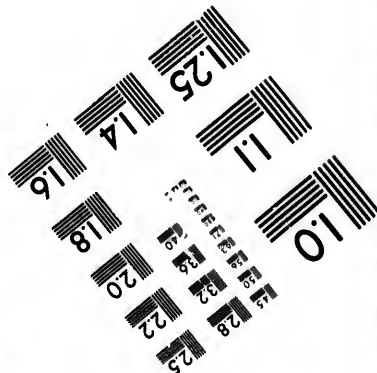
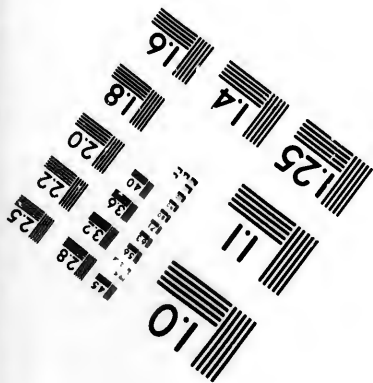
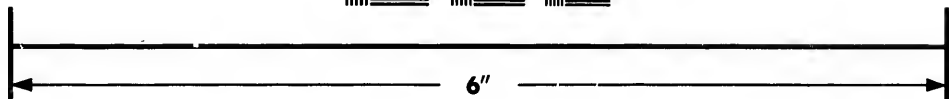
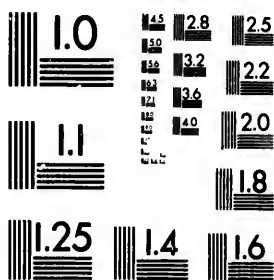


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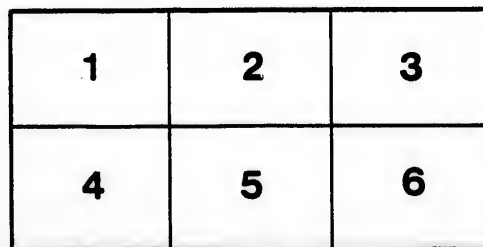
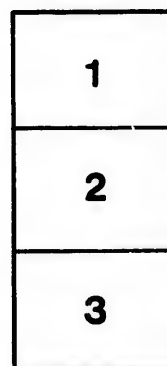
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S. H. Littlejohn -
with kind regards -

LEGAL MEDICINE.

By WYATT JOHNSTON, M. D.,
OF MONTREAL, CANADA.

Epitome.—By the death of Maschka on Feb. 5, 1899, we lost one of the most prominent medicolegal authorities. As a result of last year's agitation, we note the passage by the French Chamber of Deputies of the Cruppi law, by which, in every criminal investigation, the State allows the suspected person to choose an expert to investigate the case in his behalf, at the expense of the government. The expert must be selected from a list revised annually by the courts. Steps have also been taken in France and Canada to provide a special diploma to qualify for medicolegal practice. The Christian scientists have come into collision with the law in manslaughter cases. The subject of rigor mortis has been studied from a purely physical standpoint by A. Lacassagne, with most interesting results. Babes and E. Malvoz have published important new observations on the relations of infection and putrefaction to legal medicine. The announcement by Beskreda of hyperleukocytosis in connection with certain toxic conditions opens a new and interesting field of inquiry.

Criminology.—The voluminous literature of the subject has this year contained little that is novel or important. The pleading of Brower,¹ that asexualization is the most promising means of reducing crime, has been put on a practical basis by the suggestion of McCassy,² that criminals, especially those imprisoned for rape, should be offered their liberty at any time on condition of submitting to castration previous to discharge.

MEDICAL JURISPRUDENCE.

The **Cruppi law**, referred to above, has met with a good deal of criticism. Leredu³ claims that the defence should not be limited in their choice to an official list of experts. Motet⁴ considers that the new law will lead to constant differences between experts and prove doubly costly to the State.

Ducor⁵ insists upon the necessity of a higher standard of technical knowledge for experts. The text of the law is given in *Sem. méd.* of July 5, 1899.

L'exercice de la Médecine et le Charlatinisme is the title of an important monograph by P. Brouardel, already published partly in the

¹ Jour. Am. Med. Assoc., June, 1899.

² Ann. d'Hyg. pub., p. 442, 1899.

³ Rev. de méd. lég., Jan., 1899.

⁴ Ibid., Dec. 3, 1898.

⁵ Ibid., Aug., 1899.

*Ann. d'Hyg. pub.*¹ Though specially relating to practice under French laws, it contains much that is of general interest. It is in the same form as the rest of the series by the same writer. The chapters upon accidents in connection with anesthetics, narcotics, and erroneous prescriptions are specially interesting.

The law in its relation to physicians is discussed by A. N. Taylor,² L.L.B., in a series of articles treating of legal medicine from the forensic standpoint, which form a valuable addition to the literature of the subject.

W. A. Purrington³ has published a work entitled **legal decisions affecting physicians, dentists, druggists, and health-boards**, the law in relation to dentistry being the part most fully dealt with.

Grassl⁴ records 2 cases in which a conviction for assault was obtained against surgeons who **operated without permission**. In 1 case no objection was made until the physician took legal proceedings for collecting the fee for the operation in question.

R. M. Lizys⁵ discusses the French statutes relating to **malpractice**.

Carl Stoss⁶ reviews the **legal questions** regarding **surgical operations** and **medical treatment** in the light of cases which have come before German courts.

DEATH AND CONDITIONS AFFECTING DEAD BODIES (THANATOLOGY).

On the Cause and Varieties of Rigor Mortis.—A. Lacassagne and E. Martin⁷ state that the determining factor in the onset of rigor mortis is the drying of the muscles and tissues. Those which first lose the fluids of the body by hypostasis—*e. g.*, jaw, sternomastoid—become rigid earliest. If the body is inverted and placed on the face, the order is reversed. In artificial desiccation by ligating with an Esmarch immediately after death the depleted limb becomes rigid before the rest of the body. Chemic dehydrating agents produce similar effects. By post-mortem injection of fluids Brown-Séguard and Richet were able to retard the onset of rigidity. [The above statements do not explain why the heart is one of the first parts of the body to become rigid.]

A New Sign of Death.—The influence of respiration and putrefaction on the radiography of the lungs. S. Ottolenghi⁸ finds that (in accordance with Bougardes's statement) dead lungs are more opaque to the x-rays than living ones, and show darker at the borders, but the difference is not sufficient to give us decisive results in the case of persons recently dead (24 hours), and only becomes well marked with the onset of decomposition. Gas-formation in dead lungs gives rise to clear areas not likely to be confused with the appearances during life.

Ehrle⁹ reports the **rapid destruction of a child's body** after infanticide. The body was buried in sand, near the surface, in unusually hot weather. The surface of the body was charred slightly and the entire interior converted into a blackened pulpy mass in about a week.

