

## AN EPITOME OF CURRENT MEDICAL LITERATURE.

### MEDICINE.

#### (146) Movable Kidney.

STIFLER (*Münch. med. Woch.*, July 12th, 1892) regards this condition as more common than is usually supposed. Of 100 cases observed by him, only 8 occurred in men. In 75 cases the affection was on the right side, and in 25 on the left. Ten cases occurred before the age of 20, 20 between 20 and 30, and 40 between 30 and 40. In 3 cases the mother also suffered from the same condition. Although many cases occurred in those who had borne children, yet not a few of the patients were nulliparous. Increased thoracic and diminished abdominal pressure seemed to be the chief cause. Obesity was present in 15 cases. Ill-fitting corsets were used in 14 cases. In about 35 cases the previous lifting of heavy weights, falls, and riding were recognised as causes. The author says that in 18 cases perityphlitis and perimetritis were the chief causes for the displaced and fixed kidney. In 5 cases masturbation is apparently given as the cause of the disease. In 2 cases the spontaneous dislocation of diseased kidneys was noted. In 8 cases there was no discoverable cause. The severity of the affection depends on the nature and number of the attacks of the so-called strangulation as well as on the site of the displaced organ and on its mobility. Pain on pressure and on movement was noted in all but 8 cases. Gastric disturbances were present in most of the right-sided and also in some of the left-sided cases. Attacks of strangulation (collapse, pain, vomiting, etc.) were rare, but manifestations of an acute and temporary hydronephrosis, seldom with blood in the urine, occurred more often. Marked diuresis occurred after such attacks. Neurotic symptoms were common. In 15 cases there were manifestations of hysteria. The diagnosis of movable kidney is easy. In one case pulsation was communicated from the aorta to the displaced organ. From his experience in these 100 cases the author is very satisfied with the treatment by an abdominal belt with cushion, and any question of operative procedure hardly arose.

(147) **Carbolic Poisoning in a Suckling.** V. F. BŪLVEBASH (*Meditzinskoi Obozrenië*, No. 9, 1892) relates the following case: A previously healthy infant, aged 3 months, was brought into a room which had just been disinfected by spraying about 6 pints of a 5 per cent. carbolic acid solution. In about half an hour the child awoke, crying and looking exceedingly pale. Shortly afterwards there appeared diarrhœa with dark green thin stools, while the urine was dark grey in colour with an olive-green tint. The pulse was weak and rapid

(140 per minute), the respiration irregular and somewhat hurried; small moist râles were heard in the lungs; there was also a slight short cough, with anorexia and general prostration. The treatment consisted in the administration of a large teaspoonful of castor oil and 2 drops of spiritus Mindereri (liquor ammoniæ acetatis) as a diaphoretic every two hours, a warm bath of ten or fifteen minutes' duration being ordered at bedtime. Gradual improvement took place, ending in complete recovery about the third day after the inhalation of the carbolic vapour.

#### (148) Von Graefe's Symptom in Exophthalmic Goitre.

FERRI (*Giorn. del R. Accad. di Med. di Torino*, February, 1892), has made some interesting observations which tend to throw doubt on the commonly accepted explanation of von Graefe's symptom. He is in fact led to conclude (1) that the muscle of Müller has nothing to do with the phenomenon, and (2) that this symptom is in reality dependent on the levator palpebræ superioris, which, from an increased volume of the vessels distributed in its substance, undergoes a mechanical shortening. This explanation, it will be noticed, makes the contraction independent of any nervous origin.

#### (149) Infantile Infection from Mammitis.

MAYGRIER (*Arch. de Toccol.*, July, 1892) read before the Obstetrical Society of Paris notes of the case of a woman who had lymphangitis of the breast shortly after labour, and suckled her child with the affected organ. The child died when 14 days old. Pus was found in abundance in different organs, especially in the digestive canal and the nervous centres. The respiratory tract was not involved, and there was no evidence of suppuration of the umbilicus. The infection had evidently occurred through the alimentary tract.

