in Chronic Appendicitis. - Byron Robinson (Annals of Surgery) believes that the occurrence of pair in chronic cases of appendicitis depends on whether the appendix is or is not fixed to the underlying psoas muscle. If the appendix is adherent to the psoas, any movement of the muscle irritates it and sets up appendicular colic. This pain is not accompanied by any degree of fever or other disturbance. If the appendix is out of the line of activity of the psoas, the patient can walk or ride without pain. The author finds that in 70 per cent. of bodies examined by him there are signs of past peritonitis around the cæcum and appendix.

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Schott's Treatment of Sci-ATILA.-Borischpolski (Veurol. Centrabl.), adopting the view that sciatica is due to the disturbance of the circulation followed by accumulation of the products of metabolism in the affected nerve, has applied the Schott douches to thirty-two cases of sciatica.

Of these cases, twenty-three were cured, seven were improved, and two remained in statu quo. The writer concludes that these douches are of real value in sciatica, a conclusion supported by Bechterew, who saysthat they are particuiarly useful im long-standing cases of sciatica.

A New Traumaticin.-According to the Revue Internationale de Medecine et de Chirurge, a form of traumaticin that is used in the dermatological clinic in Berne, is madeby Ducommun's method-that is, by mixing a watery solution of soap with a solution of alum. A magma, consisting of a compound of aluminum and fatty acids, is formed. The excess of water is squeezed out of this mass with the fingers, and the residue, while still moist, is dissolved in ether.


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Premature Menstruation. E. Seuvre (Union Mca, du Nord-Est) records the case of a girl, aged four years and nine montlls, who had a sero-sanguinolent vaginal discharge, well-marked mamme (like those of a girl of fifteen or sisteen years), enlarged labia majora covered with scanty hairs and a broad pelvis. About a year previously the broadening of the pelvis and the mammary enlargement had been noted, and the child had become graver and more affectionate. There was no history of premature sexual development.

Sanmetto in Diabetes Melli-tus.-R. A. Miller, M.D., of Atchison, Kansas, writing, says: "I used Sanmetto in a sevcre case of diabetes mellitus in a gentleman fifty-four years of age, in which there was an excessive flow of urine, patient having
to arise some four or five times during the night; severe irritation at neck of bladder and enlargement of the prostate gland; dry, hot skin with considerable emaciation. After using Sanmetto for three or four days the trouble was greatly improved, patient not having to arise more than once during the night, and has since, by the use of one more bottle of Sanmetto, almost recovered. 1 think Sanmetto a most excellent remedy."

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rouf. The clarses in the school have been so large in the last few years, and facilities for attending them socramper, that this huilding has heen erected, not puly for the classes of practitioners, but also that more patients might te receiped, in utider to form a great teaching hospital. this has now bean accomplished, and every onjortunity, bothin thedispen. sary and hospital, is afforded in als departments of medicine and surgery. The great major operations are performed in the amphitheatre of the institution, which is fitted up in the very best inanner to secure best surpiral resulta Patholngia al anil Histo locical Laboratories are also a part of the school. The Faculty are also connected with most of the great hospitals and dispensaries in therity. where other clintes are held for the benefit of the matriculates of the Post-Graduate Medical School. Practitioners may enter at any time.
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Expert Testhony in Criminal Trials.-The New York Times, in commenting upon this subject, wisely says: "If public provision is made for expert testimony, it should be in behalf of the court, and for the purpose of getting independent and unbiased cvidence for the enlightenment of both judge and jury, and not for the purpose of supporting one side of a case.

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An Inefficient Army.-Vencreal diseases keep over three thousind soldiers from performing duty in the English army in India, according to the recent report of the sanitary commissioner to that government. In 1894 sixty-two thousand admissions for venereal discase occurred, or 5.342 total adinissions for each one thousand of strength of the whole English army. Thus a small army in itsclf is constantly incapacitated by diseases which for the most part are preventable.

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demonstrated that sheep and horned cattle are the most liable of all animals to contract the discase, and that dogs, monkeys and rodents enjoy complete immunity from it.

Declarations of Cause of Injury not Evidence.- Whatever the rule may be in other jurisdictions, the Supreme Court of Illinois holds, in Globe Accident Insurance Co. v. Gerisch, November 23, I896, that the declarations of an insured person, as to the cause of his injury, made to his physicians at different times from several hours to three days after the supposed accident, are not proper or competent evidence in an action brought to recover upon a policy of accident insurance for his death, though had his statements related only to the part of his person that was hurt, his sufferings, symptoms, and the like, it would have been competent evidence.


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Post-scarlatinal Palsies--Alekssjeff ( I'ratch) says that palsies are sare sequels of scarlatina; only seven cases, which the author has collected and analyzed, have hitherto been recorded. To these he adds two cases of his own, and on the basis of these nine cases he endeavors to frame a clinical picture of this form of paralysis. The affection appears either as an early or late manifestation. The former occurs almost at the very commencement of the scarlet fever, and is characterized by a great tendency to involve at the same time
both the upper and lower extremities, and is sometimes followed by aphasia. The latter forms do not appear till the end of the third week of illness, and only one-half of the body is affected. In such cases nephritis and endocarditis are usually met with. The prognosis of post-scarlatinal palsies is good, complete recovery generally taking place. Tonics combined with the use of electricity and massage are useful in promoting recovery.

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the authorities in the War Office the g:cat risk involved, and the serious responsibility incurred, in allowing the present inefficient and shrunken condition of the Army Medical Service to continue.

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Non-Expert Can Testify as to the Existence of Hymen.The objection was made, in a prosecution for an attempt to commit rape, that a female witness who was asked as to whether, when she made an examination of the child on the Friday after the offence was alleged to have been committed, there was any hymen there, was not competent to testify in relation to a matter of this kind; that it was a matter connected with the anatomy of a human being and that, to be competent. a witness should possess the same intelligence and knowledge that a physician or professor of anatomy does. The witness testified that she thought she knew what the hymen was, and that, if it was what she thought it to be, it was not there. The overruling of the obiection, the Supreme Court of Califromia holds, in People v. Barncy, October 20th, 1896, was an error. Certainly, it says, it cannot be neces-
sary that a witness should be a physician or a skilled physiologist in order to be competent to testify as to the existence or non-existence of any part of the human body, when the matter ban be determined by ocular inspection.-American Med. Jour.

One Cow's Milk.-" You must let the baby have one cow's milk to drink every day," said the doctor. "Very well, if you say so, doctor," said the perplexed young mother, "but I really' don't see how he is going to hold it all."-Indianapolis Journal.

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[^4]:    *British Medical Journal, 1882, ii., pp. 783 and 828 .

[^5]:    t"On Bacterium Decalvans: an Organism associated with the Destruction of the Hair in Alopecia Areata," by George Thin, M.D. Proceedings of the Royal Society, 1881, p. 217.

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