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ON AN UNUSUAL CAUSE OF PERITYPHLITIS.

BY WYATT JOHNSTON, M.D.;

Demonstrator of Pathology, McGill University.

Owing to the fact that perityphlitis, whether purulent or not, has come to be regarded as always due to ulceration of the vermiform appendix, the following observations seems worth putting on record:—

The patient was admitted to the General Hospital under the care of Dr. Wilkins and afterwards transferred to that of Dr. Molson, to both of whom I am indebted for kind permission to use the notes of the case.

John C., æt. 36, sailor, admitted June 7th, 1890, for severe diarrhœa with great tenesmus. Had a severe attack of dysentery (1) three years ago, while on a voyage to the West Indies. Since then has had occasional attacks of diarrhœa. Had severe constitutional syphilis following a primary sore five years ago. While in hospital the diarrhœa was characterized by frequent small liquid stools, accompanied always by great tenesmus and not yielding to the usual remedies. The possibility of intestinal syphilis was thought of and he was given iodide of potassium three times a day, in doses of ten grans, without effect, the remedy being then discontinued. After being over four months in hospital the patient died of exhaustion. Towards the close of the case the urine contained a moderate amount of albumen. It should be mentioned that a digital examination of the rectum failed to reveal any lesion. During the time he was under ob-

servation in hospital there were no signs or symptoms pointing to perityphlitis.

Autopsy (performed Oct. 22nd, 1890, 36 hours after death).—Multiple condensing osteitis of tibiæ and cranium. Extensive amyloid degeneration of kidneys. In abdomen a large irregular fibrous mass about the head of the cæcum. The vermiform appendix lies just below the brim of the pelvis on the right side, and is embedded in dense fibrous tissue. The mass of fibrous exudation so formed is as large as an apple, and is intimately adherent with the upper end of the rectum and lower part of the sigmoid flexure, at a point opposite the second sacral vertebra, on the right side. The rectum appears to descend into the pelvis on the right side. On slitting up the intestine, the ileum, cæcum and ascending colon are found to be normal. The appendix vermiformis is twisted and constricted in many places by the adhesions formed about it. The bowel is much narrowed at this point. The base of the ulcer is formed by the fibrous mass above referred to, and a ragged sinus extends about two inches into it. No signs of suppuration exist. Another similar but smaller ulcer is situated near the splenic flexure of the colon and has formed adhesions with the anterior abdominal wall. The portion of intestine between the two ulcers shows slate-like pigmentation and is dilated, containing soft dark gray fæces.

The condition present was obviously one of severe syphilitic ulceration of the intestines. The extensive chronic adhesive perityphlitis was probably of very old standing and had become latent before the patient came under observation here. In looking up the literature of the subject I have been unable to find any exactly similar case reported. In most cases where the condition has not been due to appendicitis, it was secondary to some ulcerative or cancerous condition about the cæcum, or in connection with some form of intestinal obstruction. Here, the primary cause was situated in a portion of the bowel not normally in very close connection with the cæcum or appendix. The reason appears to have been the right-sided position of the rectum, an anomaly found in five or ten per cent. of all bodies examined, bringing the upper part of the rectum close to the right iliac

region. In view of the increasing frequency of operations in this region in cases of perityphlitis it is worth remembering that an inflammatory condition in the region of the appendix may exist when that structure is itself free from disease and the possibility of the condition being due to tertiary syphilis is instanced by this case.

TWO CASES OF PNEUMONIA IN PUERPERAL WOMEN.

BY ED. EVANS, M.D., OF LACROSSE, WISCONSIN.

CASE I.—*Pleuro-pneumonia*.—Patient, aged 36, VIII-para, epileptic, miscarried at the seventh month; breech presentation. Child, placenta and membranes came away together. Child dead and had a disagreeable odor (reported by nurse).

I saw her a few hours later and found her feeling well. Pulse 80; temperature $99\frac{1}{2}^{\circ}$. I gave a vaginal douche and ordered a few doses of quin. sulph. gr. v. She progressed nicely till the fourth day, when, after some chilly sensations, she was seized with severe "stitch" in right side, beneath the last three ribs, pressure on which aggravated the pain. Examination of the lungs revealed nothing except shallow respiration, probably due to pain. There was no abdominal fulness or tenderness; the uterus was well contracted; the vagina was not hot or tender; uterus freely movable, not tender, and no infiltration about it. Lochia normal, scanty. Pulse 100; temperature $100\frac{1}{2}^{\circ}$; respirations 32. Next day she was somewhat better; but on the following day she was seized with very severe pain in the right shoulder, extending downward. There are a few small râles (or friction sounds) near base of right lung; expansion restricted and respiration weak on right side. Pulse 84; temperature 101; respirations 36. Next day, pulse 80; temperature 99.5° ; respirations 30; feels better. In lower third of right lung there is consolidation, blowing breathing, and subcrepitant râles. On the following day, pulse 70; temperature, 98° ; respirations 25. No pain or distress, and she rapidly recovered.

At no time was there cough, except an occasional hack during the last two days of the febrile stage, and there was no expect-

toration at any time. The lochia was normal throughout, and there was no blood in it after the fifth day: She is a strong, vigorous woman, the weather was fine, and she had not been exposed in any way, and she never suffered from lung trouble before. There was little, if any, pneumonia in the city at the time, and as I think sepsis can be absolutely excluded, I see no way of accounting for the attack.

CASE II.—*Pneumonia*.—II-para, aged 27, On Sept. 20th, 1890, Mrs. S—, after a short, normal labor, was delivered of a healthy child. Everything went well till the 27th, the appearance of the milk causing no disturbance whatever; lochia normal and scarcely blood-stained.

Sept. 27th.—Pulse 88; temperature 99.5° . There is pain in legs and tenderness along the external saphenous veins, and also in right groin; no swelling. (She had some pain and tenderness in some places occasionally during last month of pregnancy.) There is no abdominal tenderness, pain or fulness whatever. Uterus well contracted and not tender. *28th*—Feels better, no pain, and temperature 98.5° in the evening. *29th*—Had chill at 10 A.M.; pulse 120; temperature 103° ; respirations 25; no abdominal symptoms; examination of lungs negative; legs same as on the 27th. *30th*—Passed a restless, sleepless night; pulse 120; temperature 104.5° ; respirations 36; legs better; no abdominal symptoms; lungs normal, except that she complains of tenderness on percussing along vertebral border of right scapula; respirations weak and harsh at root of right lung, no dulness, no râles; she has slight sore throat, no cough

Oct 1st.—Temperature 102° (morning), 104° (evening); pulse 120; respirations 36. During the night she coughed a little and expectorated a very little sputum streaked with blood, which she thought came from her throat; limbs seems well; lochia normal; herpes labialis appeared during the night. On percussing right lung, there is very slight dulness about the angle of scapula; the respiration in this lung is weak and harsh, and expiration rather bronchial about angle of scapula. *2nd*—

Pulse 84 ; temperature $98\frac{1}{2}^{\circ}$; respirations 28 ; she slept quietly during latter part of night and feels well this morning ; no change in lungs ; evening temperature 99.5° . *3rd*—Morning temperature 99.5° ; pulse 96 ; respirations 24 ; during the night there was some pain in right iliac region and a slight flow of bloody, offensive matter from the genital tract, continuing in lesser quantity during the day ; no tenderness or fulness about the uterus, which is small in size and well contracted. I washed it out, but the water came away clear and free from offensive odor, nor was there at any subsequent time any offensive or considerable discharge. Evening temperature was 103° , and during the night the temperature rose to $104\frac{1}{2}^{\circ}$. *4th*—Temperature ranged from 102° to $103\frac{1}{2}^{\circ}$, without any more marked physical signs in the lungs than noted before ; respirations 32, very little cough, and no expectoration. *5th*—Passed a good night ; pulse 100 ; temperature 98.1° ; respirations 27. She feels very well ; coughing a little more. *6th*—Pulse 80 ; temperature 98.5° ; respirations 28. Examination of lungs shows the left lobe normal ; in right there is slight dulness or diminished resonance over central part of right, posteriorly, while the respiration is more distinctly bronchial, but not blowing ; no râles. Some cough, without expectoration, continued for a few days. There was good involution of uterus. She rapidly convalesced, and was sitting up by the 8th.

During the progress of the case some facts in connection with it served to render the diagnosis more or less doubtful. The satisfactory and rapid progress during the first six days, and the absence of all symptoms referable to the uterus up to the 13th day, would seem to exclude septic infection through the genital tract. When the chill occurred on the 29th it had been preceded for a couple of days by symptoms of phlebitis. Was the fever, quickened respiration and general prostration, and indefinite physical signs in the right lung due to a similar condition in lungs, or was it due to the onset of croupous pneumonia ? The appearance of herpes and the characteristic crisis on the morning of the 2nd October would seem to favor the diagnosis of pneumonia. The appearance of an offensive discharge on

the night of the 2nd, followed by a relapse, introduced a new factor of doubt, and now, if it be not regular pneumonia, is it a case of sepsis or some thrombotic process (septic or otherwise) in the lungs? The occurrence of crisis on the night of the 4th, the rapid disappearance of all symptoms and quick recovery, satisfied me that it was a case of croupous pneumonia which ran a somewhat irregular course. The marked feature in each case was the almost entire absence of such symptoms as cough and expectoration. In the first case the physical signs were late in appearing, while in the latter at no time were they well marked.

THE INFLUENCE OF CLOTHING ON THE SKIN.*

BY J. LESLIE FOLEY, M.D., L.R.C.P. (LOND.)

Scattered throughout cutaneous literature are many hints as to clothing. It has been my object, in brief outline, to collate these: grouped in one picture, as it were, with which to refresh your memories. Since Adam and Eve first discovered their nakedness in the Garden of Eden and made themselves habiliments of fig-leaves, the subject of dress is one that has been uppermost in the mind of mankind—or shall I say womankind. From the primeval fig-leaf to the nice refinements and vagaries of the modern fashionable dressmaker or tailor the gradations have been great. One might almost trace in the change and variety of costume the changes that have taken place in the several nations from the earlier eras to the present time. The ancient garment was a far healthier one than the modern. The flowing toga, the chlamys, the antique peplum, the sandal allowed more free movement of the body. In the modern ball-room costume there is a tendency to revert to the primal fig-leaf style. But while man has ever been mindful of his exterior adornments, while the ancient as well as the modern youth (historically, not relatively, speaking of course) have always been on the lookout for the latest things in hats, the latest things in coats, the latest things in ties—while woman squeezes her waist tighter than the most ardent lover could ever hope to do—while advanced ideas on dress are dominant, mankind, for the most

* Read before the Medico-Chirurgical Society of Montreal.

part, are far more apt to regard it from a decorative rather than from a sanitary point of view.

The animal and vegetable kingdoms furnish man with his clothing materials. Silk, wool, hair, feathers from the animal. Hemp, flax, cotton from the vegetable. The cardinal clothings are wool, linen, cotton, silk. Wool and cotton are principally used—wool in the cold climate, cotton in the warm. Wool stands pre-eminent as a good conductor of moisture, a non-conductor of heat, and for its electrical properties. Linen attracts moisture, cotton does not, nor does silk, but it may disturb or excite the electricity of the skin. It has been known to set up a dermatosis.

Color.—Dark colors absorb and radiate heat. White are bad radiators and absorbers of heat, for this reason light clothing is the best for summer; white is the least absorbent of odors and gases. Physicians and nurses are best dressed in white. Clothing affects the skin, for good or ill, in health and in disease.

In health.—One of the requisites for maintaining the skin in a normal condition is proper clothing. Treves has formulated the requirements of healthy dress—

- (1) A perfect covering for the body.
- (2) Maintenance of an equable temperature.
- (3) Absence of superfluous material and needless weight.
- (4) Non-interference with any of the functions of the body.

Not seldom you see young girls whose trunks are well covered, but whose upper and lower extremities are sadly deficient in any covering save the exterior garment. Heat and cold must be guarded against. The former producing miliaria, erythema calorica, increase of pigment, etc.; the latter, dermatitis congelationis, pruritus, erythema pernio, etc. Cold causes contraction of the capillary blood-vessels of the skin and the blood is determined to other organs—lungs, kidneys, etc. Cold lowers the nutrition of the body. This may account for the more frequent occurrence of skin diseases in winter-time.

Over-clothing should be avoided. All no doubt are familiar with the over-clad baby, garment after garment, layer after layer of material zealously placed on the darling, almost smothered in

its own clothes. This often leads to an eczema, intertrigo, hyperidrosis, etc. This sometimes applies to people of riper age. The warmth of the bustle and the gathering too many heavy skirts around the pelvic region often leads to congestion of these parts, sets up some uterine trouble, and this may give rise to a skin affection. As is well known, every organ of the body has its influence (directly or indirectly) on the skin. To cripple or interfere with the function of any of the organs of the economy would be to cripple the skin. All compression should be shunned. The liver, spleen, etc., should not be compressed by tight-lacing, nor the intestines by tight waist-bands. Everything that impedes the circulation of the skin must be strenuously avoided—tight sleeves, collars, garters, boots, gloves, etc. Tight garters may give rise to varicose veins, chilblains, eczema. If used they should be tied above the knee, but it is better to discard them and wear bands suspended from the waist. The belt should not be worn. *Insufficient clothing* should be remedied. Those having sedentary occupations in a warm room both in winter and summer need more clothing than those out-of-doors and hardened to cold. Infants and old people need more clothing. Frequent changing of clothing from a light to a heavy texture, and *vice versa*, is bad, nor should one be too ready to drop the winter flannels. Boerhaave says “our winter clothing should be put off on midsummer day, and put on the day after.” The clothes should not be cold when put on, nor kept in a cool place. They should be loose. This allows of a more ample stratum of air within the meshes and between the layers, which, being warmed by the body heat, are warmer than tight-fitting clothes. On retiring they should be removed and hung up to be aired.

Close dresses (Macintoshes, etc.) are objectionable, as they do not allow of free transpiration—skin respiration. This applies also to rubber socks and shoes.

Gloves.—Buck holds that silken and woollen gloves are more apt to lead to chilblains than kid or dogskin. Except in winter-time, or in those prone to chilblains or of feeble circulation, they should not be worn.

Boots.—Shoes healthier than boots for the young. *Laced*

better than elastic. Patent leathers retain the sweat. Uppers should be soft. Heel low. Toes square.

Stockings and Socks.—Woollen fabrics the best; silk next. Cotton should not be worn. Socks worn square-toed. Digitated toes advised by some as being more cleanly.

Night attire should be of linen or cotton. Woollen not worn except by old people, children and the rheumatic. Linen gives rest to the skin which may have been unduly stimulated by the woollen garments. All experience a sense of relief when the day-clothes are taken off.

The Head.—Babies should never wear caps. No head-dress should weigh more than five or six ounces. Felt is the best material for hats. Soft, broad-brimmed hats are the best. Boys should wear caps of the softest and lightest texture. Ladies should not wear combs.

The Neck.—Tight and stiff collars should not be worn. It prevents the proper use of the arms. The circulation of the neck should not be impeded.

In Infants the following obtain. Should be warmly clad. Woollen clothes. Body evenly covered. Head kept cool. Clothes free from constriction of any kind. Bandage abolished (it constricts region of heart, lungs, liver, etc.). Compresses and pads avoided. Avoid over-clothing.

Underclothing should be woollen, silk or gauze being used if it be too irritating and cannot be worn next the skin. The clothing covers a multitude of sins and disguises many diseases, especially of the skin.

In Disease.—While clothing is necessary to keep the skin in condition, it is often the means of giving rise to a dermatosis.

- (1) It may serve as a nidus for pediculi or parasitical affections.
- (2) It may irritate a healthy skin by roughness and friction, and set up an eczema, pruritus, or dermatitis.
- (3) It may excite a diseased one.
- (4) It may convey poisons to the skin and set up a dermatitis, etc.
- (5) By increasing the warmth of the part it may excite or increase the growth of parasitic fungi—*tinea versicolor*, etc.

(6) In excessive quantity it may increase perspiration and cause hyperidrosis, etc.

(7) Pressure of clothing, tight sleeves, boots, etc., may produce erythema, callus, eczema, venous congestion of the skin, etc.

(8) The pressure of articles of clothing on special parts determine the localization in some cases; e.g., syphilitic paronychia is much commoner on the toes, where the shoes exercise pressure, than on the hands, where there is no pressure; where the clothes press is where the itching and resulting blood-capped marks appear in pruritus senilis.

(9) It may serve as a carrier of infectious and contagious diseases.

(10) By increasing the blood supply, the irritation of clothing or wearing heavy garments, flannel, etc., increases the itching of the part.