¹ Paris, 1899, Baillière.

² New York, E. B. Treat, 1899.

³ Paris Theses, 1899.

⁴ Arch. d'Anthrop. crim., May, 1899.

⁵ Arch. d'Anthrop. crim., May, 1899.

⁶ N. Y. Med. Jour., 1899.

⁷ Friedrich's Blätter, July, 1899.

⁸ Lehmann, Berlin, 1899.

⁹ Viertelj. ger. Med., 1899.

⁹ Correspondenz-Bl. d. Württ. Aerzte., No. 26, 1899.

Subpleural Ecchymoses in Death from Primary Heart-failure.—A. Schulz¹ points out that with a strophanthin preparation, which in its essential action is primarily a cardiac depressant, very numerous and well-marked subpleural and subpericardial ecchymoses are constantly present after fatal doses.

Postmortem Contractibility of Muscles to Electricity.—J. Babinski² states that contraction is lost first in the facial muscles. These pass through a phase in which the faradic response is lost, but the voltaic remains, with the normal formula inverted (PFC > NFC and NOC > POC), thus being analogous to the reaction of degeneration. The irritability persists in the muscles after disappearing from the terminal nerve-filaments.

D. Mirte³ has studied **secondary postmortem atelectasis** of the lungs of the newborn. After death the atelectasis tends to extend to the deeper parts of the lungs from the surface. In premature fetuses aeration is scattered in minute areas at various points in the lungs. In lungs which have breathed some days the extension of postmortem atelectasis is very slow. In lungs with inflammatory lesions it occurs more easily. In inflated lungs it occurs readily and early, and these do not have the central aerated nucleus of lungs which have breathed.

H. Schmidt⁴ concludes, in a monographic article upon **drowning**, that the only reliable appearances are those in the digestive and respiratory organs, the tympanum, and the blood. The signs indicating the duration of immersion are indirectly of importance. It is important to recognize the injuries to which drowned bodies are subject after death. The association of a fatal wound with drowning usually indicates suicide. In doubtful cases giving a negative result it should be stated simply that the examination has not shown indications of violence.

Edema of the laryngeal folds in immersed bodies, according to M. Richter,⁵ is not a certain sign of drowning, but is not as easily produced postmortem as has been stated. Out of 18 experiments with children's bodies edema was found 8 times. With extirpated larynxes it occurred 34 times out of 77 experiments. In 23 immersed bodies it was found 9 times. Thus, it is not characteristic of drowning, but occurs postmortem when the circumstances are favorable. Once present, it does not disappear with the onset of putrefaction, and does not require long immersion for its production.

Focke⁶ discusses thoroughly the medicolegal bearings of **death from tetanus**. The autopsy findings alone are inconclusive unless the specific bacillus is demonstrated by inoculation or culture-method; and even in this case the proof is only absolute if the material is obtained from deep tissues or foreign bodies in them, as the surface of tissues is exposed to external contamination. The connection of the tetanus with a well-defined injury is necessary.

Medicolegal Pathology of Brain-injuries.—Adler⁷ lays stress upon the following points: Autopsy-results alone are insufficient to establish a diagnosis of fatal concussion of the brain without knowledge of

¹ Viertelj. ger. Med., Apr., 1899.

² Acad. d. Sc. med. di Palermo, 1899.

³ Wien. klin. Woch., 25, 1899.

⁴ Soc. de Biol., No. 15, 1899.

⁵ Friedreich's Blätter, 1 and 2, 1899.

⁶ Viertelj. ger. Med., Suppl., i., 1899.

⁷ Ibid.

the symptoms. Instant loss of consciousness he considers characteristic. The injury must be exceptionally violent. In cases complicated by alcoholism the question is whether the amount taken could have caused death within the time elapsed. Pressure-symptoms from intradural hemorrhage begin some hours after the injury. Traumatic hemorrhages are usually cortical, and spontaneous hemorrhages deep-seated. The traumatic are usually smaller and multiple; deep traumatic hemorrhages are usually associated with meningeal hemorrhage. Lacerations of brain-substance indicate alterations of pressure in the cranial cavity. Projectiles of small caliber may lodge in the brain without causing unconsciousness. Brain-injuries never in themselves cause suppuration. In another article¹ he pronounces it doubtful whether diabetes ever really results from brain-injury, and discusses at length the medicolegal symptomatology of brain-injury.

Corrière² describes the **alterations of blood in experimental asphyxia**. The most notable observation was in animals asphyxiated by CO₂ in which a great number of eosinophile cells were presented.

Alterations of the Nerve-tissues in Death by Starvation.—

S. Placzek³ found that in rabbits dead from starvation the Nissl bodies were greatly diminished, but still present. He found by the Marchi stain degenerative changes in the posterior columns. [His results differ from those of Schaffer and Jacobson, who studied the question separately, with mutually divergent results.]

Spinal Changes in Death by Hunger in Man.—Placzek,⁴

referring to his previous article, says that the degeneration described there was not recognizable by Weigert's method. He reports the result of examination of a case of death by hunger in an insane woman. [Body showed a decided panniculus adiposus.] There was a distinct wasting of the Nissl bodies.

Gaelano Corrado⁵ reports the occurrence of striking **changes in the nerve-cells** of animals killed by **electric shock**. These consist in a deformed, eroded, ragged appearance of the contour, with granular and vacuole formation and disturbed arrangement of the chromatin.

A New Anatomic Sign Concerning Death by Burning.—

F. Strassmann,⁶ in 2 cases in which an extradural blood-extravasation was at first regarded as proof that an existing fracture of the skull had occurred during life, was able to demonstrate the contrary from the circumstance of the blood-clot being surrounded by melted fat. The occurrence of hemorrhages postmortem within closed cavities, through the effects of heat, has already been explained.⁷ Strassmann was able experimentally to reproduce the condition.

Harvey Littlejohn⁸ reports 3 cases of fatal burning, in one of which pseudo-hemorrhage of the meninges from combustion occurred. In another case, a woman of 82, the left leg was completely destroyed up to the knee, although the fire had lasted only $\frac{1}{2}$ hour.

Lacassagne and E. Martin⁹ have applied the term **hepatic doci-**

¹ Viertelj. ger. Med., Suppl., i., 1899.

² Soc. de Biol., Feb. 11, 1899.

³ Viertelj. ger. Med., Apr., 1899.

⁴ Ibid., July, 1899.

⁵ Acad. Medico-Chir. di Napoli, No. 52, 1898.

⁶ Viertelj. ger. Med., Jan., 1899.

⁷ See YEAR-BOOK for 1899, p. 973.

⁸ Edinb. Med. Jour., May, 1899.