#### (150) Chronic Hydrocephalus and Congenital Syphilis.

HELLER (*Deut. med. Woch.*, June 30th, 1892) first refers to the fact that any connection between these conditions is denied by many. He gives short details of fourteen published cases in which hydrocephalus and congenital syphilis co-existed, and refers to two additional ones. He then reports the following case. Seven weeks after birth the infant had an eruption on the palms of the hands, on the soles of the feet, and on the legs quite typical in colour and in other respects of congenital syphilis. After treatment with sublimate baths and small doses of calomel the rash quickly disappeared. When 6 months old the child's head was noticed to be very large, the appearance being exactly that of hydrocephalus. The anterior fontanelle was of great size, and the intervals between the bones very distinct. The face was markedly small by contrast. The child was treated with iodide of potassium. Five months later the head did not appear to be

hydrocephalic. The anterior fontanelle was much smaller, and the frontal suture could hardly be felt. There can be no doubt of the existence of congenital syphilis and hydrocephalus in this case. The enlargement of the head was not due to rickets, for there was no evidence of rickets. The result of treatment would also support the idea of the hydrocephalus being the result of syphilis. Only in one of the cases referred to above did the hydrocephalus disappear during antisyphilitic treatment. In this case, as well as in the author's, the treatment was commenced early. Heller concludes that in all cases of hydrocephalus congenital syphilis should be looked for, and if found antisyphilitic treatment should be adopted energetically and as early as possible.

#### (151) Pemphigus Neonatorum.

DURING an epidemic in the Lying-in Hospital at Göteborg, in which 134 out of 216 children were affected, and in which two mothers who nursed their children suffered from pemphigus of the mamma, Almquist (*Archiv. für Derm. und Syph.*, Heft 2, 1892), investigated the virus bacteriologically. In the cases of nine of the children in which investigations were made, the same coccus was found in large numbers in the bullæ. This coccus was very like staphylococcus aureus, and grew readily at ordinary room temperature. Two inoculations with pure cultures on the author's arm produced, after a short period of incubation, first redness, and after two or three days, typical pemphigus bullæ, which healed without any constitutional disturbance.

### SURGERY.

#### (152) Paralysis of the Upper Extremity after Dislocation at the Shoulder.

MÜLLER (*Centralblatt für Chirurgie*, No. 29, 1892) reports a case of slowly-developed paralysis of the upper extremity after a dislocation of the head of the right humerus, which had been reduced without difficulty on the sixth day. The forearm was much smaller than that of the opposite side, and the muscular prominences of the palm, together with the interossei, had almost completely disappeared. The skin over the whole of the upper extremity was cold and livid. There was total loss of sensibility in the ulnar region of the hand and forearm, and also over the posterior and volar surfaces of all the fingers and the hand. The sensibility of the surface of the arm above the elbow remained quite normal. There was complete loss of function in the flexors and extensors of the hand and fingers, and also of the pronators and supinators. Extension of the limb at the elbow-joint was somewhat impaired, whilst flexion could be exercised with full force. In operating in the axilla with the object of freeing the nerves of the affected limb, the author found much difficulty in exposing the cords, as they were surrounded by dense cicatricial tissue. The difficulty was increased by

an absence of any pulsation in the lower portion of the axillary artery. After careful dissection, the three larger nerve trunks, together with the axillary artery, were found to be tightly compressed between the inner surface of the articular capsule on the one side, and by a distinct transverse band of cicatricial tissue on the other. Above this band, which was about 1 centimetre in breadth, the artery, which was as large as a subclavian, pulsed distinctly. The axillary vein remained outside this band, and had not been compressed. After division of the constricting band by scissors, the circulation was at once re-established in the limb. The sensibility of the forearm was speedily restored after this operation, and at the end of two months the limb had increased in size, and the patient was able to move his hand and fingers freely both in flexion and extension.

#### (153) Splenectomy.

M. LINDFOSS (Christianstad), at the Scandinavian Congress of Naturalists (*Sem. Méd.*, July 27th, 1892), discussed this operative procedure. The indications for operation were (1) prolapse of the spleen, (2) mobile spleen, and (3) abscess and cystic degenerations of this organ. The contra-indications were (1) leukæmia, (2) ague, and (3) amyloid degeneration of the spleen. He then related a successful case of extirpation of the organ. The patient was a woman, aged 20, who had a mobile spleen without any leukæmia. An incision was made along the outer border of the left rectus abdominis muscle, the abdomen opened, and the spleen exposed. The pedicle was secured with a silk ligature, the organ removed, and then the pedicle returned into the abdomen, and the wound closed. The wound healed up by primary union. One month after the operation the blood was examined, when an increase of red blood corpuscles was found, and a diminution in the amount of hæmoglobin. The operation was performed on February 20th, 1892, and the patient left the hospital cured on April 14th.