Poisonous dyes in clothing.—Arsenic is the ingredient in the majority of cases. There is scarcely an article worn next the skin that has not at some time or other been made the vehicle for transmitting poison to the body. Red chest-protectors, bright red-tinted flannel shirts, socks and stockings of the same color, black silk gloves, magenta colored wool and even hats have given rise to cutaneous eruptions. Bichromate of potash, lead chromate, eosin, etc., are sometimes factors. Dr. Harrington* of Boston was at a loss to explain certain cutaneous eruptions characterized by ulcers; when he discovered that the patients had been wearing stockings, etc., dyed with bichromate of potash. All colored clothes should be boiled before wearing. The dyestuffs in the lining of shoes may permeate the stockings and produce a dermatitis of the feet and legs. Duhring reports such cases. The cuffs may irritate an eczema of hand or arm. A rough collar or clothing around the neck may irritate an eczema or dermatitis of that region. The bedclothes may irritate an eczema. Irritation of stays near breast; friction of under-clothing, may induce a circumscribed scleroderma—(Crocker). If there is much exudation in an eczema and a powder is applied,

* Boston Med. & Surg. Journal, Aug. 12, 1886.

it crusts up with the exudate and may cause the clothing and bedding to adhere to the diseased surface. False hair may set up an eczema of scalp or forehead; a bad ear-ring an eczema of ear. Friction from hat-bands, "frizzes," "bangs" and dyed veils may produce acne—(*Wigglesworth*). In soldiers the helmet sometimes gives rise to an eczema. A stiff, ill-ventilated hat may produce alopecia.

The dermatoses principally affected by the clothing are :

Dermatalgia—The clothing becomes simply unbearable.

Dermatitis Congelationis—Tight clothing and boots tend to it.

Erythema Intertrigo—Heavy underclothing, tight or ill-fitting garments; hard, foul and wet diapers may cause it.

Urticaria, sudamina, hyperidrosis, bromidrosis, miliaria may all be caused by too heavy or tight underclothing in hot weather; flannels or apparel colored with poisonous dyes may produce urticaria; woollen fabrics may cause miliaria.

Eczema Genitalium—Eczema of the genitals may be excited by the irritation of the clothing while walking. Sweat may be effused in a normal condition upon and with articles of clothing and cause a stench by chemical changes both in the clothing and fluid. Urine may be retained upon the underclothing and set up a persistent dermatitis of the scrotum, perineum or inner surfaces of the thighs in either sex.

Onychogryphosis—Tight-fitting gloves, boots and shoes may cause it.

Pruritus—Heavy bedclothes or the friction of the clothing may produce it.

Pruritus Digitorum Pedis. Acute and Chronic Eczema.—Irritation of underclothes or dyes contained in them.

Erythema Pernio. Furunculi—Irritation of clothes.

Seborrhœa Corporis, or Unna's *Eczema Seborrhoicum*—Flannel may produce these, also *Tinea Versicolor*, and in infants the so-called *Lichen Strophulosus*.

Acne—Woollen fabrics. *Acne artificialis* limited to the forehead may be caused by the irritation of some enamelled hat-band, likely containing arsenic. This should be replaced by a soft linen or silk lining. A feather pillow often increases the congestion of the face in acne.

Pityriasis Rosea—Unwashed flannels may cause it. According to Hutchinson, the irritation of a new woollen vest may bring out on the trunk in a syphilitic subject an eruption. A non-specific eruption resembling syphilis may be set up from like cause (vest-rashes).

Seeing how seriously the clothing may damage the skin, it behooves one to look well to and guard against its deleterious influence.

Rules as to Clothing in Skin Diseases.—It is the inside rather than the outside clothing that mostly affects the skin. If the disease be chronic and indolent, flannel shirts and drawers may be worn next the skin. If irritable and inflammatory, soft and frequently washed old cotton (an old night-shirt or old cotton drawers). In acute and subacute eczema the bedclothes should be as light as possible. The clothing should never be rough enough to irritate the skin; free from all poisonous dyes; properly washed and frequently changed. All restriction and constriction must be avoided. All woollen clothes should be discarded and removed from the room so that the conidia or spores may not become entangled in their fibres and aid in spreading the disease in tinea tonsurans. All flannels avoided in tinea versicolor, pruritus, seborrhœa corporis, and silk worn next the skin. In pruritus digitorum pedis, stockings changed often; shoes and boots broad and easy. Erythema pernio, underclothing woollen and warm; stockings and gloves of same material; wear cork soles inside boots to prevent chills. In miliaria, sudamina, urticaria, hyperidrosis, clothing light. Erythema multiforme, silk or softest linen worn next the skin. Top boots not worn in an eczema, they heat the leg; masks, rubber gloves, bandages, etc., protect from scratching, and from other injurious influences, water, dusts, etc. Dr. Bulkley recommends, in an acute eczema of arm, that a vaccinator shield be applied to protect it from the clothes. And I venture to suggest, as a means of preventing the weight, heat and irritation of the bedclothes in a patient confined to bed with an eczema or any inflammatory skin disease, elevation of the bedclothes with wooden or iron sticks bent in the form of a bow across the bed and held together

by bars running across the top and along the bottom. In pediculosis the clothes should be baked or boiled. In scleroderma flannels are desiderated. While clothing cannot be strictly classed as a line of dermatological treatment, careful and minute attention to it will certainly add to its success.

Retrospect Department.

QUARTERLY RETROSPECT OF MEDICINE.

By R. L. MACDONNELL, M.D.,

Professor of Clinical Medicinæ in McGill University; Physician to Montreal General Hospital.

The Indications against High Altitude in Phthisis.—The editor of the *Lancet* (Oct. 4th, 1890) draws attention to the difficult question of the selection of winter quarters, and not inopportunately recalls some of the pathological conditions which are a bar to the recommendation of the high altitude stations to the consumptive. It would be a great gain if no case were sent to the mountains except those for which experience warrants us in anticipating benefit, and if the notoriously unsuitable cases could be excluded. The first point to be considered is the extent of the pulmonary lesion. No case with extensive disease of the lungs is suitable for the mountains. The atmospheric conditions and mode of life at high altitudes are all of a nature to stimulate respiration and throw an additional strain upon the lungs. Life at high altitudes can operate beneficially only where the destruction of lung tissue is very limited in amount, and where there is still a sufficient amount of sound tissue to respond to the stimulus thrown upon it. If the lungs be extensively diseased, high altitude life will probably excite troublesome dyspnoea, prevent out-door exercise, and not only fail to retard the progress of the disease, but not even confer the palliation of symptoms which in advanced stages of phthisis may be expected from a soft and mild climate.

Certain constitutional states are contraindications to high altitudes in phthisis. Of these the most important are the rheumatic and gouty conditions, feebleness of the circulation,

bronchitis and emphysema, and lastly albuminuria. No case presenting any of these features can be sent to Davos, St. Moritz, Wiesen, Denver, the Adirondacks, or any other high altitude station with any reasonable prospect of benefit. A strong circulation is, *cæteris paribus*, an indication for the trial of a mountain climate. On the other hand a weak circulation, one of the clearest of contraindications. Organic heart disease will in nearly every case be a definite bar, and no difficulty will be felt in deciding upon such cases. Much greater difficulty will arise in connection with cases where there is no cardiac lesion, but only circulatory power. We are apt to take the tension of the pulse as a guide in such cases, but there is good reason for thinking that it is by no means a safe index. Much general physical vigour may apparently coexist with a low tension pulse. Our attention ought to be directed, not so much to the condition of arterial tension as to the obvious evidences of the efficiency or non-efficiency of the circulation, such as the condition of the extremities, proneness to congestions, &c.

It is not now generally believed that hæmorrhage is any contraindication in this matter, but there is more reason for thinking that certain types of dyspepsia—which can hardly be defined with exactness—are likely to preclude any benefit from a resort to the mountains. Insomnia, again, is a sign of doubtful indication. In some cases, it is distinctly aggravated, in others as distinctly benefitted by a residence at high levels. “After all deductions, we may yet affirm that for a certain limited number of cases of early and quiescent phthisis, where the circulatory and digestive systems are fairly efficient, and where there is no bronchial and renal complication, and no rheumatic and gouty history, the high altitudes possess peculiar advantages.”

AORTIC REGURGITATION.

Pulsation in the Uvula.—In ordinary conditions of health there is no pulsation in the soft palate or uvula that is visible on simple inspection, so that when such a pulse is present it may, as a nearly constant rule, be taken as a sign of disease. In a recent memoir (*Charité Annalen*, xiv., 1889), Dr. F. Müller,

of Berlin, has reported a case in which he observed rhythmical pulsations of the soft palate. The case was one of aortic insufficiency. A slight attack of pharyngitis led to an inspection of the throat, when it was seen that with each carotid pulsation the tonsils and pillars of the fauces moved slightly towards the median line, while the soft palate and uvula were somewhat lowered, so that there was a rhythmical contraction of the faucial opening at the same time that there was an increase in the redness of the mucous membrane. Inspection of the throat after the inflammation had subsided showed the pulsation still present, though somewhat less pronounced. His attention having been thus called to this peculiar condition, Dr. Müller searched for it in six other cases of aortic insufficiency, and found it four times in a total of seven cases. In an article in the *Gazette Hebdomadaire de Médecine et de Chirurgie*, March 15, 1890, Dr. P. Merklen quotes these cases and refers to an observation of his own. The patient was a young man, who had a double mitral and aortic lesion, with marked hypertrophy of the auricle and left ventricle. The sublingual capillary pulse was distinct, and, in addition, the palatal pulse was very evident on inspection. This was more particularly marked in the uvula, which could be seen to swell synchronously with the carotid and radial pulses. Although, as Dr. Merklen remarks, this sign can have no great clinical value as an aid to diagnosis, it would, nevertheless, be interesting to learn with what constancy it is present in cases of aortic insufficiency, and whether the pulsation is ever visible in any other conditions. Müller never observed it in any other cases than those of aortic insufficiency, and Merklen has also examined many patients without this condition, but failed to find any pulsation. It is certainly not present in all cases of aortic insufficiency, for Müller looked for it in four such cases, but could not detect it. The palatal movements are not caused by transmission of the carotid beat, but are probably produced in the same way as the capillary pulse seen under the finger-nails in cases with similar cardiac lesions.*

* The New York Medical Record, May 31st, 1890.

The Capillary Pulse.—Lazarus Barlow * deprecates the ordinary mode of testing for the existence of a capillary pulsation by reddening the forehead by friction, and advocates search for it under the nails, or still better upon the mucous membranes. He turns out the lower lip and presses a glass slide over it, when the pulsation if present is seen reddening and fading through the glass, Fifty cases of healthy hearts had no capillary pulsation. In 46 cases where capillary pulsation was present, 39 had some change in the second aortic sound; 6 showed capillary pulsation on one occasion and never subsequently; and in one case, where the pulsation was constantly present, no cardiac lesion could be discovered. Of these 39 cases where the second sound of the aorta was affected, 33 presented a diastolic murmur.

The Capillary Pulse and the Centripetal Venous Pulse.—Quincke† found that the capillary pulse could not be found under the finger in many cases owing to its lack of transparency. He therefore rubs the forehead with some hard, smooth body, as the lower end of the stethoscope, until a red spot is produced by the paralytic dilation of the capillaries and smallest arteries. In this the systolic increase of the size of the redness can often be well observed. For the production of the pulse there should be the greatest possible difference between the arterial pressure during the systole and that during the cardiac diastole. The capillary pulse is best seen in aortic insufficiency, and depends on the amount of blood regurgitated as well as on the energy of the succeeding ventricular contraction. To permit of much aortic regurgitation, not only must there be extensive valvular insufficiency, but the ventricle must be able to contract; for if it be dilated and weakened, and unable to expel more than a portion of its contents, there is evidently not much room for regurgitation. Consequently, in disturbance of compensation in cases of aortic insufficiency, the characteristic peculiarity of the pulse often disappears, and it is only with return of ventricular strength that capillary pulse and the

* *The Practitioner*, March, 1896. Also in Sajous' *Annual*.

† *Berliner Clin. Wochenschr.*, 1890, 265, from the *Amer. Jour. Med. Science*.

celerity of the arterial pulse can be discovered. The capillary pulse is not observed in every case of aortic insufficiency, and conversely it may be witnessed in other conditions also, wherever the *pulsus celer* is found, in anæmic and chlorotic conditions, and in many nervous and muscular alterations of the cardiac action. It may sometimes be seen in the everted under lip, or in pressing a plate of glass against the finger tip. It may even appear in the natural redness of the cheeks and in any localized area of inflammation of the skin. The other conditions being present, it is especially well seen in erysipelas; pulsation of the retinal arteries is seen under the same circumstances as the capillary pulse. The conditions under which the centripetal venous pulse is produced are different. Quinke thinks it to be of rare occurrence. The chief conditions requisite for its occurrence are relaxation of the vessels, chiefly the arteries, but also of the capillaries and veins. This is especially common in certain stages of fever, as in sudden fall of temperature, accompanied by profuse sweat. Thus he has seen it in a number of cases of typhoid fever, as also in recurrent and intermittent fevers, pyæmia, polyarthritis rheumatica, pneumonia, phthisis and cholelithiasis. Nervous influences may join with the fever in producing it in such conditions as meningitis, spondylitis, encephalomacia, and injuries of the cervical cord. He has also seen the venous pulse in afebrile conditions, as chlorosis and anæmia, and even in healthy persons whose peripheral vessels have been relaxed by the summer heat. It is witnessed in the veins of the forearm and back of the hand. Only once has he seen it on the dorsum of the foot. Besides the relaxation of the vessels, a number of other conditions seem necessary for the production of the phenomenon; such as thinness of the skin, a sufficiently powerful action of the heart, a certain degree of fulness of the veins dependent on the relaxation of the vessel walls and the position of the arm at the time of examination. A slight change in the position of the member may be sufficient to cause the pulse to disappear. One must not expect to find the capillary pulse in every case of centripetal venous pulse; on the contrary, their combination is exceptional. The condition most

favourable to the production of venous pulse, the condition which develops it to the best advantage is the combination of aortic insufficiency with relaxation of the vessels. Arterio-sclerosis, also, may favor its occurrence by transmitting a powerful pulse-wave into the smallest arteries.

EARLY DEVELOPMENT OF SPINAL SYPHILIS.

Gibert and Lion have recently published in the *Archives Générales de Médecine* an essay on the early manifestation of syphilis of the spine. Fifty-six cases have been collected in which symptoms were noted within two years of the primary infection. One case is reported of a man who shewed spinal symptoms in the tenth month after infection. Of the 56 cases, in 44 there were no cerebral syphilitic manifestations. These manifestations are twice as frequent in the first year as in the second, and particularly frequent in the second quarter, that is, about the sixth month of syphilis. Syphilitic spinal manifestations are chiefly to be found in cases which have not been well treated in the early stage of the disease, in those in which the eruption has been copious and obstinate, and those in which the tertiary symptoms appear at the time when secondary symptoms are due. They are found almost exclusively amongst men. The initial symptom is usually pain in the spine extending the whole length of the column. In the case specially commented upon by M. Gibert, the patient experienced at first a sense of fatigue in the back which was soon followed by paralysis of the bladder, and in forty-eight hours all the other symptoms presented themselves, viz, paraplegia, loss of reflexes, paralysis of the rectum, loss of sensibility to heat, cold, pain, contact, tickling. Vasomotor disturbances manifested themselves by a semi-erection of the penis, œdema of the lower extremities, and by the suppression of sweating in the paralysed parts.

RHEUMATISM AND GOUT.

Painless Gout.—There is a valuable store of medical observations in Mr. Jonathan Hutchinson's Archives of Surgery, which every one would be the better of studying, and of the many very

good articles that on *Rheumatism and Gout* is specially worthy of admiration. Pain, according to Mr. Hutchinson, is not essential to gouty inflammation. When it affects skin and cellular tissue chiefly, then it may easily happen that there is little or no pain. In many cases of even acute gouty inflammation, redness and œdema are the signs and pain is almost wholly wanting. In such cases the diagnosis of erysipelas might very likely be made, as "when, as I have sometime seen, the œdema spreads up the limb this suggestion might appear to obtain an item of important support."

On the Inheritance of Gout as the Predisponent of Gonorrhœal Rheumatism.—Mr. Hutchinson has long held that the predisposing cause of what is called gonorrhœal rheumatism is an inheritance of gout. In case after case, he has found this history, and few indeed have been the exceptions. Mr. Hutchinson gives the details of a case bearing out the correctness of his opinion.

Arthritic Changes Induced by Injury.—Mr. Hutchinson relates an interesting example of the importance of the family history, and of the manner in which rheumatic gout may be localized by injury. A young gentleman, aged 20, suffered from pain and stiffness in the wrist and elbow, the result of a fall from his bicycle some months before. His grandfather had suffered severely from gout, as also other members of the family. Mr. Hutchinson having expressed his opinion that it was this inherited tendency which was the cause of the persistence of the swelling, his mother remarked it was wished that he should see the sister also. In her case, great enlargement of the carpo-metacarpal joint of the right thumb had resulted from a sprain, and there was the further history that she had formerly been laid up for a year with chronic inflammation of one knee in consequence of a sprain. She was a florid girl of twenty, and had often suffered from rheumatism. Both she and her brother were accustomed to take wine and beer moderately.

ALTERATIONS OF THE CARDIAC MUSCLE IN DIPHTHERIA.