⁹ Arch. d'Anthrop. crim., Jan., 1899.

masia to denote the test for glycogen and sugar in the liver. They find that while it is present in rapidly fatal cases of poisoning, it is absent in conditions having a prolonged death-agony. In alcoholic poisoning it is absent, and also in diabetics, unless these die suddenly when in fair health. A number of medicolegal applications are instanced, for which the original article should be consulted.

Facies Sympathique in Hanging.—E. Martin¹ concludes that: 1. In hanging a peculiar appearance of the face exists, which he calls *facies sympathique*. 2. Pupillary inequality is a condition produced during life, permitting the affirmation that the hanging has not been seen on a dead body. 3. The sympathetic lesion is probably the cause of the lividity through vasomotor paralysis and dilatation.

A case² is recorded of the suicide of a man by filling his mouth with gunpowder and setting fire to it. He was conscious on reaching the hospital, but died in 12 hours. The autopsy showed laceration of the throat, esophagus, and lung-alveoli, with interstitial emphysema.

Suicide in Edinburgh.—Harvey Littlejohn³ gives a statistical and medical review of experience in Edinburgh during the past 45 years.

Schuchardt⁴ reports an **unusual injury of the neck in hanging by an iron wire**. A man was found hanging by a wire taken from a funeral wreath off his wife's bier. The furrow on the skin was 5 mm. wide.

Two Cases of Suicide in the Insane.—L. Scabia⁵ states that in both cases a quantity of pebbles was swallowed, producing intestinal ulceration. One case recovered after passing 357 pebbles, weighing together 774 gm. The other swallowed 20 stones and several buttons and had 7 submucous ecchymoses of the stomach and esophagus, and died of bronchopneumonia.

Payr⁶ observed a fatal case of **fat-embolism after brisement forcé** of a contracted knee-joint. A complete status thymicus and lymphaticus existed in this as well as in the 4 other recorded cases. In such cases the heart is not able to withstand fat-embolism, and the bones become rarefied and fattily degenerated from prolonged stay in bed, which makes this a serious intervention.

Differential Diagnosis of Traumatic and Spontaneous Cerebral Hemorrhage.—Schilling⁷ gives the following criteria: Spontaneous hemorrhages are central, and extend from within outward, usually from branches of the Sylvian artery, usually from a single source. Pathologic changes are found in the vessels of the brain and in the general circulation. The heart or the kidneys show pathologic changes. In traumatic hemorrhages without fracture of the skull, dural, subdural; or subarachnoid hemorrhages occur in a single spot or at several points. Traumatic central hemorrhages are accompanied by meningeal hemorrhages. The absence of surface hemorrhages forms a very important indication against trauma. They are caused by contraction and expansion of the cranial cavity.

¹ Arch. d'Anthrop. crim., Mar., 1899.

² Jour. Am. Med. Assoc., Jan. 13, 1899.

³ Ibid.

⁴ Aertzl. Sachverst. Zeitung, No. 12, 1899.

⁵ Rivistad. med. leg., Mar., 1899.

⁶ Münch. med. Woch., No. 28, 1898.

⁷ Aertzl. Sachverst. Zeitung, Mar., 1899.

WOUNDS AND DISABILITY FROM INJURY (TRAUMATOLOGY).

Zacher¹ has reprinted, with explanatory text, the English, Swedish, Norwegian, Danish, Austrian, Russian, Finnish, Swiss, French, and Italian statutes dealing with the plans for **State insurance of laborers** against accident and disease.

A general medicolegal study of the subject of **posttraumatic disease** has been made by A. Crouhel.²

Estimation of the Effects of External Injury upon Existing Disease in Accident-insurance Practice.—F. Kiderlen³ points out that: 1. Existing disease may be made worse directly or indirectly by external injury. 2. Owing to the existing disease the injury may have unusual consequences. 3. It may increase the effect of injury upon earning power; *e. g.*, a deaf workman may suffer greater loss from the amputation of a leg than a healthy man would.

G. Haag has published⁴ a convenient graphic schedule for estimating the **amount of disability** caused by the commoner forms of injury. His diagram (see Plate 9) indicates in percentages the loss of earning power from permanent disability of various parts of the body. By the government insurance system about 60% compensation is allowed usually in the form of an annuity for disability persisting after 3 months.

Lacy Barrett⁵ reports a peculiar **gunshot wound** caused by the ramrod of a muzzle-loading shotgun passing through the left side of the forehead, coming out through the middle of the left parietal bone of a 15-year's-old boy. After the accident he could walk, but could not speak nor move the right hand. In the hospital he became comatose; left pupil dilated; good recovery ensued.

Hemorrhagic Traumatic Pachymeningitis.—C. F. v. Vlentent⁶ has studied clinical material obtained from Köhl, and concludes: 1. Appearances analogous to pachymeningitis hæmorrhagica occur from organization of primary hemorrhages in the subdural spaces. 2. The organization-tissue at first tends to enclose the coagulum, and then extends inward concentrically. 3. Recurrent bleedings do not occur; the process is not progressive, but tends to cicatrization. 4. Animal experiments are not strictly analogous to general pachymeningitis. 5. Traumatic meningitis is not identical with spontaneous. The bleeding may be from the dura or the pia, or both.

Drenkhahn⁷ discusses the medicolegal questions arising in connection with **injuries of the thoracic duct** in a monographic article, too long for abstraction here.

Lung-disease from Accidental Inhalation of Nitrous-acid Fumes.—Becker⁸ states that a previously healthy workman, aged 30, employed in etching bronze, carried a pot of fuming nitric acid, 80 cm. wide, a distance of 10 feet and inhaled the vapor, which caused immediate coughing and expectoration of fluid blood for 30 minutes. Next day only blood-tinged sputum. On the third day hemoptysis of clear blood

¹ Die Arbeiterversicherung Ausland, Berlin, 1899.

² Thesis, Lille, 1899.

³ Viertelj. ger. Med., Jan., 1899.

⁴ Munich, 1899.

⁵ Lancet, Jan. 7, 1899.

⁶ Dis., Bonn., 1898.

⁷ Friedreich's Blätter, 2 and 3, 1899.

⁸ Aertzl. Sachverst. Zeitung, 13, 1899.

recurred; but the sputum remained bloody for 8 days. Work was resumed after 4 weeks, and kept up for 3 months, with cough and pain in the chest, at the end of which time the sputum was again bloody. At the end of 6 months there was bronchial catarrh, liable to exacerbations.

Rupture of Internal Organs from Contusions.—C. Seill¹ gives a very interesting statistical study of the nature and comparative frequency of the lesions of different organs.