#### (154) Electrolysis in Oesophageal Stricture.

CAMPBELL (*Medical News*, July 9th, 1892) gives the results of his method of treatment of non-malignant strictures of the oesophagus by electrolysis. He uses electrodes of small size to begin with, and these are gradually increased in size, until an electrode of 1 inch in diameter is passed down the oesophagus. At first a small electrode is passed down until it rests upon the upper part of the stricture. Then a current of 5 milliampères is passed. The strength of the current is gradually increased to 10 or even 15 milliampères, the electrode being kept continuously in contact with the stricture. In a few minutes the electrode passes through. Then at intervals of a few days larger and larger electrodes are used, until one an inch in diameter is passed through the stricture. With the larger electrode a somewhat stronger current is used up to 20 milli-

ampères. Six cases are reported in the paper which had been treated thus. All were fibrous strictures, and were completely cured. Some of them were seen two years after treatment and then no return of the diseased condition had taken place. The author applied the same treatment to some cases of malignant stricture, but no permanent benefit was received in any case.

#### (155) Primary Actinomycosis of the Skin in Man.

D. MAJOCCHI (*Rif. Méd.*, June 17th, 1892) distinguishes two forms of cutaneous actinomycosis in man—the anthracoid and the ulcerative fungating forms. The following is the history of a case belonging to the latter category. The patient was a strong man of 52, with excellent general health, and no troubles save with his teeth, many of which he had lost. Three months after the last visit to the dentist there appeared a swelling near the angle of the jaw, and a little later two others, which extended to the mastoid process. They were hard at the base and distinct from the neighbouring glands, but were softer towards their centres. The lymphatic glands were hardly affected. The swellings gave no pain unless they were pressed at their bases. On being opened they gave exit to a little pus mixed with yellowish granules, which required slight pressure to dislodge them. The body of the tumours appeared cribriform, the meshes containing granular pus. The general characters of the tumours, and the fact that the neighbouring glands were unaffected, led to the diagnosis of actinomycosis, which was afterwards confirmed by microscopic examination. The author thinks that the door of entry in this case was certainly the mouth, rendered vulnerable by the condition of the teeth.

#### (156) The Surgery of the Gall Bladder.

TERBILLON (*Bull. Gén. de Thérap.*, June 15th, 1892) adds further evidence as to the value of surgery in disease of the gall bladder. The operations performed were as follows: 8 cholecystotomies resulted in 7 cures and 1 partial cure, the patient dying a month afterwards with persisting jaundice, fistula, and progressive weakness; 2 cholecystectomies, both resulting in cure; 1 exploratory incision, with evacuation of contents, without definite cure.

#### (157) Urethral Calculi in a Child.

P. NIKOLSKI (*Khirurgicheskaja Letopis*, January, 1892), relates the following case:—A delicate peasant boy of eight had in the course of five years passed nine calculi of the size of a pea in his urine. Latterly he had been suffering from enuresis with exceedingly painful micturition and hæmaturia. On examination, a rotary-like chain of concretions could be felt along the membranous portion of the urethra. A median urethrotomy was performed without delay, and as many as ten calculi were extracted from the canal, an eleventh being at the same time taken from the bladder. The operation was not followed by any rise of tempera-

ture. For a fortnight the boy passed his water both through the wound and the urethra, but afterwards through the latter alone. On the twenty-sixth day cicatrization was complete. On the thirty-first the patient left perfectly well, micturition being quite normal. The eleven stones consisted of phosphates, and weighed together forty-six grammes, the weight of the vesical concretion being fifteen grammes, and that of the urethral calculi varying from two to five and a-half.