Schlem contributes to the August number of *Virchow's*

Archives an interesting account of his examination of the hearts of many patients who had died in a recent epidemic of diphtheria in Göttingen, the investigation not being limited, as were those of previous observers, merely to cases where heart symptoms were present, but including all fatal cases of diphtheria occurring within a definite period. This systematic examination of a number of cases afforded the author an opportunity of estimating the frequency with which the heart is attacked in diphtheria as well as examining into its intensity and nature. Thirteen fatal cases of diphtheria are reported, and the results are as follows:—Fatty and granular degeneration of muscle fibres, slight hyaline degeneration and atrophy. The connective tissues appeared frequently somewhat rich in cells, and in certain cases the heart muscle was dotted with extravasated blood. Fatty and granular degeneration was found in every case, in some it was very slight, especially when the false membrane was the cause of death; in others the morbid change was extensive so that many fibres were entirely replaced by fat cells, affording an explanation of the cardiac weakness observed during life. Age seems to exert no special influence upon the intensity of the heart affection. On the other hand, the duration of the illness seems to be an important matter. Of the cases in which an extreme degree of degeneration was found, one lasted 18 days, two cases 10 days, and in a third instance the exact duration could not be determined, but it was probably nearly as long. In the cases in which cardiac degeneration was not so marked, the duration of the fatal illness was invariably much shorter, and the least degree of degeneration was found in those cases where the larynx was attacked and the patient died at a very early stage of the disease. The changes in the heart did not bear any relation to the changes in the lungs. In many cases in which there was more or less pronounced broncho-pneumonia there was little change in the heart, while in others there was no pneumonia but a considerable degree of muscular degeneration of the heart. In but one case could a proliferation of nuclei in the intermuscular connective tissue be found, and this lay under the pericardium, which at this spot

appeared on section to be undergoing the same change. In many cases the intermuscular and perivascular connective tissue was to some extent infiltrated with nuclei, but the author could not determine whether this is not a normal condition in children. Of the fatty degeneration fever cannot be regarded as the cause, since in many cases the rise of temperature was not great, and in some of the cases most affected, the normal point was never passed. The changes in question partake of the nature of the condition called by Orth parenchymatous or degenerative myocarditis, and which is frequently met in many severe diseases of an infectious nature.

DIABETIC PARAPLEGIA.*

In a recent lecture by Prof. Charcot on organic or dynamic affections of the lower limbs, the subject of diabetic paraplegia, analogous to alcoholic paraplegia, came under discussion. In 1880 Jules Worms wrote of symmetrical neuralgias in diabetes (cf Buzzard, *Drasche Ziemssen*). The neuralgias were not always bilateral and were occasionally fulgurating (Bernard et Féré). Sometimes there were formications, hyperæsthesiæ and dysæsthesiæ, as in ataxia and even absence of knee jerk. Absence of knee jerks in grave cases of diabetes, not necessarily grave because a large amount of sugar is excreted, is evidently due to peripheral neuritis, the spinal cord being found intact. In some cases locomotor ataxia is simulated by this absence, the lightning pains and other sensory troubles and the ataxic gait. But in both the diabetic and the alcoholic kind of ataxia, the gait is not really that of tabes—the muscular paralysis predominating in the extensors of the foot. In fact in all the pseudo-tabes alcoholic, diabetic, saturnine, beri-beri and arsenical, we see the “steppage;” not the true ataxic walk. The front part of the foot falls, and the patient is obliged to step higher than usual to prevent the toes from catching the ground. The paralysed muscles show the electrical reaction of degeneration. Meanwhile in all the above, the spinal cord shows no coarse alteration; the posterior columns in particular are quite free.

* The London Medical Record, July 20th, 1890.

Diabetic paraplegia is probably due to an auto-intoxication. There is not the painfulness on pressure of the limb found in the alcoholic variety, but the feet fall even when the patient is seated. On the whole the case exhibited bore the closest similarity to alcoholic, while there was no alcoholism about it. Of course a true tabes may co-exist with diabetic paraplegia; the symptoms would then differ. The diabetes might appear late and would then be due to extension of the tabetic lesion to the 4th ventricle; these cases are rare. Or true diabetes may occur during tabes or precede it, independently, as a coincidence, but not a fortuitous coincidence for the arthritic and neuropathic families of diseases are closely related.

URÆMIC STOMATITIS.

A few years ago I had a very interesting case of interstitial nephritis in my wards of the Montreal General Hospital, which was made the subject of a clinical lecture (*Medical News*, Jan. 15, '87). This patient presented one by one the symptoms of the lesions which we group under the comprehensive title of interstitial nephritis. She had recurrent attacks of epistaxis, hemiplegia, a large heart, œdema of lung, albuminuria, and casts. During the course of this long illness an attack of stomatitis occurred which I described to the class in these words: "During the summer of 1885, the progress of the disease (the interstitial nephritis) was stationary, but in the early autumn severe stomatitis set in, accompanied by such depression of the general strength that a fatal result from exhaustion at one time seemed imminent. There was extensive ulceration of the mucous membrane of the mouth, the gums receded from the teeth, leaving the teeth loose, so that some of them had to be removed. A large ulcer threatened to destroy the floor of the mouth and gave rise to several severe hæmorrhages. This is an uncommon affection, and so far as my knowledge goes has no connection with the renal disease." I was decidedly wrong in that last statement, for it appears that a connection has been traced between uræmia and stomatitis, an interesting essay on the subject having appeared in the *Archives Générales de Médecine*

(Oct.-Dec., 1889). M. Barié, the author, describes under the name *Uræmic Stomatitis* those bucco-pharyngeal determinations which form a part of the gastro-intestinal manifestations of uræmia. The parts affected are the mouth, the rima glottidis, and the pharynx. The two forms under which uræmia manifests itself in this way are (1) pultaceous stomatitis, (2) ulcerative stomatitis. In the pultaceous form the tongue is covered with a grayish coating, thick and tenacious, but not adherent to subjacent mucous membrane which may extend over the inside of the cheeks, the gums and even the pharynx. In the ulcerative form, the ulcerations are found upon the gums, the inside of the cheeks and the lips. The accompanying salivation is excessive. In one of the cases a very large proportion of urica was found in the saliva. Stomatitis is followed by a depressed condition of the system. After ulcerative stomatitis the prognosis is specially bad. The ulcers may extend, become deep and form extensive sloughs, but they may heal and leave behind them cicatrices of various forms. *Uræmic stomatitis* is caused by the elimination of urinary poisons by the salivary glands, a dirty state of the mouth favours its occurrence.

In connection with the subject of *uræmic stomatitis* it is interesting to note that in an essay on *Ulcerative Stomatitis* by *Simanovsky* which is reproduced in abstract by the *Medical News* of September 6th, 1890, eight cases of the disease were described, and in one of three cases in which the urine was examined, albumen was discovered.

THE CONNECTION BETWEEN MENTAL SYMPTOMS AND CARDIAC DISEASE.

The editors of the *Boston Medical and Surgical Journal* present their readers (Vol. cxxiii, No. 5) with an admirable synopsis of the literature of this important subject. Nasse in 1818 first wrote of cardiac insanity as a special psychosis. Numerous treatises have since appeared. Sufferers from heart disease occasionally present peculiar mental symptoms. They are emotional, irritable, peevish, get angry at the least trifle, while at the same time, possessing great mental and bodily activity.

These psychical peculiarities do not amount to mental alienation, but they constitute a tendency of mind on which insanity may engraft itself. The two fundamental conditions necessary to constitute cardiac insanity are firstly a lesion of the heart, then a particular disposition of the cerebrum. It is important to remember that the insanity breaks out generally during an exacerbation of the cardiac symptoms. Mitral affections are the most influential in bringing on this psychosis; next in order come the ventricular hypertrophies, and lastly, aortic insufficiency, a lesion which is particularly prone to cause anæmia of the bulb, and give rise to the anguish and dyspnoea so characteristic of Corrigan's disease. We cannot as yet connect special forms of insanity with particular lesions, for patients may be affected with all forms of cardiopathy without mental alienation, while the great majority of the mentally unsound have no lesion of the heart whatever. Melancholia more frequently coincides with heart disease than any other psychosis. There exists a cardiac lypemania accompanied with a restlessness and an agitation which bears a strong resemblance to "anxious melancholia" that is, a delirium with predominance of sad ideas, and with an exaggerated tendency to noisy lamentation and an irresistible tendency to continued movement. Burman considers hypochondriac melancholia as the type of cardiac insanity; to this he joins the delirium of suspicion, and a particular mental state in which the subjects are at once impulsive and depressed. It has been remarked that all the victims of cardiac insanity are extremely prone to suicide, and that the morbid impulse is especially apt to manifest itself on the occasion of an aggravation of the circulatory troubles. The delirium is peculiarly a delirium of the night time, as Corvisart has remarked. It has, moreover, been noted that the supervention of albuminuria is one of the most important factors in the production of the delirium. A cardiac patient in the full possession of his reason will show signs of mental derangement, will have delirium, hallucination, morbid impulses as soon as the least cloudiness of albumen appears in his urine. This circumstance suggests the possibility of the delirium being uræmic in these cases. The one feature which

soonest attracts attention in the evolution of cardiac insanity is the intermittent march of this psychosis ; it manifests itself paroxysmally, its accessions being habitually followed by remissions supervening under the influence of rest and treatment. In the treatment of this kind of insanity, great reliance must be placed on the heart tonics, especially on digitalis, frequently administered in small doses ; it has been found that large doses rather aggravate than arrest the delirium. Bull speaks highly of the utility of hypodermic injections of sparteine and morphine, which have a very rapid action in arousing and sustaining a fatigued and flagging heart. The sedative action of the alkaline bromides on the nervous system constitutes them a precious auxiliary. Repose and isolation are indispensable ; it will often be necessary to send the patient to a sanitarium, or even to an asylum ; sometimes a sea voyage will give just the rest and freedom from care and business that is needed.

QUARTERLY RETROSPECT OF GYNÆCOLOGY.

By T. JOHNSON-ALLOWAY, M.D.,

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Inflammation of the Ovaries.—In the *Annales de Gynécologie et d'Obstétrique* (June, 1890) SLOVIANSKY expresses essentially the same views as previously on the subject of chronic oöphoritis. Localized pain is the most prominent symptoms. In the cirrhotic form this is not increased by deep pressure, and is due to compression of the terminal nerve-fibre by the cicatricial tissue. Hyperæsthesia of the skin supplied by the genito-crural nerve is often noted, especially just before menstruation. The character of the menstrual flow depends upon the amount of ovarian tissues affected. Menorrhagia accompanies hyperplastic oöphoritis associated with endometritis, reflected pain through the 6th or 7th intercostal nerves is very common on the side the ovary is affected. Migraine, palpitation, reflex cough and irritability are all well recognized symptoms.

Statistics of Ovariectomy.—TERRILLON (*Le Mercredi Médical*, July 2, 1890) reports two hundred cases of ovariectomy, with twelve deaths in the first hundred and four in the second, three

of the latter being due to shock and only one to sepsis. The writer argues in favor of sparing the remaining ovary when it is not visibly diseased, since nine of the patients thus treated subsequently bore children.

Vaginal Hysterectomy.—OTT (*Frauenarzt*, June, 1890) reports eleven cases in which total extirpation was attempted, the operation being abandoned in three cases on account of the extension of the disease to the peri-uterine tissues. All the other eight patients recovered, but six had a recurrence within less than a year.

Vaginal Extirpation of the Uterus.—MALAN (*British Gynecological Journal*, May, 1890) believes that the operation should be judged by the results obtained by the best operators. Leopold's statistics show only four deaths in eighty cases, or 5 per cent., and perhaps even this death-rate may be diminished.

Forty-two cases had been operated upon more than two years before, of whom twenty-seven, or $64\frac{1}{2}$ per cent., were still free from recurrence. The writer opposes high amputation, first because the mortality is greater [?] than after extirpation, and secondly, because it is impossible to say beforehand how high the disease extends. Infiltration of the broad ligaments is not in itself a contra-indication to the radical operation, since it may be purely inflammatory and not cancerous. "As long as the uterus can be drawn down, so long is the operation allowable." The condition of the patients with recurrence of the disease after hysterectomy is not materially worse and does not constitute an argument against the operation in suitable cases.

The Surgical Treatment of Cancer of the Uterus.—PETROW'S thesis on this subject (abstracted in *Frauenarzt* for June, 1890) is based upon observations made in Lebedew's clinic. The latter performed twelve vaginal hysterectomies with two deaths; two patients had a recurrence within less than a year and only one was free from disease at the end of three years. Of seven patients upon whom high amputation was done, two had a recurrence within eight months, one was healthy at the end of two and one-half years, and four had not reported.

The writer collected from all sources 599 cases of total extir-

pation and 417 of high amputation, the immediate mortality in the first series being 18.76 per cent., in the second 8.7 per cent. In 21 per cent. of the cases of total extirpation the average freedom from recurrence was only eight months, although the subsequent history of nearly one-third of the patients was not obtained. Over one half of the cases of high amputation were lost sight of, but there was a return of the disease in 38 per cent. of the others. From these statistics the writer argues in favor of vaginal hysterectomy. [As the author himself admits these statistics are unreliable, especially as regards the recurrence after high amputation. There is, however, no question as to the relative mortality following the operations.]

JESSETT (*British Gynecological Journal*, May, 1890), as the result of his long experience at the Brompton Cancer Hospital arrives at the following conclusions:—(1) When the disease is confined to the portio vaginalis, amputation of the cervix is the operation to be performed, the scissors, rather than the cautery or *écraseur*, being preferable. (2) Caustics are “unreliable, and, indeed, in many cases, harmful.” (3) If the disease does not extend beyond the os internum, conical amputation should be practised; but if it is found to extend higher, the entire uterus may be extirpated. (4) If the disease is limited to the corpus uteri and is recognized early, vaginal hysterectomy is the only operation to be done. (5) “No drugs administered internally have any effect whatever in arresting the disease.” Appended to the paper is a table showing the results in eight cases of high amputation, but both these statistics and those of the writer in vaginal hysterectomy are of little value except as they present the immediate results of both operations, which were good, the mortality being *nil*.

The limits of Vaginal Hysterectomy for Cancer of the Uterus.
—COE (*Am Journ. of Obstetrics*, June, 1890), from a study of nineteen cases of vaginal hysterectomy, arrives at the conclusion that when performed in cases of cancer of the cervix the operation can seldom be regarded as a curative one, though the immediate mortality may, in the hands of experienced operators, be reduced to six or eight per cent. He would limit total extir-

pation to cases of malignant disease of the corpus uteri in which the condition is recognized early, while the uterus is freely moveable, the glands and perimetric tissues are not involved, and the patient's general health is such as to offer a fair prospect of recovery from the operation and the enjoyment of several years of life. But under these circumstances the surgeon may be disappointed by an early recurrence.

In a paper on *Menstruation and Removal of both Ovaries*, Dr. J. ENGELMANN of St. Louis draws the following conclusions:— In considering the question of the cause of the persistence of menstruation after (double ovariectomy) the removal of both ovaries, we must bear in mind the more important of the reasons assigned: (1) Habit; (2) the presence of a third ovary; (3) Remnants of ovarian tissue left *in situ*. Some have ascribed the cause of persistent menstruation to habit—an explanation which I do not accept, and which cannot be admitted even when it is a regularly recurring and persistent flow with the undoubted characteristics of menstruation. Morbid activity or irritation of the spinal or ganglionic centres or of the terminal nerves may serve to explain recurrences of uterine hæmorrhage for a time, but habit is a term which must be excluded from any scientific discussion of the question. We do know that uterine hæmorrhage frequently occurs soon after operations on the pelvic viscera, especially after laparotomy, evidently due to the congestion caused by this disturbance of the circulation, and, if the spermatic and other supplying vessels are cut, by the increased flow to the remaining arteries, especially the uterine. We also know that bleeding, simulating menstruation, occurs under various conditions without ovarian activity; thus from the congested or subinvolved uterus during child-bed; in old age, if the tissues are relaxed, or if the endometrium is in a state favoring hæmorrhage, with an endometritis polyposa or hæmorrhagica. In many of these cases in which the appendages are removed, or ovariectomy is performed, a diseased, congested, or enlarged uterus exists, and by reason of the ligation of numerous vessels the flow of blood through the uterine artery is increased, and in such cases in the already congested organ the habitual influence of

the menstrual wave, of the uterine flood, in obedience to the irritation arising from the nerve stump or the spinal and ganglionic centres, may suffice to cause an increased pressure and a flow of blood at intervals, especially at the times when menstruation should have occurred, but this will never persist for any length of time. It is in this class of cases, with a uterine status favoring hæmorrhage, that the habit, the disappearing wave of the uterine flood, or, more correctly speaking, the influence exerted by the ganglia and nerve stumps, will lead to the semblance of menstruation, but never to a normal and persistently recurring flow. It is now well known that a third ovary does occur, although only a myth until 1863. One such case, and another of an accessory ovary, is pictured by Winckel. Olshausen, Klebs and others have observed and published isolated cases, but notwithstanding all the numerous laparotomies of late years by competent observers, not one has met with a third ovary except Olshausen in the removal of an ovarian cystoma. Continuance of menstruation after removal of both ovaries has been so frequently reported and the presence of a third ovary so rarely that, *à priori*, we must conclude that an additional remaining ovary cannot be accepted as an explanation for this phenomenon. Whilst the present status of our anatomical and physiological knowledge will not admit of either of the above explanations, it is fully in accord with the facts observed in the cases reported, which conclusively prove that the continuance of menstruation, undoubted menstruation, regular and persistent, is due to the presence of ovarian tissue, however small in quantity and whatever it may have left. From the history and examination in my own cases and in that of Prof. Schatz, we may safely draw the following *physiological conclusions*, which are corroborated by numerous cases of oöphorectomy and of double ovariectomy, now observed, the histories of which have been recorded for a sufficient length of time after recovery from the operation:—

1. That the continuance of *menstruation* after removal of both ovaries is due to remnants of ovarian stroma left *in situ*.
2. That particles of ovarian tissue, however small, which

remain after the removal of the greater portion of the organ, whether or not the Fallopian tube be preserved, *may* retain their activity and continue the functions of the entire organ, and from this we infer that menstruation is more or less intimately associated with ovulation, and that the menstrual condition indicates the ovarian status, provided the uterine tissues be normal in character.