Pretz² reports 2 cases of **traumatic entry of air into the knee-joint**. The first was that of a man caught beneath the fender of a tram-car, and in a state of profound shock. No fractures. The skin was torn for 25 cm. over the left knee, the knee-joint being quite tympanitic. The joint was freely movable. Recovery. In the second case the patient got the knee caught beneath a trap-door, which was forcibly closed. The skin was crushed and torn for a hand's breadth above the knee. The knee-joint was tympanitic and crepitant to the touch. The joint was freely movable. Emphysema lasted 4 days. Sepsis ensued and proved fatal. In the knee-joint blood and pus were found. Only a few cases are recorded.

Cranial Defect from Fractures during Childhood.—H. Chiari³ believes that fractures of the skull not infrequently remain ununited, not only when compound and infected, but also when subcutaneous. This is due to slight tendency to form callus in the cranial bones and to the tendency of the edges to become displaced. Separation of periosteum and dura from the edges by hemorrhage or enclosure of soft tissues is another cause. Atrophy and absorption of edges may also occur, leaving a wide cleft. In young children there is a tendency to separation of the edges from relatively greater effusion and the distensibility of the cranium. Fractures during the first 3 years tend to end in defects. The meningocele formations exaggerate this tendency (traumatic spurious cephalohydrocele). Very few authentic postmortem records are available. Chiari reports 2 postmortems in such cases, 1 from the effects of forceps.

Varices and Accident.—Wagner⁴ concludes that: 1. Varices cannot originate from trauma. 2. Existing varices may be aggravated from the effects of injury. 3. Existing varices may be developed more rapidly from therapeutic measures rendered necessary by accidents. 4. Such varices tend in some cases to induce flat-foot. 5. The aggravation of varices should, under the above circumstances, be estimated as one of the effects of the accident.

W. Herzog⁵ finds that **traumatic gangrene** after severe crushing injuries, or even subcutaneous ones, is due to lesions of the inner coats of the arteries.

Gangrene of Skin.—G. Riehl⁶ reports 4 cases of self-inflicted injury of this nature, 1 by inunction of concentrated brine, 2 by scratching and washing with green soap and acetic acid, and 1 by unknown methods. If the history does not reveal the origin, certain objective appearances are of value: the irregular, jagged edges of the spots, often with deep projections of normal skin not corresponding either to the

¹ Viertel. ger. Med., Oct., 1899.

³ Prag. med. Woch., 11-13, 1899.

⁵ Beiträge z. klin. Chir., Band 23, S. 643.

² Deutsch. Zeit. f. Chir., Band 48, S. 591.

⁴ Aertzl. Sachverst. Zeitung, 11, 1899.

⁶ Wien. klin. Woch., 14, 1899.

course of nerves or vessels, and the varying depths of the loss of substance should direct attention to this.

Forensic Significance of Suppuration of Chemic Origin.

—Moritz Mayer¹ refers to cases recorded of purulent inflammation caused by mercury, gray oil, silver nitrate, croton oil, cantharides, injections of opium and morphin, applications of turpentine liniment, and tartar emetic.

Grashey² reports a case in which **actinomycosis** infection was conveyed by the kick of an ox in a woman who was kicked in the jaw.

Trauma and Tuberculosis.—Lannelongue and Achair³ report that experimentally tuberculized animals showed no tuberculous lesions at the site of trauma on the abdominal walls.

E. Schäffer⁴ reports a case in which a previously healthy boy of 7 developed this condition the day after receiving a blow on the forehead. Examination of the lump showed no grounds for supposing that the trauma had caused dissemination of the tuberculous poison. Cases requiring special care are: 1. Fractures and their results. 2. Cellulitis of all kinds in patients over 40. 3. Deep injuries of young persons, with division of tendons, muscles, and nerves. 4. Hernias. 5. Simulation doubtful; cases exaggerated. 6. Traumatic neurosis, pleurisy, etc.

Weibel⁵ reports the case of a boy of 6 years, apparently healthy, who took sick 2 days after a blow on the head. The autopsy showed a caseous primary focus in the bronchial glands.

Urban⁶ found that in the animals infected with tubercle-bacilli, on breaking the bones and dislocating the joints, the joints become tuberculous, but the diaphyses remain free. Small wounds are more liable to infection than large ones.

Traumatic Origin of Tumors.—Ravel⁷ has studied the development of melanosarcoma after injury to nevi, and reports a case in which contusion of a mole on the upper arm was followed by sarcoma, and death in 3 months.

Fatal Sarcoma after Injury.—Obergtachlan⁸ relates the case of a previously healthy strong man, who, on pushing sideways on a heavy wagon, on July 1, 1897, felt pain in the right lower abdomen, but worked till July 26. He consulted a physician on July 4, who found a pigeon-egg-sized muscle-hernia or muscle-rupture. In August there was a fist-sized sarcoma. Death took place on April 4, 1898.

Lähr⁹ reports 4 recent cases of **brain-tumors after head-injuries**. The first case was that of a woman of 33, syphilitic, who struck her head against that of her little child. There were hemiparesis and pressure-symptoms 4 months later, with Jacksonian epilepsy. Death in 8 months. There was gumma-formation in the cortex in the part corresponding to the site of injury in the right supramarginal gyrus. The second case was that of a locksmith, aged 23. During an epileptic attack he struck his head against a piece of machinery. Pressure-symptoms appeared in 4 months and death occurred in 6 months. There was a gliosarcoma of the frontal lobe beneath the site of injury. The third

¹ Viertelj. ger. Med., Apr., 1899.

² Gaz. des Hôpitaux, No. 54, 1899.

³ Münch. med. Woch., May, 1899.

⁴ Diss., Kiel, 1899.

⁵ Unfallvers. Praxis, 22, 1899.

⁶ Monats. Unfallheilk., 6, 1899.

⁷ Ibid., Mar. 14, 1899.

⁸ Unfallvers. Praxis, Mar., 1899.

⁹ Charite Annalen, xxiii.

case was that of a 33-years-old woman, who struck her occiput in falling from a ladder. Pressure-symptoms and paralysis were present 1 month after; death in 3 months. There was a sarcoma of the corresponding region of the right occipital lobe. The fourth case was that of a 41-years-old workman, in whom, 5 months after repeated blows on the head, sarcoma of the frontal lobe was diagnosed.

Traumatic Gastrectasia.—Kocher¹ reports the case of a man of 34, who fell 2 meters, striking his right side on a ship's bulwark. Intestinal obstruction occurred, subsiding without operation, but followed by gastrectasia, recognized 3 years later. The symptoms were relieved by gastroenterostomy. Extensive perihepatitis and adhesions about the region of the liver were found at the operation.

Ulcer of Stomach caused by Trauma.—C. Thiem² tells of a healthy man of 47, who was struck in the epigastrium by the snout of a cow, and who felt immediate pain, transitory in nature. Eleven days after he vomited blood, became quite anemic. Some tenderness and fullness remained in the epigastrium 9 months later. Improvement followed dietetic treatment. Thiem thinks this was not purely autodigestion, but that autoinfection of the stomach-wall took place when it was bruised.