#### MIDWIFERY AND DISEASES OF WOMEN.

##### (158) Vaginal Cyst complicating Labour.

PUECH (*Arch. de Tocol. et de Gynéc.*, March, 1892), maintains that one case related by Peters is the sole instance already on record, where a vaginal cyst seriously affected labour. He describes a second, under his own observation. The patient was a laundress, aged 25. She was a big, strong woman, who had always enjoyed good health, and never suffered from menstrual troubles. Five years before she was delivered of her first child, and noticed on recovery that there was a swelling on the vulva. Chronic vaginal discharge set in. In October, 1889, she was confined for the second time; Puech was present on this occasion. There was a cyst as big as a hen's egg in the lower third of the vagina, posteriorly and somewhat to the left. Labour was concluded without instruments; a small male child was born; the pains were very strong. The fetal head flattened the cyst, which was not ruptured. The patient declined any operation, the tumour did not inflame, and on recovery there was no pain during walking or coitus. On November 16th, 1891, this patient was again delivered. The cyst was found, during labour, much enlarged, so that exploration of the os was difficult. The vertex presented in the first position. The head, well-engaged in the pelvic cavity, bore against the cyst, which was thus pressed towards the vulvar cleft. As the tumour clearly impeded labour, it was punctured with a trocar. Three ounces of a pale brown puriform fluid escaped. A 1 in 2,000 sublimate solution was repeatedly injected until it returned quite clear, and the vagina was thoroughly cleaned. A large female child was then delivered without difficulty. During childbed, the cyst rapidly refilled, but the patient refused to have it removed.

##### (159) Ruptured Tubal Gestation: Expectant and Operative Treatment.

WAITZ (*Deutsche med. Woch.*, No. 3, 1892) notes that a woman with symptoms of acute internal hæmorrhage from rupture of a foetal sac was admitted into hospital in the middle of the night. A physician had sent her for immediate operation, but she seemed better on the next morning. Ice and opiates were given. On the third day symptoms of peritonitis appeared. Free doses of sulphate of magnesia were administered; watery stools were passed, and

the symptoms passed away. For nearly a week the patient improved, but on the eighth day after the first attack very severe symptoms of internal hæmorrhage appeared. Abdominal section was performed. Over a pint and a-half of partially coagulated blood was found in the peritoneal cavity, and a ruptured tubal sac was found and removed. The patient recovered. Waitz recommends that the pelvis be elevated during the operation, and that the abdominal wound be brought down as low as possible.

**(160) Bacteriology of the Infantile Vagina.**  
V. V. SROGONOFF (*Vratch*, No. 20, 1892), having examined the vagina bacteriologically in thirty-three girls, aged from five hours to eight days, has come to the following conclusion: (1) When examined shortly after the infant's birth, the vagina is found, as a rule, to be absolutely free from microbes. (2) Subsequently the number of infants without vaginal bacteria rapidly decreases. (3) After the first bathing most new-born girls are found to have micro-organisms in the vagina. (4) The microbes penetrate partly through the agency of the water used for the bath, partly through the customary anointing of the child's genitals with some fatty substance; they may also be introduced during the performance of artificial respiration. (5) Breech presentation favours an earlier penetration of microbes into the genital tract. (6) On the whole, the infantile vagina constitutes a favourable medium for the proliferation of bacteria. Only non-pathogenic microbes (species not stated) were found by the author.

**(161) Hyperemesis Gravidarum and Railway Nausea.**

GRENSER (*Centralbl. f. Gynäk*, No. 26, 1892), records the following case. The patient was an English lady, aged 25, in her first pregnancy. She was healthy, but anæmic and nervous. Long railway journeys seemed to cause nausea and vomiting, just like the attacks for which she consulted the physician on the present occasion. She was married at the end of September, 1890. Pregnancy began early in December, and was accompanied by constipation and tympanites. Then nausea set in, followed by uncontrollable vomiting. For a week the patient was in great peril. She was kept absolutely still, and fed by nutritive enemata. By the mouth nothing was allowed to pass, excepting pieces of ice and iced soda water in very small doses; but after a few days a little hot tea could be swallowed with benefit. Subcutaneous injections of morphine were administered; cocaine was not deemed advisable. On September 6th, 1891, a male child, of moderate size, was delivered by aid of instruments. Grenser did not consider that the patient was hysterical. Professor Leopold believed that railway nausea might be neurotic, but it was not usual to believe that the uncontrollable vomiting of pregnancy was simply an indication of hysteria.