3. That even elongated pedicles may contain ovarian stroma in which the functional activity of the organ may be continued.

4. That remnants of ovarian stroma do *not necessarily* preserve their vitality and functional activity.

5. That the ovary is an essential factor in the functional life of woman, and that menstruation is inseparable from ovarian activity, if not ovulation.

The deductions of practical value to the operator are as follows :

1st. If menstruation is to be checked and the change of life produced, it is requisite that every particle of ovarian stroma shall be removed, if the result desired is to be expected with certainty.

2nd. If shrinkage of fibroids, limitation of hæmorrhage, or cessation of annoying symptoms is to be accomplished with the greatest possible certainty, both ovaries must be *completely* removed.

3rd. In the performance of double ovariectomy in women not yet beyond the climacteric, and not suffering from uterine reflexes, such healthy ovarian tissues as may exist should be spared in order that functional activity may not be impaired.

The Sharp Curette.—DR. H. MARION SIMS in reporting some cases in the *Annals of Gynecology*, makes the following remarks on curetting the uterus. He says :—I wish, in this connection, to emphatically state my preference for the Sims, or sharp curette, as compared with the Thomas, or dull curette. I have used both of these instruments, and it has been my experience that I can certainly remove more effectually and more thoroughly any growth or fungoid degeneration of the utricular glands with the sharp curette, and I have seen the dull curette fail completely

to give relief in a number of cases. I have even had cases in which the operation had to be done finally with the sharp curette in order to remove all the pathological conditions that existed within the uterus. It has been stated by many operators that the sharp curette is a dangerous instrument. That I do not believe, for I have used the instrument now continually for nearly twenty years, and I have yet to see the first case of accident follow its use. Like any sharp instrument it is a valuable one in the hands of those who understand its use, and, probably for the same reason, it may be called a dangerous instrument in reckless hands. I think, if you follow out my instructions given for the use of the sharp curette, you will find that on all occasions you will meet with just as much success and just as little danger as I have experienced in its use. To begin with, you should never curette a patient in your office and then allow her to walk or ride home. If the curette operation is to be performed, I make it a rule to go to the patient's house, or have her go into a hospital or boarding-house or hotel, if she be not a resident of the city, and there I perform the operation carefully, thoroughly and without undue haste. In using the sharp curette, you will always find that when you are curetting over a diseased area, the instrument will emit no sound whatever; it will, in fact, be perfectly noiseless; but as soon as your instrument has touched healthy tissue you will get that peculiar rasping sound similar to the sound produced if the curette be drawn over the palm of the hand. The curette should be carried around thoroughly over the surface of the tissues on both sides, and antero-posteriorly as well, and after you are satisfied that you have thoroughly and efficiently curetted the whole interior of the organ, then the uterus should be well washed out with a solution of about 5 per cent of carbolic acid and hot water at about 100° to 105° F. Following this, I have made it an invariable rule for years in my practice to inject into the uterine cavity about twenty or thirty minims of the tincture of iodine, care being taken to inject the iodine as the syringe is being withdrawn from the uterus, and not while it rests against the fundus or near it. This, together with the washing out, causes a prompt closing of

any bleeding surfaces. The patient is then put to bed and made to remain there anywhere from three to five days, according to the manner in which the case progresses.

Hydrosalpinx and Pyosalpinx.—DR. LANDAU (*Nouv. Arch. d'Obstétrique et de Gynécologie*, 1890) read in the Section of Obstetrics and Gynæcology, at the Berlin meeting of the International Medical Congress, an excellent paper on the treatment of fluid collections in the tubes. He considers that the diagnosis of a tubal sac is not necessarily an indication for its extirpation. Since such an operation involves many dangers, even after recovery from its immediate effects, the precise indications which justify it must be accurately determined. Dr. Landau first discusses hydrosalpinx. That disease may undergo spontaneous cure; cases of intermittent hydrosalpingitis indicate how cure can take place. The methods of effecting cure without mutilation are "orthopædic" and surgical. The "orthopædic" methods are rectification of a displaced uterus, massage, catheterisation of the Fallopian tube, and dilatation of the uterus. Rectification of a retroversion or other displacement favours the escape of the contents of the dilated tube, as an intermittent hydrosalpingitis. Massage, properly performed, has the same favorable effect. This practice also causes breaking down of adhesions of the tube, whether with other parts of itself or with the uterous and other adjacent structures. The tube is thus set free, and contractions of its muscular coat excited. Dr. Landau rejects catheterisation of the tubes. An elastic sound cannot be introduced in the uterine orifice of the tube; a rigid instrument is dangerous. Dilatation of the uterus is difficult and very uncertain. The process involves manipulation which may rupture a suppurating tube, or cause a simple hydrosalpinx to suppurate. The surgical proceedings, short of salpingotomy or castration, are puncture by the vagina or incision. When puncture of the dilated tube through the vagina is practised strict antiseptic precaution are called for. By pressure on the abdominal walls the tumour is pushed well downwards. A special trocar, guided by the finger, is pushed into the dilated tube without the aid of the speculum, and without any fixing of the uterus

by forceps, etc. Great care must be taken to avoid the entrance of air, and aspiration should never be attempted. With these precautions the neighbouring organs and the vessels are not damaged. The above proceeding Dr. Landau terms "palpatory puncture." It may prove sufficient by allowing contraction of the muscular coat, its effects then resembling the phenomenon which occur when the membranes are punctured in pregnancy. Should the flaccid tube fill once more after puncture the process may be repeated, the cavity being washed out with a three per cent. solution of carbolic acid, or tincture of iodine may be injected into the empty sac. Leaving a cannula in the sac is not advisable. In obstinate cases of refilling, incision may be performed. In a long series of cases where Dr. Leopold has employed simple puncture of the tube, he has opened by mistake ovarian, parovarian, and hydatid cysts and tubal sacs, without fatal results.

A new method of performing Hysteropexy.—DR. LAROYENNE performs hysteropexy in the following manner: A sound is passed into the uterus, and that organ is pushed up and pressed against the abdominal wall. An incision, about three inches in length, is made through the median line, well upon the fundus and anterior aspect of the uterus; the peritoneum is opened. A long needle, mounted on a handle, is passed through the muscular tissues of the abdominal wall, and through the peritoneum half an inch from its cut border, and is then made to transfix half an inch of the anterior aspect of the uterus at the level of the fundus, passing the peritoneum and muscular tissue of the abdominal wall on the side opposite the point of introduction. The needle is left in place, and two or three more needles are passed, in the same manner, lower down at the intervals of half an inch. The needles are then threaded with catgut. The uppermost suture is tied after the withdrawal of its needle. Then the next needle is withdrawn and its catgut suture tied. The process is repeated with the remaining needles and sutures. In this manner the uterus is kept steadily forwards till secured by all the sutures. The superficial wound is closed, and a plug of iodoform gauze is passed into the vagina, serving as a provi-

sional pessary. The uterus should not be pulled upwards with the hand; M. Laroyne's proceeding avoids this objectionable practice. The peritoneum must be opened; Caneva's extra-peritoneal proceeding been performed with safety and precision, but the omentum is often in the way, and an intestinal adhesion to the front of the uterus existed in one case.—*Progrés Médical*, July, 1890.

Sloughing Fibro-myoma of Uterus.—DR. CHEESEMAN reports a case of a patient aged 49, mother of 3 children, who was the subject of a very large myoma-uteri. After a severe flooding, which was treated by the tamponade, her temperature began to rise and the vaginal discharge became offensive. The temperature continued to remain between 103° and 104° F.; the discharge, in spite of douches, becoming more abundant and offensive. Ergot was now administered with the result of causing large masses of necrotic tissue being expelled, the temperature keeping high and the critical condition of the patient being maintained. After about a month of this state of things being maintained, Dr. Cheeseman dilated the cervix under ether to explore the cavity of the uterus. The cavity was found enlarged and the finger detected a circular opening in the roof about the size of a fifty-cent piece. Within the rim of this opening the finger could be swept round between the body of the tumour and the uterine wall, but no evidence of further separation could be made out. On account of the patient's condition this necrosing mass was not disturbed. Under the use of ergot, however, masses of the tumor were expelled daily. The patient was now rapidly losing ground from the profound septic condition which existed. During the following month much of the growth had sloughed out, ending in the expulsion of one large ragged slough from the vagina. After this the discharge became less abundant and offensive, and she gradually recovered in the course of another month. There could now be no trace found of the large abdominal tumour, and the uterus returned to its normal size.

Gynæcology in its Relations to Insanity.—THOS. SAVAGE, M.D., in *British Med. Jour.*, says:—Among the causes of

insanity in women, heredity, intemperance, and the vicissitudes of female life are said to be the most frequent ; and it has long occurred to me, as I know it has to others, that in regard to the latter element as a cause, much good might result if every case in which there was the least doubt was thoroughly overhauled and investigated by an experienced gynæcologist. Every one knows that occasionally, although rarely, a case of insanity has been cured by the application of a properly adjusted pessary to a displaced uterus. Then, in regard to the influence upon the mental state which is produced by the presence or the absence of the ovaries, little is known. Observation on this point has not been sufficiently extended or pursued. We do know that sometimes the operation for the removal of both ovaries is followed by mental derangement ; but we cannot at present say why it is so. In my own practice I find that, excluding cases of supra-vaginal hysterectomy, I have performed the operation for various abnormal conditions, of removal of the appendages on both sides in 500 cases ; and that the operation has been followed by insanity in four instances. Of these, three recovered, and one committed suicide. I have never seen insanity follow the removal of one ovary alone, or any other pelvic operation. The insanity of the climacteric period, and of the puerperal period, may or may not be dependent on some occult influence seated in the ovaries, the exact nature of which, if, or when, it exists, has yet to be investigated. Then, the mental and hysterical state of many unmarried women of thirty years of age and upwards is one which may well engage the careful attention of gynæcologists, especially of those who have access to fields where such cases may be seen and studied in numbers and variety.

Massage.—DR HOLTZAPFEL (*Wiener medizinische Blätter*, October 2nd) publishes a series of cases in which massage proved useful in certain forms of pelvic disease. Most of the cases were in Professor Freund's wards in a Strassburg hospital. Massage must not be attempted in the subjects of malignant new growths, acute and subacute inflammatory disorders, abscesses, pregnancy tubercle, hæmophilia, and diabetes. Three

classes of cases have been more or less successfully treated by massage. First, it has been used to promote absorption of extravasated blood and inflammatory exudations. In every instance of the kind there is considerable danger in practising massage; Dr. Holtzapfel therefore rejected the practice in these cases. Secondly, massage has been employed for the stretching of bands of adhesion and cicatricial tissue, as in old cases of perimetritis and parametritis. In such cases the practice has proved satisfactory. The dragging of the uterus backwards through adhesions or cicatricial shortening of its ligaments can often be remedied by massage, which has likewise given excellent results in parametritis chronica atrophicans, a hitherto somewhat intractable disease. The third class of cases in which massage has been tried with success includes all in which relaxation of the tissues has caused prolapse of the uterus, ovaries, or vagina. Massage appears to restore to the relaxed ligaments and other structures their normal elasticity, also effecting beneficially their innervation and blood supply. The results, according to Dr. Holtzapfel, are more satisfactory than those which follow complicated plastic operations for the relief of the same conditions.

Rupture of the Uterus cured without Operation.—(K. A. HERSFEDD, M. D., in *London Med. Recorder*).—This case deserves attention, as it shows, like the published cases of Tiskacek and Leopold, that laparotomy is only required in special cases of rupture of the uterus. The patient was a multipara, amniotic fluid had escaped three days previously. The foetus took a transverse position; the medical attendant tried turning unsuccessfully, and then decapitating, also unsuccessfully. The woman was then removed to hospital in a collapsed condition, and examination showed all the signs of rupture of the uterus. The foetus was in the second ;houider position, the left hand in the vagina, and the shoulder wedged in the pelvis. The rupture was on the left of the cervix, three centimètres from the internal os, and permitted the introduction of the whole hand into a large cavity filled with clots, and covered by the peritoneum of the left parametrium. Decapitation was at once performed, and removal of the foetus and placenta. The rupture

was packed with iodoform gauze, also the uterine cavity, and a good bandage was applied externally. The patient did well. On the sixth day, the temperature was only 38.2; on this day the dressings were removed. Some ulcerations of the vagina were touched with iodine tincture, and the vagina washed out with thymol solution, after which she made a good recovery.

Abdominal Sections by Prof. Martin.—(*Brit. Med. Jour.*)
—On Wednesday morning, Aug. 6, Dr. Martin performed three abdominal sections at his private hospital in the Elsasserstrasse before a company of distinguished foreign operators. Each patient was chloroformed in her ward, then carried upon a couch with wheels to a room where the abdomen was thoroughly washed with sublimate, the pubis shaved, and the urine drawn off. The visitors, at the request of the operator, entered the operating theatre divested of their coats and waistcoats. The operator and his assistants were in yet more complete undress uniform. The patient, when brought into the theatre, underwent a fresh washing, the juice of a lemon being lastly squeezed over the abdominal integuments. The operator sat between the patient's thighs; the chief assistant—also sitting—was placed to the patient's left. In all three cases the operation was performed with great rapidity, and the abdominal incision was made very long, almost reaching the umbilicus, although in no case was a large tumor present. The wound was also closed quickly by means of stout catgut sutures, not placed closely together. In the second case a suppurating tube was removed from the right side. In the third an intra-ligamentary ovarian cyst was enucleated. The first operation was of great interest. An interstitial myoma of moderate size was present. The uterus and its appendages were drawn out of the wound, and the vessels of the broad ligament temporarily secured by means of large pressure forceps. Then a vertical incision was made, extending down the back and front of the uterus, passing over the fundus. The myoma was next enucleated. The capsule was treated after Dr. Martin's special method; none of its substance was cut away, but its raw surfaces were united by deep, and its cut edges by superficial, catgut sutures. The forceps being

removed, the uterus and appendages were then replaced in the pelvis. In none of the cases was flushing or drainage employed. The instruments were immersed in a 2 per cent solution of carbolic acid. For the washing of the patients and the operator and assistants a 1-1000 solution of sublimate was employed. The spray was not used. Dr. Martin's hospital is a model of elegance, comfort and cleanliness.

Tuberculous Peritonitis.—M. MAURANGE (*Nouv. Arch. d'Obstétrique et de Gynéc.*, September, 1890) has collected statistics of seventy-one cases in which abdominal section had been performed for tuberculous peritonitis; 83 per cent. were operative successes, and of these about one half were doing well one year after the operation. In many cases which afterwards died of other tubercular affections the peritoneal lesions were found completely cured. The precise way in which cure of the local affection is brought about by abdominal section is not clear; many theories have been advanced. M. Maurange maintains that the operation simply places the patient in a condition favourable for cure by unburdening the peritoneal cavity of its ascitic effusion, which is, moreover, a true cultivating fluid. The proceeding also insures antiseptics. Abdominal section is not only advisable in cases where a localised tuberculous area exists, but also in cases where the patient's general condition grows worse, and where the disease spreads whether ascites or not. Some surgeons are content to open the peritoneal cavity; others flush it with antiseptic lotions, dress it with iodoform, or drain. M. Maurange has seen good results follow a less extreme practice than abdominal section. The ascitic fluid is removed by aspiration; antiseptic washing with subsequent evacuation of the fluid follows the aspiration, and lastly variable quantities of a mixture are injected into the peritoneum. This mixture consists of 4 grammes of iodoform dissolved in 100 grammes of liquid oil of vaseline. This injection can be safely repeated, considering the small proportion of the iodoform and the weak absorbing power of the diseased peritoneum.

The Treatment of Endocervicitis.—DR. STRATZ, in *Zeit. für Geburtshülfe und Gyn.*, made a series of observations to test

the value of the application of chloride of zinc and lactic acid. He found the former was the better of the two applications. Scarcely any benefit was obtained from weak solutions. A 50 per cent. solution of the chloride of zinc cured some cases and also seemed to produce cicatricial hardening of the tissue. The leucorrhœa returned after a few months in nearly all cases. He considers Schröder's excision far superior for the treatment of such cases. He also made a series of careful microscopic examinations to test the comparative frequency of endometritis and endocervicitis. In thirty well-marked cases of the latter disease with slimy, purulent discharge, there were only five showing signs of endometritis, three of the interstitial form and two in which the glands were chiefly involved.

Reviews and Notices of Books.

On Aphasia or Loss of Speech and the Localization of the Faculty of Articulate Language.
By FREDERIC BATEMAN, M.D., Fellow of the Royal College of Physicians, Senior Physician to the Norfolk and Norwich Hospital. Second edition; greatly enlarged. London; J. & A. Churchill; Jarrold & Sons, 3 Paternoster Buildings.

The learned author of this work was the first to publish, in English, a treatise on aphasia. This was upwards of twenty years ago. Great and numerous have been the advances in neuro-pathology since that period. It may be said that the work done during the last two decades in cerebral localization practically includes all our knowledge of this subject. Of all the problems in cerebral pathology, none exceed in interest those connected with the loss of speech.