Dovie³ reports the case of a man who was kicked by a horse in the right side of the abdomen. Obstinate constipation and vomiting followed. Laparotomy showed a constriction at the pylorus. Gastroenterostomy was followed by improvement.

Lewie⁴ states that when empty the stomach is not exposed to direct injury. The full stomach, on the contrary, lies directly against the anterior wall. This does not suffice in itself to explain gastric ulcer, conditions of anemia, etc., being more likely; *chronic traumatic* effects, such as result from tight lacing and repeated pressure. [These are really not traumatic effects in a legal sense as regards accident.] Twelve cases illustrating the direct effects of trauma are given; also some cases from strains during exertion, etc. Some experiments upon animals are also reported. The pressure of corsets is regarded by Rasmussen as an important factor.

Kronlein⁵ reports 2 cases. The first case was that of a trainer, a man of 24, who fell from a horse, striking the pit of the stomach on the pommel of the saddle. Four weeks later he began to vomit after eating. Hematemesis was present in 4 months. Resection of the pylorus was done at 8 months. Death. The second case was in a workman of 48, who jumped from a hayrick, and struck a fork against the pit of the stomach. No ill-effects immediately. Next night there was severe pain in the left side; unable to work. The following week there were loss of appetite, vomiting, and tenderness near the xiphoid. Cure followed laparotomy and resection of the pylorus. The gradual onset is explained by supposing that the injury was beneath the mucosa.

Brandenberg,⁶ in studying **hernia and injury**, found that out of 3052 laborers 80.2% were found predisposed, and 19.8% not so. Of those disposed, traumatic hernia occurred in only 0.32%.

¹ Aertzl. Sachverst. Zeitung, 5, 1899.

² Diss., Berlin, 1898.

³ Mittheil. a. d. Grenzgeb., Band 4, 1899.

⁴ Monats. f. Unfallheilk., May, 1899.

⁵ Diss., Kiel, 1898.

⁶ Correspbl. Schw. Aerzte, Mar., 1899.

Strassmann,¹ in discussing **abdominal hernia and trauma**, reports a case from carrying a too heavy sack, cites several cases, and states that he does not think the established proof of predisposition should negative the claim when the connection of result and exciting cause is clearly made out.

Noack² investigated the subject of **peritoneal adhesions** after severe compression of the abdomen, causing severe colic and constipation. He reports 4 new cases, the interval from injury being 1 to 10 years.

Hemorrhagic Pancreatitis due to Traumatism.—Ferrand³ reports the case of a man of 39, who died 6 months after receiving a violent blow in the epigastrium. In the region of the pancreas 2 to 3 liters of bloody fluid were effused, the pancreatic tissue being infiltrated with blood and sclerosed. The organ was enlarged.

Isolated Injury of Pancreas.—E. Stern⁴ reports 2 cases, one that of a 37-years old navvy, who was crushed between the buffers of a railway train; the other that of a man of 38, who was run over by a carriage. The first case was fatal after 7 months. A large cyst had formed, which led to local inflammation and a fistula leading to the left pleura. In the other case death occurred 4 days after the injury, and the gland was found divided transversely.

Cyst of Pancreas following Trauma.—I. von der Haau⁵ relates the following case: Dec. 3, 1895, I. D. I., a boy of 9, while coasting, was struck in the region of the stomach by a playmate's sled. Shock, vomiting, and pain in the epigastrium followed. After 3 months there was noted a large tumor in the epigastrium. Aspiration gave fluid with amyloid properties. Three hours afterward symptoms of acute peritonitis led to immediate opening of the abdomen, but all trace of the cyst had disappeared. Good recovery, with reappearance of the cyst in 3 weeks. Second operation resulted in fistulous opening, which soon healed. [This is the only case reported in a child.]

C. Thiem⁶ contributes cases illustrative of the **gynecologic effects of accident**. He reports 2 cases of pelvic inflammation: 1. Prolapse of vagina, ascribed to accident—lifting heavy sacks; felt pain in abdomen—only asked for medical advice 3½ months later. Disallowed. 2. Retroversion; healed inside of the 13-weeks limit, which precludes disability claims; pain came on during act of lifting a heavy basket. No traces of injury were left.

C. Thiem⁷ also states that **dilatation of the oviducts** cannot be considered an effect of accident. In one alleged case, caused by carrying a basket, pyosalpinx was present.

F. H. Kornfeld⁸ discusses the decisions of the German Reichsversicherungungant in reference to **gynecologic effects of accident**. In a case of alleged accidental prolapse the judgment of the first court was reversed on appeal, on the grounds that neither the accident nor the connection of the condition with an accident had been proved. The woman

¹ Aertzl. Sachverst. Zeitung, Heft 10, 1899.

² Mittheil. a. d. Grenzgeb., Band 4, Heft 5.

⁴ Viertelj. ger. Med., Oct., 1899.

⁶ Monats. f. Unfallhlk., Jan., 1899.

³ Sem. méd., Nov. 23, 1898.

⁵ Jour. Am. Med. Assoc., July 8, 1899.

⁷ Ibid., Sept., 1899.

⁸ Ibid., Jan., 1899.

complained of a sudden pain while working a hand-pump, and had old pelvic disease.

Bruns¹ reviews recent literature on **nerve-disorders due to injury**.

Müller² tells of a **case of tabes following trauma**. A stableman, aged 29, was knocked down by a horse, which trod on his breast and broke his right leg. Symptoms began 4 months later. The patient had had a slight venereal infection 10 years before.

E. Trommer³ reports cases [alleged] of **tabes after trauma**, in one of which symptoms appeared in a man of 42, 8 weeks after crushing of his left foot. In the other case exposure to cold was the history. Mendel,⁴ however, states emphatically that tabes cannot ensue from injury, though it may be aggravated as a result. He gives very full citations of the literature on the subject.

Loewe⁵ relates cases of **loss of deltoid muscle**, with preservation of power to raise the arm. He reports 3 cases.

W. Wagner and P. Stolper⁶ have written a very full and instructive monograph upon injuries of the vertebræ and spinal cord.

Tillman⁷ reports experiments with apparatus to imitate conditions of concussion of the brain. He explains the lesions as due to changes in volume and to the differences in the specific gravity of the cranial contents.

E. Levy⁸ makes report of 4 cases of **metastatic meningitis after injury**, in which all local causes, such as head-injury, car-disease, etc., were excluded, and with no metastases elsewhere in the body. One case has been previously reported by E. v. Hoffmann.

S. Paget⁹ has observed **voracious hunger and thirst after injury or disease of the brain**. He gives 11 cases. Diabetes was excluded in all.