**(162) Premature Children saved by the Couveuse.**

MADAME HENRY, head midwife to the Maternité of Paris, has published statistics (*Journ. des Sages Femmes*, July 16th, 1892) which show that the use of the *couveuse*, with artificial feeding or "gavage," has saved the lives of a large proportion of premature children born in the institution. The mortality of the infants before and after the introduction of the *couveuse* system is indicated in the following table:—

State of Pregnancy when Child was born.	Mortality before introduction of <i>Couveuse</i> .	Mortality since introduction of <i>Couveuse</i> .
6th month ...	100.0 per cent	84.0 per cent.
6½th " ...	78.5 "	40.0 "
7th " ...	61.0 "	50.2 "
7½th " ...	46.0 "	23.0 "
8th " ...	22.0 "	11.2 "
8½th " ...	12.0 "	0.4 "

**(163) Menstruation in an Infant.**

O. E. TCHERNOMORDIK, of Tchashniki, relates (*Vratch*, No. 4, 1892) the case of a normally-developed and generally healthy girl who has been regularly menstruating since February, 1891, when she was not quite one year old. The hæmorrhage recurs every four weeks, lasting on each occasion four or five days, and being accompanied by occasional pain about the hypogastrium. The first menstruation was preceded by some fever, an urticaria-like rash over the whole body, and general restlessness lasting for three days. The symptoms subsided with the appearance of the bleeding. The girl's mother is somewhat nervous but otherwise healthy. She began to menstruate about the age of 15.

**(164) Cysts of the Vagina.**

V. CHALOT, of Toulouse (*Annales de Gynéc.*, July, 1892) distinguishes several distinct varieties of vaginal cyst. They are (1) glandular cysts—for small glands, which may become obliterated, are sometimes found on the vaginal mucous membrane; (2) lymphatic cysts, lined with endothelium; (3) hygromas, enlarged bursæ developed by coitus or injury; (4) serous cysts developed in spaces produced by detachment of the coats of the vagina during parturition; (5) cysts developed from hæmatomata; (6) Müllerian cysts, or lateral hæmatocolpos, pyocolpos, or mucocolpos, developed from the lower part of one of Müller's ducts; (7) paravaginal hydatids; lastly (8) cysts developed from the Wolffian ducts. Rieder has proved that without doubt relics of these ducts may persist till adult life. Chalot has shown that they are quite distinct from Skene's tubes. He describes a case of Wolffian cyst. A cyst in the antero-lateral part of the vagina, extending towards or into the broad ligament and

lined with columnar epithelium, which may be ciliated, is assuredly Wolffian. Even when the epithelium is not purely cylindrical, or when it is cylindrical yet the cyst does not extend into one lateral fornix, the cyst is Wolffian. A cyst in the antero-lateral part of the vagina bearing papillæ is of Müllerian origin. When a Wolffian cyst is placed high up, or extends into or beyond the fornix, the surgeon must not attempt its excision. It should be opened by a simple incision; then its lining membrane must be scraped by means of the curette. Lastly, the cavity is well plugged with iodoform gauze. When the cyst evidently extends far into the parts adjacent to the lateral fornix, it is best, in order to insure against closure and refilling of the cyst, to excise its prominent lower part. Then the curette and the tampon must be used.

**THERAPEUTICS.**

**(165) Treatment of Erysipelas.**

CAVAZZANI (*Gl. Incurabili*, May 1st and 15th, 1892) draws attention to a plan of treatment first advocated by him for erysipelas as long ago as 1867. It consists in the application every two hours to the affected part by means of a brush of the following mixture: B Tannin, camphor, aa 1 pt.; ether, 8 pts. With this simple treatment highly successful results are recorded in 100 cases of varying severity. In another series of 5 cases the author applied in the same way a 1 per cent. alcoholic solution of fuchsine with quite satisfactory results. As to the mode of action and the general efficacy of this latter application, he refrains from making any suggestions till a further trial has been made. Sachs (*Bull. Gén. de Thérapeutique*, May 30th, 1892) places on record 4 cases of erysipelas which progressed most favourably under the influence of ichthyol. The drug was employed dissolved in collodion in the proportion of 1 in 10, and was applied by means of a brush to the affected region.