Dr. Bateman devotes the first three chapters of his work to an account of the history of the building up of our knowledge on this subject. He gives a short but lucid resume of the more important cases contributed to the literature of aphasia by English, American and Continental writers of repute. The reader is thereby enabled with little trouble to follow the various steps which have led to our present views on loss of speech.

Not the least interesting part of the work is that referring to the author's own contributions. The subject of aphasia is treated of all in its relations and in all its forms and modifications.

There is certainly no work in the English language which gives such a full and accurate account of this abstruse subject. The author is to be congratulated on having produced a work that it will be standard authority on loss of speech. It represents a great amount of painstaking labour.

The Johns Hopkins Hospital Reports : Report on Gynæcology I. By HOWARD A. KELLY, M.D.

We have read this report with the greatest interest. The well-known ability and untiring industry of this young and brilliant gynæcologist, now so favourably circumstanced, led us to expect interesting things. We have not been disappointed. The report consists of over two hundred and fifty pages. There are a few illustrations. The number of papers is fifteen ; thirteen of these are by the director himself, and one each by Drs. Robb and Withredge Williams, the assistants. First comes a description by Dr. Kelly of his operating-room and its appliances, and the accessory rooms. It is such as must fill every American gynæcologist with envy. This chapter also contains a description of the precautions for asepsis and antisepsis. They are numerous and scrupulous. The experience of other surgeons shows that some of them may be unnecessary, but they are useful to impress assistants and nurses, who are sometimes with difficulty made to understand the importance of many necessary precautions. Next comes a report in detail of the abdominal sections from Oct. 16, 1889, to March 3, 1890 ; fifty in number. The list comprises examples of all the usual conditions and some of the more unusual and very rare ones. Dr. Kelly drains very frequently, even in cases without oozing of blood, to remove the serum which sometimes is so copiously effused. All the pus cases recovered. The author is fond of hysterorrhaphy, which he now does by two sutures on either side, round the utero-ovarian ligament up to the anterior abdominal wall. He claims for this much better results than by older methods. The third

paper is a Report of Autopsies of Two Cases Dying in the Gynæcological Wards without Operation. Both of these were tumors unfit for operation, and are instructive, as showing the results of too much delay in applying for operation. The fourth paper is on Composite Temperature and Pulse Charts of forty cases of Abdominal Section. The fifth is an excellent paper on the Management of the Drainage Tube in Abdominal Surgery, by Dr. Robb. Dr. Kelly does not use the sucker, but the method by a roll of gauze or wick passed in the bottom of the tube. We have not much experience of this method, but are inclined to believe that it must lessen the dangers and anxieties to the operator of drainage-tube cases. Detailed instructions are given, and we believe them most valuable. The ninth paper is on a report of the urinary examination of ninety-one gynæcological cases. The tenth describes the author's method of ligature of the uterus and ovarian arteries as a means of checking hemorrhage from the uterus, etc. We think this is a most valuable contribution to the technique of abdominal surgery. The eleventh paper, by Dr. Williams, is a report of two cases of carcinoma uteri in the negress, well known to be exceedingly rare.

We have no space for a more extended notice, but we believe we have shown the great value of this first report, and indicated what good reason there is for expecting great things in the future from the gynæcological department of Johns Hopkins.

A Text-Book of Comparative Physiology. For Students and Practitioners of Comparative (Veterinary) Medicine. By WESLEY MILLS, M.A., M.D., D.V.S., Professor of Physiology in the Faculty of Human Medicine and in the Faculty of Comparative Medicine and Veterinary Science of McGill University, Montreal; author of a Text-Book of Animal Physiology, etc. With 476 illustrations. New York: D. Appleton & Co. 1890.

The appearance of Dr. Mills' work on Animal Physiology was universally heralded as marking a distinct advance in the presentation of this subject. It was recognized as a very able and

successful effort to place this subject on a broader and more scientific basis. The great success attained by Dr. Mills in showing the student of human medicine how to attain to a true knowledge of physiological principles has naturally made him anxious to extend the same benefits to students of comparative medicine. The work in question is the result. The introductory chapter is devoted to the consideration of the more important biological laws and principles. The introduction of such a chapter must prove a great aid to students, as they come but poorly stocked with biological knowledge. A special feature of the author's works on Physiology is the early consideration of reproduction. In the older works this was always left to the last, and many of our professors of physiology on this side of the Atlantic usually found no time to refer to it, and the consequence was that men passed through their medical course practically ignorant of the very foundations of physiological knowledge. In dealing with this part early the student is enabled to obtain a grasp of the whole subject which otherwise it is impossible for him to accomplish.

In looking over this book, we are especially pleased with the broad and able way in which the subjects of digestion, circulation and the nervous system are dealt with.

As a text-book on the subject of physiology for students of comparative medicine it will take the leading place. It is profusely and beautifully illustrated, and, altogether, reflects the greatest credit on author and publisher.

Flushing and Morbid Blushing: their Pathology and Treatment. By HARRY CAMPBELL, M.D., B.S., Senior Assistant Physician and Pathologist to the North-West London Hospital. London: H. K. Lewis, 136 Gower street. 1890,

The author of this work has already made his mark in the medical world through the publication of a very able and philosophical treatise on the "Causation of Disease." In the present work we have the subject of Flushing and Morbid Blushing treated of in the most comprehensive manner. The causation,

nature and treatment of these troublesome states is dealt with fully and clearly. The chapter on treatment is especially valuable, as it is a good index as to the proper methods of carrying out the treatment of neurasthenia in general.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Annual Meeting, October 10th, 1890.

G. E. ARMSTRONG, M.D., PRESIDENT, IN THE CHAIR.

The annual meeting for the year 1890-91 was held at the Society's rooms, 14 Phillips Square, on the above date. There were present: Drs. Jas. Stewart, T. G. Roddick, Wm. Gardner, Alloway, Mills, Guerin, J. Gardner, Telfer, Corsan, Foley, Allan, Proudfoot, Finley, Jack, G. A. Brown, A. W. Gardner, Laphorn Smith, W. G. Stewart, England, Springle, Rodger, F. W. Campbell, Buller, Johnston, Williams, McCarthy, E. P. Blackader, Ruttan, J. C. Cameron, McConnell, and Birkett.

After the minutes of the preceding meeting and those of the last annual meeting had been read and approved, Dr. Burgess was elected a member.

The Treasurer (Dr. MacDonald) presented his report for the past year, which showed a small balance to the credit of the Society. The treasurer's accounts were then duly audited and approved.

The retiring Secretary (Dr. Birkett) stated that the attendance during the session of 1889-90 was the largest since the existence of the Society; that a great number of meetings had been held; and that the membership had increased, numbering up to date ninety-four members.

The address of the retiring President was announced for the next meeting.

Votes of thanks to the retiring president, vice-president, members of council and secretary were then carried.

The following were elected office-bearers for the ensuing year:
President—Dr. F. J. Shepherd.

1st Vice-President—Dr. Proudfoot.

2nd Vice-President—Dr. R. L. MacDonnell.

Secretary—Dr. J. G. McCarthy.

Treasurer—Dr. J. A. MacDonald (re-elected).

Librarian—Dr. J. M. Jack.

Council—Drs. Armstrong, Bell and James Stewart.

Stated Meeting, October 24th, 1890.

F. J. SHEPHERD, M.D., PRESIDENT, IN THE CHAIR.

Diffuse Cancer of the Stomach.—DR. JOHNSTON, who exhibited this specimen, made the following remarks :

“ The stomach is extremely small, its length from fundus to pylorus being only four inches. The wall is greatly thickened, measuring five-eighths of an inch in most places. It is firm and hard, with somewhat translucent appearance on section. All its coats are greatly thickened, and the stomach is converted into a narrow tube with firm, inelastic walls which do not collapse. Internally, an ulcer is seen just below the orifice of the œsophagus; its edges are slightly raised. A few other small superficial ulcers are seen along the greater curvature. Pyloric ring firm and rigid; admits the little finger. About the stomach firm fibrous adhesions exist binding it to the omentum, and there is some fibrous thickening between the stomach and pancreas. There is a single, small, firm, white nodule, size of a pea, in the upper surface of the right lobe of the liver. There is no enlargement of the epigastric or portal glands. The microscope shows great proliferation of the deeper cells of the mucosa. The muscular coat is uniformly infiltrated with solid masses of small epithelial cells, which fill all the lymph vessels between the muscle bundles. Many of these cells have undergone colloid change. The nodule in the liver has the typical appearance of a scirrhus, the cells being very scanty. This form occurs in about ten per cent. of all cases of gastric cancer. Many of the cases described as gastric cirrhosis are really cancerous.”

DR. MOLSON stated that the patient, a woman, 58 years of age, had been admitted to the hospital in June last, complaining

of weakness and loss of appetite. Her illness had commenced four months previously, with vomiting and pain in the epigastrium. There was considerable emaciation and a somewhat cachectic appearance. The abdominal parietes were lax and shrunken. There was no tenderness nor distension of stomach, and no tumor could be felt. Patient became comatose, and died three and a half months from the date of her admission.

Epithelioma of the Tongue.—(From a case operated on by Dr. Bell.)—DR. JOHNSTON, who showed the specimen, said: The specimen shows the condition after complete amputation of the tongue. The stump is seen just in front of the epiglottis; it presents a number of small follicular ulcers, and a small sinus exists where a ligature has remained; but, there is no return of the growth or deep ulceration. On the floor of the mouth another small ligature is seen. There is no appearance of secondary cancer in the neighboring parts. The inferior maxilla, which had been sawn through at the time of the operation, had not united, and each end was covered by granulations. There was gangrene of the lungs; a large cavity occupied nearly the entire left upper lobe posteriorly; it was lined with a firm, well-marked granulation membrane in most places. A smaller cavity, the size of an apple, was found in the same lobe. A number of small areas of pneumonia were found throughout both lungs, and in several of these the vessels were found thrombosed and the centres gangrenous. Nothing was found to explain this condition. The bronchial tubes were free from foreign bodies. No cancerous thrombi were found in the vessels.

From the same patient the heart was exhibited. This showed a decided dilatation and hypertrophy of the left auricle; marked thickening in one of the segments of the mitral valve, apparently producing moderate stenosis when the valves were in position, though, after opening, the circumference of the orifice was normal. At the apex there was a large fibrous area in the heart-wall involving the papillary muscles. The larger coronary arteries were very atheromatous, their walls thickened and calcified. There was slight atheroma of the aorta. The wall of the left ventricle was thick; the muscle somewhat brown. The lungs

were free from brown pigmentation or dilatation of the capillaries.

DR. JAS. BELL narrated the history of this case. The patient was a man, aged 64, who presented very extensive infiltration and ulceration of the anterior half of the tongue and the floor of the mouth. History of two months standing, but from other and more reliable sources it was found that the trouble had existed seven months, and that the patient had been treated with caustic applications. In the operation performed upon this patient, Dr. Bell had selected Syme's method of sawing through the inferior maxilla at its symphysis. The tongue and floor of the mouth were removed, and, besides, some glands which were infiltrated. The opposite sides of the bone were then brought together with strong silk, and the incision in the lower lip sutured with catgut. The patient was fed by nutrient enemata for forty-eight hours following the operation, when milk was introduced into the stomach by the œsophageal tube. On the fifth day, beef tea and eggs were added; but owing to the patient's inability to swallow, the tube had to be used whenever food was administered. He had not a bad symptom, and did remarkably well for four weeks; he then began to grow weak and cough occasionally. Signs of disease in the lungs were now manifest at the apices, both in front and behind. The patient gradually got worse and died on the forty-eighth day after the operation. Dr. Bell thought that the origin of the gangrene of the lungs might be ascribed to the entrance of food into the air-passages, either from the ineffectual efforts to make the patient swallow or else when using the œsophageal tube which had been entrusted to the nurse.

DR. SHEPHERD was present at the operation. He generally performed excision of the tongue after ligature of both linguals, but remarked that Syme's method, adopted by Dr. Bell in this case, proved very successful. By the division of the lower jaw the whole of the diseased part was removed with great facility. As to the cause of the gangrene of the lungs, he could not say whether it were due to the insufflation of food or not. A patient from whom he had excised the tongue developed

gangrene of the lungs three weeks after the operation, but in this case there was erysipelas.

DR. MILLS, in referring to the probable cause of the gangrene of the lungs, remarked that after experimental operation in the lower animals, in which the vagi nerves had been cut, the animals died of pneumonia produced by insufflation of food. He suggested that the inflammation might be of purely nervous origin, and put forward the view of the possibility of its being produced by some degeneration of the fibres of the vagus.

Suppurative Pyelo-Nephritis.—DR. SHEPHERD related the following case:—A man, aged 33, of intemperate habits, had gonorrhœa fourteen years ago, and shortly afterwards had difficulty in micturition, the stream gradually diminishing in size; he had suppression of urine in 1878, and had to be aspirated. He felt better for a year, when, owing to his intemperate habits, he again experienced difficulty in micturition, and from 1882 to 1884 he was unable to fully empty his bladder. External urethrotomy was performed in Glasgow in 1886, and for two years following he was free from the complaint. He applied to the out-door department of the General Hospital on the 28th of June, suffering from retention. It being impossible to pass a catheter, he was aspirated above the pubes. Dr. Shepherd afterwards succeeded in passing a small catgut bougie and then introduced sounds to number 7. Three days later sounds up to number 12 were passed. Patient afterwards felt better and was able to pass his urine quite freely, and left the hospital on July 4th. Three weeks afterwards he was readmitted, complaining of frequency of micturition and pain in the right lumbar region, with passage of blood. The severity of the pain over the right kidney increased, extending along the course of the ureter and into the right testicle. The urine, which varied from 48 to 80 ounces in the twenty-four hours, was of a dark-brownish color, containing a considerable amount of pus and blood cells. The patient gradually sank, and died August 12th. Temperature never reached above 102°, and for six days previous to his death was subnormal.

DR. JOHNSTON, who exhibited the specimen, remarked that it

showed a stricture just anterior to the bulbous urethra. There was no induration in the wall of the urethra. The kidneys showed slight dilatation of the pelves and calices. About the right kidney there was a large mass of dense fibrous tissue closely adherent to the capsule.

Ruptured Tubal Pregnancy.—DR. WM. GARDNER showed this specimen from a case in which he had opened the abdomen a week previously. Dr. Gurd, in whose practice the case occurred, had correctly diagnosed the condition. The patient, aged 26, married eight years, the mother of three full-grown children, the last over two years. Since then she had pelvic symptoms. She menstruated last on 20th June, and began to vomit a few days later, as in all her previous pregnancies, and was convinced that she was again pregnant. This continued until the 21st of September, when, during a rough drive, she was suddenly seized with intense abdominal pain accompanied by vomiting and a bloody discharge from the vagina. On getting home she fainted. The pain was relieved in a few hours by full doses of morphia, and she got up in a day or two; but soon had recurrence of pain of the same character and intensity, which compelled her to lie in bed on her back. She was first seen by Dr. Gardner a week before operation; she looked blanched and anxious. The abdomen was somewhat distended in lower part by a fixed, tender mass. The uterus lay behind the pubes, pressed forward by a tender, elastic mass, fixing the roof of the vagina and filling the pelvis. A week later the symptoms and physical signs had all increased. She was operated upon on the 17th of October. On getting through the adherent omentum a mass of blood-clot was disclosed; this was scraped out and found to contain some decolorized blood. The right Fallopian tube was expanded to a mass of the size of a large hen's egg. This was tied and removed, the cavity washed out, and a large glass drainage-tube carried to the floor of the Douglas pouch. When put to bed, patient was very weak, with a pulse of 160, but rallied promptly, and is making an easy recovery.

DR. JOHNSTON, who had examined the specimen, submitted the following report: The specimen is about the size of an egg,

and consists chiefly of firm, elastic, fibrinous material, which resembles partially decolorized and organizing blood-clot. It seems to contain numerous vessels. On placing it in water, a delicate fringe of minute villi covers nearly its whole surface. These show, under the microscope, the branched and clubbed appearance characteristic of chorionic villi. At one point a thick, flat, muscular band is attached to the mass, and appears to be part of the greatly thickened and dilated Fallopian tube. On section the inner surface appears to be for the most part a mixture of old and recent blood-clot and vascular tissue. Situated near the surface, at the end farthest from the attached bit of Fallopian tube, is a flattened cystic space the size of a pigeon's egg, lined with a delicate greyish-white, smooth membrane; evidently the amnion. At one point on this small, flattened projection is seen, apparently, the remains of the umbilical cord. No traces of the foetus could be seen.

DR. GURD wished to remark that the patient had suffered from uncontrollable vomiting in her previous pregnancies, and in the present instance the vomiting had been very severe up to the time of the operation.

DR. LAPHORN SMITH congratulated Drs. Gardner and Gurd on the successful issue of this case. He said that in some of these cases of ruptured extra-uterine pregnancy the foetus had been found in very unusual situations in the abdominal cavity.

Decidual Membrane.—DR. WM. GARDNER exhibited a very interesting specimen of the decidual membrane which formed a perfect and complete cast of the cavity of the uterus. The patient had borne one child. She was comparatively well up to last week, when she was suddenly seized with vomiting and fainting. On examination, Dr. Gardner found physical signs somewhat similar to the case above mentioned. A week later the patient was seized with severe pain and the membrane expelled. He believed it to be without doubt a case of ectopic gestation. The patient was still under observation.