Medicolegal Relations of Traumatic Hysteria.—Peirce Bailey¹⁰ gives a useful and practical discussion of the causes leading to confusion in assigning damages in this class of cases.

Traumatic Nerve-diseases in Children.—P. Schuster and K. Mendel¹¹ report a case of traumatic hysteria in a girl of 11, 1 of astasia abasia in a girl of 12, and 2 of hysteric monoplegia in girls of 15—all following trauma.

Paralysis Agitans from Trauma.—R. Krafft Ebing,¹² out of 110 cases, found 7 (4 males and 3 females) in which trauma appeared to be the cause. In 1 case an interval of 6 years elapsed before the onset of the tremor. In all of the above 7 cases the tremor began at the site of the injury. In the remainder it began at a remote point, usually in the upper extremity.

Köhler¹³ reports a case of a man, of independent means, 61 years old, who fell on his right arm in March, 1893. Tremor began in the same arm two months later. The case improved somewhat after treatment.

Traumatic Amyotrophic Lateral Sclerosis.—Hauck¹⁴ cites the case of a healthy laborer, who cut his left arm and right leg in 1881.

¹ Schmidt's Jahrbuch., No. 7, 1899.

² Berlin. klin. Woch., No. 7, 1899.

³ Aertzl. Sachverst. Zeitung, 14, 1899.

⁴ German Surgical Congress, 1899.

⁵ Tr. Clin. Soc., vol. xxx.

⁶ Monats. f. Unfallheilk., No. 6, 1899.

⁷ Monats. f. Unfallheilk., 1899.

⁸ Aertzl. Sachverst. Zeitung, May, 1899.

⁹ Amtl. Nachr., June, 1899.

¹⁰ Enke., Stuttgart, p. 564, 1898.

¹¹ Beiträge klin. Chir., Band 23, Heft 1.

¹² Med. Rec., Mar. 14, 1899.

¹³ Wien. klin. Woch., Jan. 12, 1899.

¹⁴ Aertzl. Praxis, 13, 1899.

Since then there has gradually developed a muscular atrophy of the left hand and right leg.

Multiple Sclerosis from Trauma.—B. Leick¹ relates the case of a laborer, aged 34, who received a violent blow from a plank upon the forehead, followed immediately by loss of consciousness, bleeding from the mouth and nose, and paralysis of the left side. Four months afterward there were headache, loss of sexual vigor, and pains and paresthesia in the feet. Speech was thick. Tremor was not well marked. No improvement followed treatment.

Spinal Concussion.—Stolper² finds that in his experience the so-called cases have been either cases with symptoms of contusion and laceration of the cord or vertebral column, or cases in which psychosis could be invoked as an explanation of the severity of the subjective symptoms in the absence of objective ones.

H. Schmaus³ outlines the present state of knowledge concerning **spinal commotion**. He considers that the proof of a pure spinal commotion has not yet been given, as no case recorded has been free from lesions of the vertebral column. He considers that a line must be drawn between spinal and vertebral commotion, and that the previous cases are not sufficiently exact to exclude sources of error.

Leppmann,⁴ as a result of a **medical investigation of noise**, says that in order to produce serious consequences the noise must have lasted for a considerable period. Those most likely to be injurious to health are: noises during sleeping-hours; noises which are unequal, with alternating shrill or very deep tones, especially when intermittent, as the anticipation has a disturbing influence; noises associated with vibration of the floor or table or working implement. The absolute intensity of noise is the least important factor, as we have no scientific means of recording sound intensity.

G. Gottwald⁵ has written a monographic article on the relation of **caries of the ear** to legal medicine.

Rath⁶ reports on the connection between **head-injury and ear-disease**.

John Thompson⁷ detected simulated deafness by a phonendoscope being placed with the tubes in both of the patient's ears; then a tuning-fork was connected with it by touching its tympanum, and the tube from the patient's sound ear disconnected near the body of the instrument without his noticing it.

Treitel⁸ deals with the **estimation of ear-diseases after injury**. He holds that every case of head-injury should undergo expert examination of the ear as soon as the condition of the patient permits it. At that time simulation is more easily detected than later. Care must be used in syringing ears immediately after the injury; and cases of bleeding from the ear should be treated antiseptically. The disability would depend in each case upon the extent to which deafness, vertigo, etc., interfered with the occupation.

The diagnosis of **traumatic diseases of the internal ear** is

¹ Deutsch. med. Woch., Aug., 1899.

² Münch. med. Woch., Mar. 3, 1899.

³ Viertelj. ger. Med., Suppl. I., 1899.

⁴ Laryngoscope, Jan., 1899.

⁵ Aertzl. Sachverst. Zeitung, 15, 1899.

⁶ Aertzl. Sachverst. Zeitung, 2, 1899.

⁷ Diss., Strassburg, 1899.

⁸ Monats. f. Unfallheilk., p. 320, 1899.

dealt with by R. Müller.¹ He refers to 35 medicolegal cases with typical symptoms—loss of hearing, headache, giddiness, and tinnitus, and secondary symptoms of nervous disturbance, paresis, and sleeplessness, and nystagmus. The relation between intensity of deafness and severity of subjective symptoms is a constant one. [This does not hold good of all stages, as deafness increases as other symptoms diminish, as a rule.] High notes of the tuning-fork are better heard than low ones. Hyperemia of the tympanum is often seen after head-injury.

Mascinka² has written an important treatise upon **ophthalmic accident practice**. Praum³ has also written an exhaustive monograph upon **injuries of the eye**.

Simulation of Surgical Diseases.—Joseph Leval⁴ says that the temperature should be proved normal before deciding that simulation is being practised. The commonest malady feigned is lumbago. Many patients know that in genuine cases the man can bend without pain, but not become erect. Persons with lumbago can raise their outstretched arms to 45° in a sagittal direction against resistance painlessly, but not above the horizontal. Pain is felt at once if the arms are moved backward in a sagittal direction. The arms stretched in a frontal direction can be moved painlessly forward and downward, but not backward and downward if resistance is sufficiently strong. When the patient sits on a chair he can raise the lower extremities against resistance but not lower them (and extend the hip). This is a specially good test. In testing the muscles, first put the suspected group in action, then out of action, making direct resistance from a point sufficiently removed from the seats of complaint.

MEDICOLEGAL TESTS.

Oscar Amedo⁵ has written a treatise on the **medicolegal aspects of dentistry**, especially with regard to its service in aiding identification.

Maurice Leprince⁶ gives a careful study of **spermatozoa formation** in relation to legal medicine.

H. Gross⁷ points out that as blood-stains are often removed from clothes by oxalic acid, and from woodwork with dilute sulphuric acid followed by soda, the recognition of these substances under such conditions is almost as conclusive as actually finding the original blood-stains.