**(166) Trional and Tetronal.**

SCHAEFER (*Berl. klin. Woch.*, 1892, No. 29) has used trional in 77 cases and tetronal in 49 cases in the Jena clinic for mental disease. These drugs were usually given in hot milk or wine in single doses of 1 to 2 g. at bedtime. The hypnotic effect was evident in from ten to twenty minutes, and the sleep lasted from six to ten hours. No such effect was produced in 14 per cent. of the cases treated by trional, and in 16 per cent. of those treated with tetronal. Single doses of 3 to 4 g., and divided doses amounting to 6 to 8 g. in the day may be given without hesitation. It is concluded that trional and tetronal have a marked hypnotic and sedative action, the latter being more evident in the case of tetronal. Trional has a more sure and prompt effect in the sleeplessness connected with the various forms of neurasthenia, functional psychoses, and organic brain disease. It is useless in the morphine and cocaine habits, as

well as in the sleeplessness due to pain. Tetrional is indicated in psychoses where bodily restlessness of moderate degree prevents sleep. Neither drug is to be recommended in cases of much mental excitement with marked impulsiveness (*Bewegungsdrang*). In comparison with sulphonal, the action of trional and tetrional is more prompt and vigorous. In the above-named conditions, with bodily restlessness, these drugs are efficient whereas sulphonal fails. As sedatives in violent psychical and motor excitement they cannot take the place of hyoscine. Only occasionally was there slight digestive disturbance, and there were no ill-effects produced in the heart, lungs, or kidneys. Other effects, such as weariness, drowsiness, depression, and occasionally giddiness and unsteadiness in gait, were only at times noted. After long administration the discontinuance of these drugs produced no striking symptoms, and they did not lose their therapeutic effect after lengthened use.

(167) Iodine Trichloride as a Local Application.

BELFIELD, of Chicago (*N. Y. Medical Rec.*, July 16th) recommends a trial of iodine trichloride ( $I Cl_3$ ) in the treatment of tuberculous and suppurative processes. It is formed by passing chlorine gas over iodine; it is obtained in reddish crystals, is soluble in its own weight of water, and almost as readily in alcohol, and either solution can be mixed with glycerine without decomposition. When it comes into contact with mucin, pus, or any proteid matter it is immediately decomposed, yielding iodine and chlorine gas. He believes it to be a powerful local antiseptic; he has used it in irrigating suppurating wounds in 1 to 5 per cent. solution in water, with or without the addition of glycerine. For offensive cancerous surfaces and venereal sores he has used 5 to 20 per cent. in equal parts of water, alcohol, and glycerine. Solutions stronger than 5 per cent. cause smarting in ordinary wounds. Gauze sterilised by boiling, immersed in 1 to 10 per cent. aqueous solution and dried, retains iodine trichloride for an indefinite time.

(168) Iodine in Hæmorrhoids.

N. IVANOFF (*Vratch*, No. 4, 1892) successfully treats prolapsed and inflamed hæmorrhoids by gently painting the parts with tincture of iodine. He records a severe case in a factory worker with very painful piles, the largest of which was as big as a walnut. The patient suffered great pain both in walking and in sitting. All ordinary medical measures having failed, and the man declining surgical interference, the author applied the tincture (once daily). The next day the mass had decreased to half its former size; after a second and last application, "only hardly perceptible traces remained"; on the third day the man left, declaring himself perfectly well. Preismann, of Odessa (*Wiener Medic. Presse*, May 31st, 1891) emphatic-

ally recommended the application of a compress, or a piece of cotton wool soaked in a glycerine solution of iodine and iodide of potassium. It is advisable to commence with a weak solution (2 grammes of the iodide and 0.2 of iodine to 35.0 glycerine), gradually increasing the strength up to 5.0 of iodide and 1.0 of iodine to 35.0 glycerine.

(169) Cure of Traumatic Tetanus.

CASALI (*Centralbl. f. Bakteriologie*, July 19th, 1892) reports a case of traumatic tetanus cured by the antitoxin of Tizzoni and Cattani; this is the seventh so treated. The patient, aged 22, ran a wooden stake into her foot. The wound suppurated, and the parts around became inflamed. Symptoms of tetanus gradually developed, and fourteen days after the injury were as follows—rigidity of masseters, so that difficulty was experienced in separating the jaws, impaired power over tongue movements, sudden contractions of spinal muscles and of those of the eyelids, stiffness of the neck muscles, risus sardonius, difficulty in breathing and swallowing. From the wound cultures of the tetanus bacillus were made. The patient received in all six subcutaneous injections of the antitoxin prepared from the blood serum of an immune dog, one injection every morning and evening, the dose being 25 centigrammes, except on the last occasion, when it consisted of 15 centigrammes. By the tenth day from their onset the symptoms had entirely disappeared, and a few days thereafter the patient's health was completely restored.