Anchylosis of the Spine.—DR. MOLSON brought before the Society a man, aged 30, apparently the subject of anchylosis of the spine. This was said to have begun suddenly three years

ago, with pain in the back of the neck. The patient had had rheumatism eight years ago. There was no history of venereal disease, and nothing in the family history. On examination, the patient appeared fairly well nourished. There seemed to be some tenderness over the dorsal region. In all movements the spine appeared apparently fixed, but rotation and nodding movements of the head were retained to some extent.

DR. RODDICK believed the case to be one of malingering; as there was nothing in the personal history to produce such extreme ankylosis. He believed that under an anæsthetic motion would reappear in the now apparently rigid spine.

DR. RODGER agreed with Dr. Roddick, and considered these symptoms to be feigned.

DR. G. A. BROWN had met with a case in hospital with ankylosis of spine, knee and hip joints. The patient had been the subject of gonorrhœal rheumatism.

DR. JAMES BELL thought that the case was one of real ankylosis, but would like to have a closer examination of the case.

DR. MILLS had noticed cases of spinal ankylosis in the lower animals.

DR. DECOW would suggest the use of the actual cautery as a means to the diagnosis in this case.

DR. MOLSON stated that the patient had been under close observation, but that he had never betrayed any signs of movement of the spine.

DR. BIRKETT found the muscles too well developed for a patient the subject of general ankylosis of long standing.

DR. SHEPHERD had examined the patient; he found no caries; muscles were in a state of tension. He thought it was a case of malingering; the idea of which possibly originated in some slight rheumatic affection. He had seen cases of rheumatoid arthritis in which all the joints were involved. He noticed that there was movement of the axis and atlas, which seemed peculiar, considering that all the rest of the spine appeared ankylosed.

THE PRESIDENT'S ADDRESS.

DR. G. E. ARMSTRONG, the retiring president, then read the following address :—

Mr. President and Gentlemen,—In following a time-honored custom of reviewing the work done by our Society during the past year, I wish to take the opportunity of thanking one and all for the courtesy shown to the chair during that period, and for the promptness with which you have come forward with pathological specimens, papers, and cases in practice. I have tried to do my best to make the meetings interesting and instructive, and I only hope that none are more conscious than the speaker of my shortcomings. The past year has been one of the Society's best. We have had 19 meetings as compared with 16 the year before, and the average attendance has also increased, being 26.4—25.5 being the average for the year before. The largest number at any one meeting was 42, and the smallest number 17. During the year 1888-89 four new members joined the Society, and during the year 1889-90 eleven new members joined. Our total membership at the beginning of the year was 83, and at the close of the year 94. Death has not entered to claim any of our number during the year.

In looking over the work done during the year, its varied character is quite noticeable; subjects interesting to general practitioners and specialists also being taken up and discussed at nearly every meeting.

Medicine.—In medicine, Dr. Hutchinson related an interesting case in which delirium followed acute pneumonia, and of hysteria occurring during the course of rheumatism, presenting considerable difficulty in diagnosis. We had an interesting paper from Dr. McCarthy on the distribution of lesions in chronic phthisis. Dr. R. L. MacDonnell brought before the Society the results of his experience in one hundred cases of typhoid fever, of which he had carefully kept notes. This paper excited a very interesting discussion on many of the points worked out. Dr. MacDonnell also showed to the Society a case of Hodgkin's disease. Dr. Campbell, a case of pneumonia, in which symptoms were entirely objective. A paper on aneurysm of the arch of

the aorta was read by Dr. MacDonnell and Dr. Major together. Dr. Major read an interesting paper on the use of hydrogen peroxide in diphtheria, speaking favorably of its action. At the same meeting Dr. Major read notes of two cases of deflection of nasal septum and their treatment.

Surgery.—In surgery, a paper on a case of appendicitis by Drs. Shepherd and MacDonnell, in which an operation saved the patient's life. Dr. Praeger of Nanaimo sent a paper on cholecystectomy, which was read by Dr. Shepherd. Dr. Bell exhibited a case of multiple fibroma of skin, and naevus with sarcoma of popliteal space. Dr. Roddick, an interesting case of fragilitas ossium and an interesting review of the subject. Dr. Bell, a case of talipes equino varus, upon which he had operated with good result; also two cases, one of genu valgum and one of genu varus, after operation, in which the result was very satisfactory, photographs of their condition before operation being also shown.

Midwifery.—In midwifery, Dr. G. T. Ross presented a paper on missed abortion, which gave rise to a good deal of discussion. And a paper of more than ordinary interest from Drs. Cameron and Gardner on a case of labor obstructed by a large fibroid.

Neurology.—In neurology, Dr. Blackader read a paper on Friedrich's ataxia, of much interest, and Dr. Stewart exhibited a case of hemiatrophy of the tongue, with left-sided facial paralysis and polyuria.

Skin Diseases.—Dr. Foley submitted a paper on the influence of clothing on diseases of the skin.

Therapeutics.—Dr. Stewart, a paper detailing his experience in the use of exalgine in a large number of cases.

Gynæcology.—In gynæcology, Dr. Trenholme read a paper on hysterectomy for fibroid tumor of the uterus, relating nine cases which he had operated upon; and Dr. Gardner a paper on abdominal section in tubercular disease of peritoneum and uterine appendages, relating several cases of unusual interest. Dr. Alloway presented a paper upon twenty cases of Alexander's operation for retroversion, speaking favorably of the results obtained. Dr. Smith read a paper on five cases of laparotomy,

drawing attention to several practical points connected with the details of the operation.

Ophthalmology.—Dr. Buller presented a patient from whom he had removed a tumor of the orbit which had surrounded the optic nerve.

I regret that the younger members of the Society have not taken a greater part in the discussion of these papers, and I think that they, as well as the Society, are the losers. One cannot begin too young to learn to express one's thoughts clearly and concisely. It would add much to the interest of our meetings if the younger members of the profession would come forward and take an active part in the Society's work.

One of the most interesting and instructive sections of our work is the pathological, and it is a matter of mutual congratulation that there has been at nearly every meeting such an abundant supply of pathological specimens, abundant in quantity and variety. The Society is especially, and very greatly, indebted to Dr. Johnston for the attention that he has given to this department of our work, and for the able and clear demonstration of the specimens that have been exhibited. Among others we have had before us for examination a great number of fibroid growths, each one accompanied by a complete history. Dr. Gardner has shown several uterine fibroids successfully removed by him, also a fibro-cyst of uterus, an interstitial fibromyoma of uterus, a myo-sarcoma of uterus, as well as a small multilocular cyst of ovary and a cyst of the broad ligaments not involving the ovary, also a papilloma of ovary and specimen of extra-uterine foetation with history. Dr. Shepherd, a fibro-cyst of ovary, which presented considerable difficulties in its removal, followed, fortunately, by a happy result. Dr. Trenholme, a parovarian retro-peritoneal cyst. Dr. Smith showed a fibro-cyst of uterus. Dr. Alloway, a large cystoma weighing 40 lbs, a blood cyst of ovary and a pyosalpinx, also a specimen of epithelioma of cervix. Another blood cyst of ovary was shown by Dr. Armstrong. A number of vesical calculi have been exhibited. One by Dr. Bell, removed from a patient the subject of diabetes mellitus; a large vesical calculus weighing over five ounces, by

Dr. Hingston, which he had removed by lateral lithotomy ; one of pure cystine, removed by Dr. Roddick ; and one by Dr. Gurd. A large gall-stone, which had given rise to symptoms of intestinal obstruction, was shown by Dr. Bell. Dr. Milis exhibited a triple phosphate calculus removed from urethra of a dog. Dr. Major showed to the Society a fine specimen of rhinolith which he had removed. Dr. Hutchinson, a piece of egg-shell with an interesting history, tendencies to show that it had passed through the larynx of a young child, remaining in a bronchus for a few days, when it was coughed up. Dr. Johnston showed for Dr. Brown a tympanum, in which the roof had been perforated by chronic suppurative otitis media. Dr. Buller exhibited a tumor removed from the orbit which had been perforated by the optic nerve. Dr. Foley showed specimens from a case of trichorexis nodosa. Dr. Mills exhibited a very interesting instance of hermaphroditism in a pig. An example of necrosis of femur was shown by Dr. Hingston. A perforated appendix with fæcal concretion, removed by Dr. Shepherd, was shown and history given ; another perforated appendix with fæcal concretion by Dr. Armstrong. Dr. Johnston showed two cases of elephantiasis of breast, one of them was sent by Dr. Gooding of Barbadoes. Dr. R. L. MacDonnell, an example of aneurism of descending aorta. A specimen of aneurism of thoracic aorta was shown by Dr. Johnston. Dr. Johnston also showed a specimen of embolism of abdominal aorta, as well as a specimen of thrombosis of left ventricle of heart, and another specimen of ruptured heart. A specimen of tuberculosis of heart was shown by Dr. Johnston, and one of myocarditis by Dr. Hutchinson. Dr. Roddick exhibited tuberculous glands of neck ; he removed thirty of these from one patient. Dr. Bell showed the urinary organs from a patient upon whom he had performed internal urethrotomy, the patient subsequently dying of tuberculous disease of the kidneys, also an example of sarcoma of foot, which Dr. Bell removed by a Syme. Dr. Springle showed the photograph of a child in whom there existed left-sided facial paralysis and hemiatrophy of the tongue, thought to be due to injury inflicted by forceps during delivery. Two stomachs perforated by ulcers were

shown, one by Dr. DeCow and one by Dr. Armstrong. In addition, Dr. Johnston exhibited, among many others, intra-capsular fracture of femur, fracture of left os. innominatum through acetabulum, with dislocation at sacro-iliac synchondrosis and dislocation at symphysis pubis, fatty heart, a heart infiltrated with adipose tissue, a case of intestinal obstruction in a child, of laceration of urethra, gunshot wound of brain, lymphatic cystoma of broad ligament. Dr. Gurd presented a specimen of missed abortion, which was referred to a special committee for examination and report. Dr. England showed a retained abortion with a very complete history, which showed that it had been retained six months after probable time of death. Dr. Shepherd showed a kidney, removed post-mortem, containing a calculus; five years before Dr. Shepherd had removed the other kidney for the same condition.

In conclusion, I may add that the financial condition of the Society is good, and that arrangements are completed to render our assembly room more inviting by adding a carpet, and a reading-room will be comfortably furnished where members may at any time spend an hour consulting the journals which the Society provides.

The growth of the Society, as shown not only by an increase in number of members, but the growth of individual interest, as shown by the increased average of attendance and the variety of subjects introduced for discussion, and the what to some has seemed at times to be an overstock of material, gave rise during the year to the question of the advisability of rearranging the order of work or of meeting oftener than once a fortnight.

In looking over the work done by the Society during the year, I think it will strike most of you that almost as much time has been given to pathology as to all other work together, and I think I voice the unanimous feeling of the members when I say that we don't want any less pathology. It is interesting and instructive, and, I believe, has done a very great deal to elevate the English portion of the profession in Montreal and the character of the work they do. It has made them better readers, better thinkers, and better observers. But perhaps I may be

allowed to suggest that if the work becomes too great, and a subdivision is necessary, that it be made on a line that will divide the work only and not the members. If pathology, for example, was allowed to occupy the whole of one evening every member would attend, and alternate evenings could be devoted to the reading of papers, the relating of cases, and the discussion of them. I believe it to be to the advantage of all that the senior and junior members meet together and work together. And that the specialists and pseudo-specialists and general practitioner meet together, that in their work they may be in touch and harmony.

I thank you once more for the high honor you conferred upon me in electing me a year ago your chairman, and wish you, Mr. President, great pleasure and success during your term of office.

Selections.

A FURTHER COMMUNICATION ON A CURE FOR TUBERCULOSIS.

BY PROF. ROBERT KOCH, M.D., OF BERLIN.

In an address delivered before the International Medical Congress I mentioned a remedy which conferred on the animals experimented upon an immunity against inoculation with the tubercle bacillus, and which arrested tuberculous disease. Investigations have now been carried out on human patients, and these form the subject of the following observations. It was originally my intention to complete the research, and especially to gain sufficient experience regarding the application of the remedy in practice, and its production on a large scale, before publishing anything on the subject; but in spite of all precautions, so many accounts have reached the public, and in such an exaggerated and distorted form, that it seems imperative, in order to prevent false impressions, to give at once a review of the position of the subject at the present stage of the inquiry. It is true that this review can, under these circumstances, be only brief, and must leave open many important questions.

The investigations have been carried on under my direction

by Dr. A. Libbertz and Stabsarzt Dr. E. Pfuhl, and are still in progress. Patients were placed at my disposal by Prof. Brieger from his polyclinic; by Dr. W. Levy, from his private surgical clinic; by Geheimrath Drs. Fränzel and Oberstabsarzt Kohler, from the Charite Hospital; and by Geheimrath v. Bergmann, from the surgical clinic of the University. I wish to express my thanks to these gentlemen.

As regards the origin and the preparation of the remedy, I am unable to make any statement, as my research is not yet concluded. I reserve this for a future communication.*

The remedy is a brownish, transparent liquid, which does not require special care to prevent decomposition. For use, this fluid must be more or less diluted, and the dilutions are liable to undergo decomposition if prepared with distilled water. As bacterial growths soon develop in them they become turbid, and are then unfit for use. To prevent this, the diluted liquid must be sterilized by heat and preserved under a cotton-wool stopper, or, more conveniently, prepared with a one-half per cent. solution of phenol.

It would seem, however, that the effect is weakened both by frequent heating and by mixture with phenol solution, and I have therefore always made use of a freshly-prepared solution. Introduced into the stomach the remedy has no effect. In order to obtain a reliable effect it must be injected subcutaneously, and for this purpose we have exclusively used the small syringe suggested by me for bacteriological work. It is furnished with a small India-rubber ball and has no piston. This syringe can easily be kept aseptic by the use of absolute alcohol, and to this we attribute the fact that not a single abscess has been observed in the course of more than a thousand subcutaneous injections.

The place chosen for the injection, after several trials of other places, was the skin of the back between the shoulder-blades and the lumbar region, because here the injection led to the least local reaction—generally none at all, and was almost pain-

* Doctors wishing to make investigations with the remedy at present, can obtain it from Dr. A. Libbertz, Luemburger Strasse. 28. Berlin, N.W., who has undertaken the preparation of the remedy with my own and Dr. Pfuhl's co-operation, but I must remark that the quantity prepared at present is but small, and that larger quantities will not be obtainable for some weeks.

less. As regards the effect of the remedy on the human patient, it was clear from the beginning of the research that in one very important particular the human being reacts to the remedy differently from the animal generally used in experiments, namely, the guinea-pig. A new proof for the experimenter of the all-important law that experiment on animals is not conclusive, for the human patient proved extraordinarily more sensitive than the guinea-pig. As regards the effect of the remedy, a healthy guinea-pig will bear a subcutaneous injection of two cubic centimetres, and even more, of the liquid without being sensibly affected; but in the case of a full-grown healthy man 0.25 cubic centimetre suffices to produce an intense effect. Calculated by the body-weight, one-fifteen-thousandth part of the quantity which has no appreciable effect on the guinea pig acts powerfully on the human being.

The symptoms arising from an injection of 0.25 cubic centimetre I have observed after an injection made in my own upper arm. They were briefly as follows: three to four hours after the injection there came on pain in the limbs, fatigue, inclination to cough, difficulty of breathing, which speedily increased in the fifth hour, and were unusually violent. A chill followed, which lasted almost an hour. At the same time there were nausea, vomiting, and a rise of body temperature to 39.6° C.

After twelve hours all these symptoms abated, the temperature fell, and on the next day it was normal. A feeling of fatigue and pain in the limbs continued for a few days, and for exactly the same period of time the site of injection remained slightly painful and red. The smallest quantity of the remedy which will affect the healthy human being is about 0.01 cubic centimetre, equal to 1 cubic centimetre of the one-hundredth dilution. As has been proved by numerous experiments, when this dose is used, reaction in most people shows itself only by slight pains in the limbs and transient fatigue. A few showed a rise of temperature to about 38° C.

Although the effect of the remedy in equal doses is very different in animals and in human beings, if calculated by body-weight, in some other respects, there is much similarity in the

symptoms produced, the most important of these resemblances being the specific action of the remedy on the tuberculous process, the varieties of which I will not here describe. I will make no further reference to its effects on animals, but I will at once turn to its extraordinary action on tuberculosis in human beings. The healthy human being reacts either not at all, or scarcely at all, as we have seen, when 0.01 cubic centimetre is used. The same holds good with regard to patients suffering from diseases other than tuberculosis, as repeated experiments have proved; but the case is very different when the disease is *tuberculosis*. A dose of 0.01 cubic centimetre injected subcutaneously into tuberculous patients causes a severe general reaction as well as a local one.

I gave children aged from two to six years one-tenth of this dose, that is to say, 0.001 cubic centimetre—very delicate children only 0.0005 cubic centimetre—and obtained powerful, but in no way dangerous reaction. The general reaction consists in an attack of fever, which usually begins with rigors, and raises the temperature above 39° , often up to 40° , and even 41° C. This is accompanied by pain in the limbs, coughing, great fatigue, and often sickness and vomiting. In several cases a slight icteroid discoloration was observed, and occasionally an eruption like measles on the chest and neck. The attack usually begins four to five hours after injection, and lasts from twelve to fifteen hours. Occasionally it begins later and then runs its course with less intensity.