According to H. Gross,⁸ **tattoo-marks** can be removed without the painful processes of excision or obliteration, which leave deep scars, by using a paste of salicylic acid in glycerin, applied by a compress and kept in position by a bandage. Even this leaves a shiny-red appearance of the skin for about 2 or 3 years. If the affected area corresponds in size or position with the record of the tattooing, it gives circumstantial evidence that a mark of identification has been removed.

Daubler,⁹ in attempting to distinguish human from animal blood by measurement of the blood-corpuscles, found that the **dimensions of**

¹ Charité Annalen, xxiii.

³ Ibid.

⁵ Jour. de méd. de Paris, Jan. 1, 1899.

⁷ Arch. krim. Anthropol., Band 2, Heft 2.

² Bergmann, Berlin, 1899.

⁴ Wien. klin. Rundschau, 25, 1899.

⁶ Paris Thesis, 1899.

⁸ Ibid., Jan. 19, 1899.

⁹ Viertelj. ger. Med., Oct., 1899.

the red blood-disks could be retained by a mixture of 1 part of formalin in 3 parts of serum in glycerin. The preparation becomes transparent without swelling of the corpuscles.

Formalin as a Reagent in Examining Blood-stains.—G. Puppe¹ finds that in combination with an alkali and Pacini's or Ronsini's solutions this substance has the property of preserving the form of the blood-corpuscles for microscopic examination, while the coloring-matter may be extracted for chemic and spectroscopic tests. The altered blood-pigment is soluble in alcohol. [The test promises to be of much value, as the methods in use have not permitted this.]

C. Ipsen² recommends for the **chemic detection of carbon monoxid** in blood agitation in a tightly closed test-tube to which a few drops of caustic alkali solution and a little pure glucose have been added; monoxid blood becomes cherry-red and normal blood blackish red. He claims that 8% to 10% of monoxid is sufficient to produce the reaction. A control-tube with normal blood should be used.

L. Wacholz³ finds that the grape-sugar test recently recommended by Ipsen is inferior to the tannin-test in delicacy.

Infectious Diseases and Legal Medicine.—V. Babes⁴ concludes as follows: The bodies of healthy persons dying suddenly are free from bacteria if examined before putrefaction sets in. Hence the presence of bacteria (*Bacterium coli*, *Bacillus proteus*) in a perfectly preserved fresh body indicates terminal infection. Hemorrhagic septicemia is very liable to be mistaken for ecchymoses. A short account is given of 6 cases of anthrax, with a cerebral lesion, so rapidly fatal as to simulate apoplexy or poisoning. In certain cases bacteriologic lesions may show a natural cause of death even in greatly decomposed bodies.

Radiography in Legal Medicine.—A case is cited⁵ in which a workman, wounded by a revolver-shot in the orbit, became gradually blind. It was claimed by the defence that the blindness had no connection with the injury; but the radioscope showed that the optic nerve was in the track of the ball. In another case a coachman tried to kill his mistress, firing at her head and then shooting himself in the chest. The balls were extracted and the wounds healed. At the trial it was claimed that the revolver had gone off accidentally, only one ball having been extracted; but this plea was abandoned when the radioscope showed a second ball lodged below the site of the first, at the back of the head.

TOXICOLOGY.

A. J. Kunkel⁶ contributes a monograph, of which only the first part, consisting of 564 pages, has appeared.

In a new work on toxicology, only advance sheets of which have as yet appeared, Vibert⁷ aims at treating the subject from the standpoint of the medical expert as distinguished from the purely toxicologic chemist. The sifting of the data available by such a man as Vibert should be of great service.

¹ Viertelj. ger. Med., Apr., 1899.

³ Ibid., Oct., 1899.

⁶ Ibid., June, 1899, p. 566.

² Ibid., July, 1899.

⁴ Ann. d'Hyg. pub., Mar., 1899.

⁶ Lehrbuch der Toxicologie, Jena, 1899.

⁷ Paris, Baillière.

In addition to the usual information given in works of this class, the discussion of physiologic experimenting with poison is very fully treated of by J. Ogier.¹ The book is well up to date.

Beskreda² has made a microscopic study of immunity against arsenical compounds, especially as to the role of the leukocytes. Chemotactic experiments with arsenic showed the intensity of leukocytic reaction to be proportionate to the resistance of the animal. It varies with the animal employed, the dose of the poison, and whether the animals are habituated to arsenic or not. In massive toxic doses a hypoleukocytosis occurs, the number falling proportionately with increase of the dose. The fall is in the number of polynuclear cells, their relative number being $\frac{1}{4}$ to $\frac{1}{5}$ the normal ratio to mononuclear, the majority of white cells remaining are small lymphocytes. If the animal recovers completely, the hypoleukocytosis is succeeded by a hyperleukocytosis, chiefly of the polynuclear elements. If the animal survives several days, there occurs first a hypoleukocytosis, followed by a transient hyperleukocytosis, and then again a hypoleukocytosis. The leukocytes are found to contain arsenic in this stage when they are in excess, but not in the final hyperleukocytic stage.

Bacteriologic Evidence in the Medicolegal Diagnosis of Poisoning by Arsenic.—E. di Mattei³ considers that the Gosio test for arsenic is superior in delicacy and rapidity to the Marsh test, and can be applied to the examination of organs.

F. Harbitz⁴ reports an instance of **food-poisoning**, after eating putrefied fish, in a family of 5 that ate putrid red herring. Within 5 days all became ill with nausea, constipation, and diplopia, lasting 6 weeks to 2 months, followed by paresis of the eye-muscles and paralysis of the pharynx and bladder. In 1 case symptoms persisted for 7 months.

Several outbreaks due to **meat-poisoning** were studied by Herbert Durham,⁵ who traced it to the effects of the Bacillus enteritidis Gärtner and the butyric bacillus of Van Ermengen. Out of 4 outbreaks, the serum-diagnosis method indicated in 3 the bacillus of Gärtner, and in the other the bacterium was isolated. The cow supplying the meat was found to be diseased. The symptoms were rigor, brief fever, great weakness, thirst, onset sudden, with vomiting, and pains in the joints.

Karn⁶ reports that in 3 cases of poisoning from **spoiled ham** the symptoms first appeared 2 days after the meal, and were chiefly paresis of the ocular muscles, dryness of the mouth, gastric uneasiness, constipation, and hoarseness. Stomatitis followed. The symptoms lasted 1 month. [The condition more resembles infection.]

S. Kob⁷ reports a case in which morphin-poisoning of a newborn child by its mother was detected by the presence of bismuth in the greatly decomposed body. On the assumption that bismuth was usually given with opium, it was found that the mother had shortly before procured powders of bismuth and opium. A verdict of manslaughter was rendered.