(170) Action of Salipyrin on the Heart.

P. ALBERTO (*Lo Sperimentale*, June 30th, 1892) has investigated the above question in frogs and toads, both with the heart *in situ* and separated from the body. In the latter experiments he used Williams's heart apparatus. His conclusions are as follows:—Small doses of salipyrin act favourably on the heart, facilitating its diastolic filling, increasing the force of the systole, and diminishing the actual rate of contractions. Medium doses produce arrhythmia. Strong doses cause arrest in diastole. Salipyrin acts, then, undoubtedly on the heart; whether it acts chiefly on the muscle itself or on the intracardiac nerves the author has not as yet ascertained.

(171) The Cure of Rabies.

TIZZONI AND CATTANI (*Deutsche med. Wochenschr.*, August 4th, 1892) have cured animals which exhibited the first symptoms of rabies by inoculation with an aqueous solution of a substance obtained from the serum of rabbits rendered immune to the disease. This is precipitated from the serum by absolute alcohol; it contains the protective agent in addition to other albuminoids. Four animals injected with this substance were alive and in the best of health at periods varying from sixty to eighty days after infection with rabies, the symptoms having quickly disap-

peared after the injection, whereas the four control animals died from rabies at periods varying from eighteen to twenty days after infection. The authors speak of the possibility of keeping this substance, to which the serum owes its protective and curative qualities, in a form ready for immediate use in cases of rabies.

PATHOLOGY.

(172) Staining of Tubercle Bacilli in Sections.

LETULLE (*Bull. de la Société Anatom. de Paris*, May, 1892, No. 14) refers to the difficulty of staining tubercle bacilli in tissues hardened in Müller's fluid, which has consequently been replaced by alcohol, a reagent which produces great alterations in the shape of the bacilli and in the surrounding structure. By the following procedure the bacilli can be stained, however long may have been the sojourn of the tissue in Müller's fluid: (1) Complete the hardening in alcohol; if already hard, pass through alcohol. Cut in celloidin. (2) Place sections in hæmatoxylin; to stain nuclei, wash in water. (3) Place in following solution, for at least a quarter of an hour: carbolic water, 2 per cent., rubin *g.s.* to saturate. Wash in water for one minute, and place (4) in abs. alcohol one-half minute. (5) Five minutes in following solution: carbolic water (2 per cent.) 100 gr.; iodine-green 1 gr. (6) Decolorise carefully in abs. alcohol. (7) Clear in bergamot followed by xylol. Mount in xylol balsam. The nuclei appear violet, hyalin bodies (Cazin-Russell) cerise-red, and tubercle bacilli carmine-red.

(173) Protective Inoculation of Animals against Cholera Asiatica.

BRIEGER AND WASSERMANN publish in the *Deutsch. med. Wochenschr.*, August 4th, 1892, the results of their further investigations into this subject. Cholera bacilli were grown for twenty-four hours upon a watery extract of calf's thymus. The culture medium was then kept at 65° C. for fifteen minutes or at 80° C. for ten minutes, and subsequently placed in the ice chest for twenty-four hours. Intraperitoneal injections of this fluid were made upon guinea-pigs, which thereafter proved immune to cholera bacilli of such virulence as to produce rapid death in the control animals. The minimal dose necessary to protect a guinea-pig of from 300 to 400 g. weight against a fatal dose of cholera culture was 2 c.c. (1 c.c. injected on two successive days). The authors find that an equal effect is produced when the infected thymo-extract has been merely set aside in an ice chest for several days without any warning. Precisely similar results were obtained with ordinary bouillon cultures of cholera bacilli, which had been kept at 65° C. for fifteen minutes. In this case also 2 c.c. was the minimal dose necessary to confer protection, which was still complete after the lapse of two months. A more detailed communication is promised.