The patients are very little affected by the attack, and as soon as it is over feel comparatively well, generally better than before. The local reaction can be best observed in cases in which the tuberculous affection is visible; for instance, in cases of lupus, changes take place which show the specific anti-tuberculous action of the remedy to a most surprising degree. A few hours after an injection into the skin of the back—that is, in a spot far removed from the diseased area on the face or elsewhere—the lupus begins to swell and to redden, and this it does generally before the initial rigor. During the fever the swelling and redness increase, and may finally reach a high degree, so that the

lupus-tissue becomes brownish and necrotic in places where the growth was sharply defined. We sometimes found a much swollen and brownish spot surrounded by a whitish edge almost one centimetre wide, which again was surrounded by a broad band of bright red.

After the subsidence of the fever the swelling of the lupus-tissue gradually decreases and disappears in about two or three days. The lupus-spots themselves are then covered by a soft deposit, which filters outwards and dries in the air. The growth then changes to a crust, which falls off after two or three weeks, and which—sometimes after only one injection—leaves a clean, red cicatrix behind. Generally, however, several injections are required for the complete removal of the lupus-tissue; but of this, more later on. I must mention as a point of special importance that the changes described are exactly confined to the parts of the skin affected with lupus. Even the smallest nodules and those most deeply hidden in the lupus-tissue go through the process and become visible in consequence of the swelling and change of color, whilst the tissue in itself in which the lupus-changes have entirely ceased remains unchanged. The observations of a lupus-case treated by the remedy is so instructive, and is necessarily so convincing, that those who wish to make a trial of the remedy should, if possible, begin with a case of lupus.

This specific action of the remedy in these cases is less striking, but it is as perceptible to eye and touch as are the local reactions in cases of tuberculosis of the glands, bones, joints, etc. In these cases swelling, increased sensibility, and redness of the superficial parts are observed. The reaction of the internal organs, especially of the lungs, is not at once apparent, unless the increased cough and expectoration of consumptive patients after the first injection be considered as pointing to a local reaction in these cases. The general reaction is dominant; nevertheless, we are justified in assuming that here, too, changes take place similar to those seen in lupus cases. The symptoms of reaction above described occurred, without exception, in all cases in which a tuberculous process was present in the organism after the use of 0.01 cubic centimetre, and I think I am justified in

saying that the remedy will, therefore, in the future, form an indispensable aid to diagnosis.

By its aid we shall be able to diagnose doubtful cases of phthisis ; for instances, cases in which it is impossible to obtain certainty as to the nature of the disease by the discovery of bacilli or elastic fibres in the sputum or by physical examination. In cases of tuberculosis of the lungs or joints which have been apparently cured we shall be able to make sure whether the disease has really finished its course, and whether there be still some diseased spots from which it might again arise as a flame from a spark hidden by ashes.

Of greater importance, however, than its diagnostic use, is the therapeutic effect of the remedy. In the description of the changes which a subcutaneous injection of the remedy produces in portions of the skin affected by lupus, I mentioned that after the subsidence of the swelling and decrease of the redness the lupus-tissue does not return to its original condition, but that it is destroyed to a greater or less extent and disappears. Observation shows that in some parts this result is brought about by the diseased tissue becoming necrotic, even after but one sufficiently large injection, and at a later stage it is thrown off as a dead mass. In other parts a disappearance or, as it were, a necrosis of the tissue, seems to occur, and in such cases the injection must be repeated to complete the cure.

In what way this process of cure occurs cannot as yet be stated with certainty, as the necessary histological investigations are not complete ; but this much is certain, that there is no question of a destruction of the tubercle bacilli in the tissues, but only that the tissue inclosing the tubercle bacilli is affected by the remedy. Beyond this there is, as is shown by the visible swelling and redness, considerable disturbance of the circulation, and, evidently, in connection therewith, deeply-seated changes in its nutrition which cause the tissue to die more or less quickly and deeply, according to the extent of the action of the remedy. To recapitulate, the remedy does not kill the tubercle bacilli but the tuberculous tissue, and this gives us clearly and definitely the limit that bounds the action of the remedy.

It can influence living tuberculous tissue only, and has no effect on dead tissue ; as, for instance, necrotic cheesy masses, necrotic bones, etc., nor has it any effect on tissue made necrotic by the remedy itself. In such masses of dead tissue living tubercle bacilli may possibly still be present, and are either thrown off with the necrosed tissue, or may possibly enter the neighboring and still living tissue under certain circumstances of the therapeutic activity. If the remedy is to be rendered as fruitful as possible this peculiarity in its mode of action must be caused to undergo necrosis, and then everything must be done to remove the dead tissue as soon as possible, as, for instance, by surgical interference.

Where this is not possible, and where the organism is unassisted in throwing off the tissue slowly, the endangered living tissue must be protected from fresh incursion of the parasites by continuous applications of the remedy. The fact that the remedy makes tuberculous tissue necrotic and acts only on the living tissue, helps to explain another peculiar characteristic thereof, namely, that it can be given in rapidly-increasing doses. At first sight, this phenomenon would seem to point to the establishment of tolerance, but since it is found that the dose can, in the course of about three weeks, be increased to five hundred times the original amount, tolerance can no longer be accepted as an explanation. As we know of nothing analogous to such a rapid and complete adaptation to an extremely active remedy, the phenomenon must rather be explained in this way, that in the beginning of the treatment there is a good deal of tuberculous living tissue, and that consequently a small amount of the active principle suffices to cause strong reaction, but by each injection a certain amount of the tissue capable of reacting disappears, and then larger doses are necessary to produce the same amount of reaction as before.

Within limits, a certain degree of habituation may be perceived as soon as the tuberculous patient has been treated with increasing doses, for so soon as the point is reached at which reaction is as feeble as that of a non-tuberculous patient, then it may be assumed that all tuberculous tissue is destroyed. Then the treat-

ment will only have to be continued by slowly-increasing doses and with interruptions in order that the patient may be protected from fresh infections while bacilli are still present in the organism, and whether this conception and the inference that follows from it be correct, the future must show. They were conclusive as far as I am concerned, in determining the mode of treatment by the remedy in which our investigations was practised in the following manner. To begin with the simplest case—lupus.

In nearly every one of these cases I injected the full dose of 0.01 cubic centimetre from the first. I then allowed the reaction to come to an end, and then, after a week or two, again injected 0.01 cubic centimetre, continuing in the same way until the reaction becomes weaker and weaker, and then ceased. In two cases of facial lupus the lupus-spots were thus brought to complete cicatrization by three or four injections; the other lupus-cases improved in proportion to duration of treatment.

All these patients had been sufferers for many years, having been previously treated unsuccessfully by various therapeutic methods. Glandular, bone, and joint tuberculosis was similarly treated, large doses at long intervals being made use of. The result was the same as in the lupus-cases—namely, a speedy cure in recent and slight cases, slow improvement in severe cases.

The circumstances were somewhat different in phthisical patients, who constitute the largest number of our patients. Patients with decided pulmonary tuberculosis are much more sensitive to the remedy than those with surgical tuberculous affections.

We were obliged to diminish the dose for the phthisical patients, and found that they almost all reacted strongly to 0.002 cubic centimetre. From this first small dose it was possible to rise more or less quickly to the amount that is well borne by other patients. Our course was generally as follows: an injection of 0.001 cubic centimetre was first given to the phthisical patient, and from this a rise of temperature followed, the same dose being repeated once a day until no reaction could be observed. We then increased the dose to 0.002 cubic centi-

metre, until this was borne without reaction, and so on, increasing by 0.001, or at most 0.002 to 0.005, cubic centimetre.

This mild course seemed to be imperative in cases in which there was great debility. By this mode of treatment the patient can be brought to tolerate large doses of the remedy with scarcely a rise of temperature. But patients of greater strength were treated from the first partly with larger doses and partly with frequently repeated doses. Here it seemed that the beneficial results were more quickly obtained. The action of the remedy in cases of phthisis generally showed itself as follows: Cough and expectoration were generally increased a little after the first injection, then grew less and less, and in the most favorable cases entirely disappeared. The expectoration also lost its purulent character and became mucous. As a rule, the number of bacilli decreased only when the expectoration began to present a mucous appearance. They then entirely disappeared, but were again observed occasionally until expectoration completely ceased. Simultaneously the night-sweats ceased, the patients' appearance improved, and they increased in weight within from four to six weeks.

Patients under treatment for the first stage of phthisis were freed from every symptom of disease and might be pronounced cured; patients with cavities not yet too highly developed improved considerably and were almost cured, and only in those whose lungs contained many large cavities could no improvement be proved. Objectively, even in these cases the expectoration decreased and the subjective condition improved. These experiences lead me to suppose that phthisis in the beginning can be cured with certainty by this remedy. This statement requires limitation in so far as at present no conclusive experiences can possibly be brought forward to prove whether the cure is lasting.

Relapses naturally may occur, but it can be assumed that they may be cured as easily and quickly as the first attack. On the other hand, it seems possible that, as in other infectious diseases, patients once cured may retain their immunity; but this, too, for the present, must remain an open question. In part, this may be assumed for other cases, when not too far advanced; but patients

with large cavities, who suffer from complications caused, for instance, by the incursion of other pus-forming micro-organisms into the cavities or by incurable pathological changes in other organs will probably obtain lasting benefit from the remedy in only exceptional cases. Even such patients, however, were benefited for a time. This seems to prove that in their cases, too, the original tuberculous disease is influenced by the remedy in the same manner as in the other cases, but that we are unable to remove the necrotic masses of tissues with the secondary suppurative processes.

The thought involuntarily suggests itself that relief might possibly be brought to many of these severely-afflicted patients by a combination of this new therapeutic method with surgical operations (such as the operation for *empyæma*), or with other curative methods, and here I would earnestly warn people against conventional and indiscriminate application of the remedy in all cases of tuberculosis. The treatment will probably be quite simple in cases in which the beginning of phthisis and simple surgical cases are concerned, but in all other forms of tuberculosis medical art must have full sway by careful individualization and making use of all other auxiliary methods to assist the action of the remedy.

In many cases the decided impression was created that the careful nursing bestowed on the patient had a considerable influence on the result of the treatment, and I am in favor of applying the remedy in proper sanatoria as opposed to treatment at home and in the out-patient room. How far the methods of treatment already recognized as curative, such as mountain climate, fresh-air treatment, special diet, etc., may be profitably combined with the new treatment cannot yet be definitely stated, but I believe that these therapeutic methods will also be highly advantageous when combined with the new treatment. In many cases, especially in the convalescent stage, as regards tuberculosis of the brain and larynx, and miliary tuberculosis, we had too little material at our disposal to gain proper experience.

The most important point to be observed in the new treatment is its early application. The proper subjects for treatment are

patients in the initial stage of phthisis, for in them the curative action can be most fully shown, and for this reason, too, it cannot be too seriously pointed out that practitioners must in the future be more than ever alive to the importance of diagnosing phthisis in as early a stage as possible. Up to the present time the proof of tubercle bacilli in the sputum was considered more as an interesting point of secondary importance, which, though it made diagnosis more certain, could not help the patient in any way, and which, in consequence, was often neglected.

This I have lately repeatedly had occasion to observe in numerous cases of phthisis, which had generally gone through the hands of several doctors without any examination of the sputum having been made. In the future this must be changed. A doctor who shall neglect to diagnose phthisis in its earliest stage by all methods at his command, especially by examining the sputum, will be guilty of the most serious neglect of his patient, whose life may depend upon the early application of the specific treatment. In consequence, in doubtful cases, medical practitioners must make sure of the presence or absence of tuberculosis, and then only will the new therapeutic method become a blessing to suffering humanity, when all cases of tuberculosis are treated in their earliest stage, and we no longer meet with neglected serious cases forming an extinguishable source of fresh infections. Finally, I would remark, that I have purposely omitted statistical accounts and descriptions of individual cases, because the medical men who furnish us with patients for our investigations have themselves decided to publish the description of their cases, and I wished my account to be as objective as possible, leaving to them all that is purely personal.—*Deutsche medicinische Wochenschrift*, Nov. 14th, 1890.—*Philadelphia Medical News*, Nov. 15th, 1890.

Pernicious Anæmia in Childhood.—A paper on pernicious anæmia in childhood, contributed by Drs. Ad. D'Espine and C. Picot, of Geneva, to the section of Pædiatrics of the International Medical Congress (1890), is published in the *Revue de Médecine* for October 10th. Each author con-

tributes one case, and they give brief notes of four others, which are all that they have been able to find recorded in the literature of the subject. In both the cases now published for the first time the course of the malady was very brief; in neither case did the symptoms endure more than about one month. Dr. D'Espine's patient was aged 2 years, Dr. Picot's 13; both were healthy children, in whom marked anæmia rapidly developed without any discoverable cause; the possibility of the presence of *bothriocephalus latus* was not overlooked, but the exhibition of male fern was not followed by the expulsion of a worm. In the younger child there was at an early stage some gastric disturbance, and the administration of castor oil led to vomiting, but no diarrhœa; in the elder child, on the other hand, there were at an early stage attacks of colic and diarrhœa, and or two attacks of vomiting. Both suffered from loss of appetite and continual thirst; both presented purpuric patches, the younger petechiæ also; the gums in both were healthy; epistaxis occurred in both, but was severe only in the elder and towards termination of his illness; the blood in both was pale and did not coagulate properly. In both there was firm œdema of the lower extremities, and in the younger an anæmic cardiac murmur, and towards the end a *bruit de galop*. Dyspnoea was present in both, and in the elder child was very severe—in fact, the most prominent symptom. In the younger child there were two slight accesses of fever ten days and a week before death, and for the last four days moderate remittent fever; in the elder there was no fever. A necropsy was obtained in Dr. Picot's case. The abnormalities noticed were: liver large, firm, pale yellow, and of fatty appearance, gall-bladder empty; spleen nearly twice the normal size, soft, and congested; the stomach was healthy, with the exception of two or three vascular points; the duodenum, jejunum, and ileum were healthy to within four or five inches of the ileo-cæcal valve; below that point the intestine was thickened, as were also the cæcum and appendix vermiformis; there was no ulceration, and no swelling of Peyer's patches; on section the intestine had a greyish lardaceous aspect; the corresponding mesenteric glands were enlarged; the rest of

the large intestine was healthy. Dr. Mayor made a microscopical examination; he found all the coats of the intestine except the serous copiously infiltrated with leucocytes; these leucocytes were not contained in a reticulum, and Dr. Mayor concludes that the lesion was not lymphadenoma. The thymus gland was persistent in this boy, large, heavy, and lobulated. In the younger child iron and arsenic were exhibited without any benefit, and quinine had little or no effect on the fever. The authors discuss the etiology of the disease, which they attribute to "an auto-intoxication of gastro-intestinal origin," but are apparently unacquainted with the more recent work of Dr. William Hunter, from whose earlier work they quote. They discuss the rarity of pernicious anæmia in childhood, and venture on a hypothesis connecting these fatal cases with other cases of severe anæmia in childhood not due to diarrhœa or imperfect feeding, cases in which there is anæmia without wasting associated (as they believe) with abnormal fermentations in the stomach or intestines, and often primarily dependent on dilatation of the stomach produced by over-feeding. Their hypothesis is that these cases really belong to the same category as the pernicious anæmia of adults, and that the reason why the anæmia so rarely becomes truly pernicious is that the hæmatopoietic activity, of the bone marrow especially, is so much greater and more intense in infancy and early childhood than during adult age.—*British Medical Journal*.

Antisepsis in Midwifery.—In the section of Obstetrics of the recent International Medical Congress, a paper by Dr. Galabin upon the use of antiseptics in midwifery was read. The excellent results of antisepsis in obstetric practice are ascribed by this author chiefly to the use of corrosive sublimate as a disinfectant for the hands, and for the purpose of irrigating the vagina both before and after labor. The rate of mortality in English maternities since the introduction of corrosive sublimate has fallen from 10 per 1000, to 2 per 1000. In the London General Maternity the patients are confined on horsehair that are disinfected should the case become septic. For vaginal

irrigation a 1-to-2000 sublimate solution is used for two or three days, and after that a weaker solution. Before an examination, the hands are disinfected with a 1-to-1000 sublimate solution and lubricated with a 1-to-1000 solution of sublimate in glycerin. In normal cases in private practice he thinks a single injection of 1-to-2000 sublimate solution sufficient.

Slawjanski, of St. Petersburg, said that in Russian maternities antiseptics is universally employed and has reduced maternal mortality to 0.28 per cent., and that if the method is properly carried out the presence of students has no effect upon the mortality.

Priestly, of London, ascribed the good results of antiseptics in obstetric practice less to the antiseptics used than to the extreme cleanliness. He believed that sublimate solutions as weak as even 1-to-4000 could produce harmful effect.—*American Jour. of Obstetrics*, September, 1890.

Imperative Ideas Bordering on Irsane Delusion.—At the recent meeting of the British Medical Association, Dr. Hack Tuke, speaking upon this subject before the section of Psychology, said that there are persons haunted by imperative thoughts and ideas who are not insane, being painfully conscious of the nature of such thoughts. He first described the case of Dr. Johnson, whose imperative idea led to an innocent motor act not of a distressing character. The second case reported was that of a law-student, who worried himself continually in his reading as to the proper place the negative should occupy in a sentence, which imperative idea or obsession seriously interfered with his studies. In the third case a lady could perform very few actions in life without first counting a certain number of times, rendering her life miserable. In a fourth case, a lady evinced great disgust whenever she met with particular words in her reading. It was possible to trace this idiosyncrasy to her aversion to a gentleman whose name contained the same letters. She also developed the dread of contamination, to which French alienists give the name of *folie du toucher*. Dr. Tuke pointed out that there was in some people an irresistible tendency to

touch, and in others not to touch certain articles of furniture or certain dresses. Imperative ideas frequently occur in persons with marked insane inheritance, though a neuropathic disposition is not a necessary factor. Characteristic of all these cases is the bondage under which the person lies to pursue a certain trivial or disagreeable line of thought, being at the same time sane in other respects. Such mental conditions can generally be traced to an emotional basis. The prognosis is not as a rule favorable, but although the particular obsession may not be gotten rid of, the person may pass for being sane in the society in which he moves. The treatment is chiefly moral; occupation of the mind is very important, and care should be taken not to combat directly the imperative idea.—*British Medical Journal*.

Guaiacum as a Purgative. (By DR. WM. MURRELL.)—In our thirst for new remedies there seems to be a danger that some of our good old-fashioned drugs may be forgotten. Take guaiacum for example. In most of our text-books on materia medica we are told that guaiacum resin acts as “a stimulant, diaphoretic, and diuretic.” I cannot find that there is much evidence in support of this view. Wood, of Philadelphia, seems to be of the same opinion, for he says: “Guaiacum is believed by some to act as a diaphoretic, and to do good by increasing the elimination of the skin, but as I have not been able to obtain either from medical literature or from the exhibition of the medicine any distinctive proof of its having any such action to any marked extent I have preferred to consider the drug as an alterative.” Schmiedeberg, of Strasburg, curiously enough deals with it under the head of “Drugs and preparations used for all sorts of purposes but now mostly antiquated and obsolete.” I am inclined to think that its main action is as a laxative or purgative, and this view is evidently shared by Dr. C. D. F. Phillips, who, in his well known work on the “Vegetable Kingdom,” states that in large doses it produces “dryness in the mouth, burning in the throat, a sensation of heat in the stomach, loss of appetite, heartburn, flatulence, nausea, vomiting, and purging.” My attention was drawn to the subject some

two years ago by casually prescribing for a city man suffering from rheumatism some guaiacum lozenges made up with black currant paste. He continued taking them long after the pains had ceased, and his explanation was that they did him good by acting on the liver and bowels. He said that one or two of the lozenges taken in the morning before breakfast acted promptly and without inconvenience. I ordered the lozenges for other of my patients suffering from constipation, and what is conventionally called "biliousness," and the result was equally satisfactory. The lozenges not being available for hospital use I had a confection prepared containing ten grains of guaiac resin to a drachm of honey. This was curiously popular with the patients, and for the last two years I have used it extensively not only as a purgative, but in the treatment of chronic rheumatism, sciatica, tonsillitis, dysmenorrhœa, and allied affections. The confection is nasty, but is appreciated by patients. At first I gave it in drachm-doses once a day, but they were not satisfied with this, and I had to increase the dose to two drachms three times a day. In this quantity it seems capable of producing the maximum of inconvenience and discomfort, and gives unlimited satisfaction. The purgative effect is very pronounced, and in one case the patient had fifty-six evacuations in the week. In another case it produced a well marked rash, covering the arms and legs with an eruption which forcibly reminded one of copaiba. That this rash is rare may be gathered from the fact that my colleague, Dr. C. T. Fox, had seen only one similar instance. It was accompanied by intense itching, which disappeared on discontinuing the drug. The guaiacum not infrequently gives rise to a burning sensation in the throat, and to obviate this I prescribed the ten grains of the resin in half an ounce of extract of malt, which answered admirably. This method of treatment is, perhaps, simply a return to the old-fashioned "Chelsea Pensioner," which consisted of guaiacum, rhubarb, ginger, sulphur, and certain other ingredients, but it is interesting nevertheless. I am sure that a trial of the guaiacum resin as a laxative or purgative according to the dose employed will be found satisfactory. It is possible that if the drug were triturated with

cream of tartar, sugar of milk, or some other equally inert substance, its efficacy would be increased, and it would produce the desired effect in smaller doses.—*Medical Press and Circular*, Nov. 5, 1890.

Anodyne Effects of Electric Light.—Stein, of Moscow, records (*Meditsiniskoië Obozrenië*) a series of fourteen cases of various painful affections in which he used electric light as an anodyne, with almost “magical” results. The apparatus (devised by himself) used for the purpose consisted of a small-sized (three or four volts) incandescent electric lamp, furnished with a suitable handle and a funnel-shaped reflector, varying from 3.5 to 6 centimetres in length and from 2 to 3 in the longest diameter, the lamp being fixed within the reflector. In cases where the head or neck was affected, the illumination (the reflector being applied directly to the painful area) lasted from ten to fifteen seconds; in other regions of the body from one to five minutes, or even longer, until the patient began to complain of intense heat. The anodyne effects are said to have been invariably most striking. A woman, suffering from very obstinate intercostal neuralgia, after a single sitting (a series of illuminations, each of a few seconds’ duration) was completely and permanently freed from pain. The same result was obtained in another patient suffering from intense rheumatic pains about the shoulder. In a woman, aged 50, suffering from agonizing lumbago, four sittings of five minutes’ duration twice a day proved equally successful. In another patient, a nervous woman who had had excruciating pain about the right foot and ankle, causing lameness, two illuminations of five minutes’ duration caused complete cessation of the symptoms. In a patient suffering from pulmonary and laryngeal tuberculosis, and most troublesome, almost incessant, cough, in whom even morphine in the daily dose of one grain had afforded but trifling relief, from ten to fifteen seconds’ illumination of the larynx and both sides of the neck externally, repeated every other day, reduced the paroxysms of coughing to two or three in the twenty-four hours.—*British Medical Journal*.

Modern Dietetics.—There is a curious lack of system, and consequently of uniformity, in the rules which guide medical men in their advice on the matter of diet, whether for the healthy or the afflicted. The present method of dieting athletes offers a singular and striking contrast to that which obtained only a few years since, and it is open to question whether we have yet solved the problem how to get the maximum of vital energy with the utmost economy of expenditure on internal arrangements. Still more striking are the vagaries of medical men in arranging the diet of invalids. They are tolerably agreed now-a-days as to the diet of fevers, for the simple reason that the diet is then reduced to its most simple expression. When, however, it comes to advising persons who suffer from inconvenience rather than ill-health, their inconsistency becomes rather too apparent, and patients are never weary of relating the advantages they have derived from deliberate evasion of the instructions laid down for their guidance, this tendency to insubordination being fostered by the contradictory views of different practitioners. It is possible that we do not take a sufficiently broad grasp of the subject. It is true that the dietetic habits of civilized peoples differ from those of men and animals *feræ naturæ*, but we are warranted in concluding that these have grown up in deference to altered requirements and in response to special needs. The habits are none the less natural because they have undergone development. Civilization itself is only a branch of natural history, and not a departure from Nature. We cannot, indeed, depart from Nature's laws. They are immutable and relentless, and if these customs in the aggregate have not been found inconsistent with health, strength and progress in respect of the race, we may be sure that they are the outcome of a process of evolution by which man adapts himself to altered conditions of environment. At the same time, the formation of habits and the engrossing nature of one's pre-occupations in the worry and turmoil of civilized existence, tend to impede that gradual adjustment which is indispensable if the functions are to be adequately fulfilled.

As age advances digestion and assimilation are on the wane,

and the quantity and quality of the diet require to be modified accordingly. The duty of the practitioner is to aid in this adjustment, while bearing in mind the general rules of the national dietary. Too often his edicts are as whimsical as they are arbitrary, and he does not avail himself to the extent he might do of the indications afforded by the patient's own feelings in the matter. The palate, as Sir William Roberts recently pointed out, is a kind of dietetic conscience, and, in most cases, is a tolerably safe guide to the requirements of the patient. Many people seem to regard its utterances as open to suspicion, but, though not infallible, these utterances are entitled to the utmost deference as those of the rightful authority in the choice of food. Of course there are such things as perverted functions, and the sense of taste is liable to aberrations of the kind which are manifested by its fellows. It is for the skilful practitioner to distinguish the normal from the perverted functions, and thus to aid in neutralizing the evil promptings of the latter. A vast amount of good may often be achieved by simply providing for a change of dietary, and the change may bear either on the articles of food or on the time and manner in which they are to be taken. A good deal of this is known and acted on by the wary practitioner, but a more general recognition of the beneficial effects which may follow apparently slight modifications would spare patients many a vexatious restriction. Then, again, when a given article of diet appears to disagree, the undesirable effects may be obviated by lessening the quantity instead of prohibiting it altogether. Sir William Roberts incidentally raised the question as to whether tea, coffee, and tobacco are properly to be looked upon in the light of luxuries, and he concludes that had they been this and nothing more they would never have attained their present vogue. How far this may be the case we have no means of knowing, but it occurs to us that the general rule here formulated is not one that can be commended for universal adoption, unless we are to accept the views of a physiological Pangloss that all is for the best in the best of worlds. Everyday experience seems to point to a certain amount of what Mark Twain would have called physiological "cussedness" in

mankind, and we do not feel justified in assuming that whatever is, is right. This is rather fortunate from a selfish professional point of view, for if physiological laws had free play, the process of adjustment would go on *pari passu* with the requirements of the organism, and the poor practitioner would have no voice in the matter. This, Providence evidently never intended to be the case, and our rôle is to modify general laws to individual cases with as little violence to inherited or acquired instincts or habits as may be practicable.—*Hospital Gazette*.

Operations upon Paralytic Joints.—

Dr. Karenski, referring to the operation of Albert (arthrodesis) in which the object is sought to produce ankylosis of the knee-joint in order that the lower extremity may become a support for the body, instead of a hindrance to locomotion, in cases of "dangle-leg" from paralysis, states that the opinion is generally endorsed that if the function of the muscular apparatus attached to the joint is not restored in from six to nine months the condition may be considered a permanent one. In view of this, interference, with a view of fixing the joint and thereby restoring, in some degree, its usefulness, by means of Albert's operation, is to be considered a justifiable one. While in the case of the lower extremity the limb can be restored to a condition of comparative usefulness by means of apparatus for facilitating locomotion, and, therefore, the operation may not be deemed one of absolute necessity, in the upper the case is quite different. Here the muscles of the shoulder proper being paralyzed, the entire upper extremity becomes completely useless, albeit the muscles which move the forearm still possess their function. By the aid of the pectoralis major and latissimus dorsi muscles, certain movements of the arm can be performed, but only in a slinging or jerky manner, but by fixing the humerus to the shoulder-blade by an arthrodesis at the shoulder-joint, proper adduction and abduction movements of the arm may be obtained, and by means of the scapula the arm may be held in position. In the case of the elbow-joint this operation is only to be recommended when there exists absolutely no power of flexing the forearm upon the arm. The operation heretofore has been most frequently performed upon the knee and ankle-joint.—*Deutsch. Med. Wochenschrift*; *Annals of Surgery*, Nov., 1890.

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KOCH'S TREATMENT OF TUBERCULOSIS.

Through the enterprise of the *Medical News* we are enabled to give our readers an account of the details of Koch's method of treating tuberculosis. The discoverer of the tubercle bacillus has followed up his beneficent work by what appears to be a much greater discovery—the finding of an antidote.

Tuberculosis is such a widespread affection, and enters so largely into the causation of human misery and premature death that any means likely to limit its dire results will be universally hailed with joy and gladness by the many thousands that are suffering or are likely to suffer from it. Although the details of the mode of administration of the antidote are given, its composition and method of preparation will not be made public until such time as the discoverer has worked out the entire subject.

Koch is universally recognized as the most careful of experimenters, and has never been known to have claimed for his investigations anything but what was subsequently completely substantiated. This personal record is the cause of the very generally expressed confidence indulged in by the members of our profession towards this his latest work.

For centuries cures for consumption have been periodically proclaimed as being found out, and even in the recollection of many men now living, and especially since the discovery of the bacillus, several infallible antidotes to the poison of this disease have been made known. All, however, have proved futile to arrest the progress of the disease.

Koch's remedy appears to be a poison to the tissues which

have become tubercularized, rather than to the bacillus itself. The more extensive the tubercular process, the greater is the reaction from the introduction of the antidote. On the other hand, the more limited the process, the less is the reaction. It follows that it is not only valuable as an antidote, but also a test of the quantity of tissue which is at the time the seat of the tubercular process.

Koch has not made known the different steps by which he was led to the discovery of his antidote. When the time arrives for him to tell this story, it will be most instructive and of far-reaching application.

THE RELATION OF CHOREA TO RHEUMATISM AND HEART DISEASE.

The relation of chorea to rheumatism and heart disease has always been a subject on which very divergent views have been entertained. The great frequency with which endocarditis is found in fatal chorea makes the theory originally advanced by Kirkes, that the disease is caused by emboli blocking the arterioles of the motor centres, at first sight a very plausible one. That this is the explanation of the mode of origin of a few cases of chorea is probable, but it certainly cannot be the cause of the great majority of cases, for we find that chorea generally sets in without any previous endocardial inflammation.

A recent writer (P. Meyer in the *Berliner Klin. Wochen.*) gives an account of 121 cases of chorea treated in Henoeh's klinik during the past five years. In 9 per cent. of the 121 cases there was a history of rheumatic symptoms, and in 10 per cent. heart disease without any rheumatic symptoms was made out. In 2 per cent. of the cases both heart disease and rheumatism were present. From these statistics Meyer concludes that chorea is merely a symptom which can be induced by the most varied causes. This, however, is only a partial representation of this subject. Any hypothesis which does not take into consideration the functional predisposition to chorea cannot be accepted as adequate to explain its nature. This functional

predisposition is necessarily always present. It essentially consists in the want of a due stability in certain motor areas. It is the element in chorea that is inherited, and without which the disease cannot be brought about. It is true that it is possible to have an acquired instability of certain cortical areas, as the result of many diverse injurious influences.

Given this instability of the motor cortex, the causes that may induce choreic movements are very various. In one case it may be simple emotion, in another any internal or external poisonous agent. In the latter class we include the poison of rheumatism. This poison, then, induces not only this disease, but the chorea and endocarditis. There are no grounds for entertaining the opinion sometimes expressed that chorea causes endocarditis. When the three diseases appear in the one case, it is more than probable that they are induced by some poison, either the rheumatic or allied poison, and in such cases the proper treatment is the treatment of the rheumatic state.

APOPLECTIFORM NEURITIS.

Several cases of what has been designated with the name of *Apoplectiform Neuritis* have recently been published. In all, the disease was confined to the brachial plexus and was characterized by very sudden and profound loss of motion and sensation in the arm. Rapid wasting of the muscles followed, and the electrical reactions were those of degeneration.

Dejerine has recently published a case where death occurred from pulmonary tuberculosis, and where the examination of the nerves of the plexus revealed the presence of an old hemorrhage into the plexus. This fully accounts for the apoplectiform mode of onset, and is instructive, as showing that we may have a hemorrhage into the peripheral as well as into the central nervous system.

Obituary.

DR. HENRY JACOB BIGELOW, of Boston, died on Oct. 30th, at the advanced age of seventy years. Dr. Bigelow retired from practice a few years ago. He occupied for many years the chair of surgery in the medical department of the University of Harvard, and was a noted teacher and original thinker. He will be especially remembered for the important advances contributed to lithotrity.

PROF. NUSSBAUM of Munich, one of the greatest of German surgeons, has passed away, full of years and honors. He was among the first in Germany, if not in the world, to recognize the value of Lister's work in the treatment of wounds. He quickly put it into practice, and with such brilliant results, that very soon it became almost universally employed throughout Germany. Nussbaum was not only a great surgeon, but was also, like Lister, an earnest and able physiological investigator. In fact, both of these great men would have left their mark in science even if they had never turned their attention to surgery.

ALBERT VOGEL.—The University of Munich has lost another able teacher through the death of Albert Vogel. His work on Diseases of Children is a standard treatise in a number of languages, and is at the present time being published for the eleventh time.

Medical Items.

—Dr. Kuster, of Berlin, has been appointed Professor of Surgery in the University of Marburg.

—Prof. Schrötter has been appointed Director of the Third Medical Clinic recently established in the University of Vienna.

—A new edition of Neale's "Medical Digest" will shortly be issued. This work is one of great value, especially to the busy general practitioner, for whom it was originally designed.

—Dr. Orton, President of the New York State Medical Association, has offered a prize of \$100 for the best short, popular essay on some subject connected with practical sanitation.

—Dr. Francis R. Japp, Assistant Professor of Chemistry in the Normal School of Science and Royal School of Mines, South Kensington, has been appointed Professor of Chemistry in the University of Aberdeen.

—The chair of Materia Medica and Therapeutics in the Jefferson Medical College has been rendered vacant by the retirement of Dr. Bartholow. We regret to learn that Dr. Bartholow's failing health is the cause of his retirement.

—The result of the operation of the Medical Practice Acts in Minnesota since their introduction seven years ago has been to reduce the ratio of physicians to the general population from 1 in 650 to 1 in 1250.

—In our last number we published a list of Dr. Mills' more important contributions to science. We should have mentioned that the list was prepared in order to prove Dr. Mills' claim to be appointed a Fellow of the Royal Society of Canada. This Society may have greatness in it, but it has not, as yet, evolved from the potential state.