L. Hougonneug⁸ reports a case of **criminal poisoning by lead**, in which small doses were continued during a period of 6 months. The

¹ *Traité de Chimie toxicologique*, O. Doin, Paris, 1899.

² *Ann. de l'Institut Pasteur*, No. 3, 1899.

⁴ *Deutsch. med. Woch.*, Feb. 23, 1899.

⁶ *Aertzl. Praxis*, No. 4, 1899.

³ *Rivista Med. Leg.*, Feb., 1899.

⁵ *Brit. Med. Jour.*, Dec. 17, 1898.

⁷ *Viertelj. ger. Med.*, Apr., 1899.

⁸ *Arch. Anthropol. Crim.*, May, 1899.

symptoms were vomiting, colic, and constipation, followed by paresis and epileptiform seizures. The suspected persons were convicted.

Bullinger¹ mentions among **drugs in which oxalate crystals** occur, squills, condurango, *Uva Ursi*, rhubarb, jalap, and ipecacuanha. This is a point to be remembered when crystals are found in the stomach.

Neumann² reports that small ulcerations, having the character analogous to **iodid-eruption** on the skin, were found in the stomach of a woman who had died of nephritis, and had been taking potassium iodid, and who presented the atypical cutaneous eruption.

Neuburger³ contributes an article upon **sublimate-poisoning**. A good literary review of the whole subject is given, including 200 references.

F. Strassmann⁴ states that the **passage of sublimate through the placental circulation** shows that in poisoning by large doses the sublimate is found in the fetus; but in repeated small doses this is not the case. He explains this by the fact that the placental lesion occurs in several cases, which favor the transmission.

Asphyxia from Hydrogen Sulfid in Sewer-gas.—L. Surre⁵ reports the case of 6 workers in sewers, who were overcome by the gases. Five were resuscitated. In the fatal case the gas from the blood, received a few hours after death, blackened lead-acetate paper, and the urine also gave this reaction. No spectroscopic changes could be detected in the blood. No anatomic lesions were found at the autopsy.

R. Alberici⁶ has studied the **diffusion of alcohol in dead bodies**. Experiments on dogs show that after postmortem introduction of alcohol into the stomach, it is recoverable in the heart, lungs, liver, and spleen. In the muscles, kidneys, and brain it was only found when more than 12 hours had been allowed for its diffusion.

Wodke⁷ records injuries to health in safety-match factories from **potassium bichromate**. The lesions consist of ulcerations of the nasal septum, caused by the inhalation of irritating particles.

C. Richet⁸ found the **toxicity of thallium** (0.055 gm. per kg. of dog) to be about the same as lithium and other substances which resemble it chemically, though it follows the law that the rarer metals of a group are more toxic than the common ones.

G. Carrière⁹ writes upon the **influence of anthrax-infection on strychnin-poisoning**. The resistance to the poison was not altered during the first hours after infection, when it increased and subsequently diminished.

Nitronaphthalin vapor is mentioned as a cause of **opacity of the cornea** by V. Hauke.¹⁰ It comes on gradually, making objects look hazy. In the central zone of the cornea is a grayish, ill-defined opacity, due, on closer examination, to closely set vesicles.

P. Petit¹¹ calls attention to certain toxic accidents in connection with enamels dissolved in benzine. The trouble is due to the presence of carbon disulphid in crude benzine.

¹ Viertelj. ger. Med., July, 1899.

² Aertzl. Sachverst. Zeitung, Mar. 4, 1899.

³ Ann. d'Hyg. pub., Mar., 1899.

⁴ Viertelj. ger. Med., Oct., 1899.

⁵ Ibid., No. 3, 1899.

⁶ Ibid., No. 3, 1899.

⁷ Wiener Med. gessellsch., Feb. 3, 1899.

⁸ Arch. f. Anat. phys., Suppl., 1899.

⁹ Rivista di Med. Leg., May, 1899.

¹⁰ Soc. de Biol., No. 12, 1899.

¹¹ Wien. klin. Woch., No. 27, 1899.

¹² Jour. des Brasseurs; Ann. d'Hyg. pub., Mar., 1899.

Acute Psychosis from Salicylic Poisoning.—Saloschin¹ records a case in which an anemic girl of 31, suffering from acute rheumatism, was given 18 gm. of sodium salicylate in 36 hours, and became violently delirious with hallucinations and delusions, these disappearing completely in 18 hours. Associated with this were the dulness, headache, and tinnitus characteristic of the drug.

SEXUAL.

Neugebauer² has minutely studied the **injuries to the female sexual organs during coitus**. Records of 157 cases, divided into the following 30 groups, are given: 1. Severe hemorrhage with normal laceration of hymen. 2. Hymenovaginal rupture. 3. Laceration of the hymen, and extending to stretching of the rest of the vulva. 4. Perforation of the hymen, leaving normal orifice intact. 5. Stripping off of hymen at line of attachment to vulva. 6. Lesions of vulva with false passages in greater labia. 7. Laceration of hymen extending to urethra. 8. Laceration of clitoris or meatus. 9. Laceration of navicular fossa. 10. Laceration of frænum labiorum pudendi. 11. Laceration of perineum. 12. Laceration of sphincter ani. 13. Laceration from anal orifice to mons venetis. 14. Coincidence of several of above lacerations. 15. Longitudinal laceration of first vaginal wall. 16. Longitudinal laceration of anterior vaginal wall. 17. Of lateral wall. 18. Laceration of posterior vaginal fornix, superficial. 19. Laceration of posterior vaginal fornix extending down to the parametrium. 20. Laceration of the posterior vaginal fornix, parametrium, and peritoneum. 21. Laceration of the vaginal fornix opening Douglas's culdesac, with prolapse of intestine. 22. Laceration of the vaginal fornix and prolapse of the cervix. 23. Lesions of the bladder with hemorrhage in cellulitis. 24. Vesicovaginal fistula. 25. Paravaginal false passage. 26. Rectovaginal fistula. 27. Laceration of perineum into rectum. 28. Vulval sinus from hymen. 29. Perforation of septum of duplex vagina. 30. Perforation of septum of a bifid hymen.

Persistence of Hymen after Marriage.—*J'Anjou méd.*, — 1899, reports 3 cases after 10, 15, and even 20 years respectively of married life. The first 2 were observed through examinations necessitated by intercurrent disease. In the other case the parties wished before adopting a child to know if the sterility of the woman was absolutely permanent.

A. Mantzavinds³ relates a case of **false accusation of rape**. The act said to have been committed the previous day by accused, a boy. No marks of violence were seen, although energetic struggle was alleged, but blood was seen on the chemise and drawers. The genitals were blood-stained, and the hymen recently ruptured and bleeding. Employment of an anesthetic or narcotic was excluded. On digital examination a broken hen's egg (!) was found in the vagina. The girl's parents subsequently admitted having forcibly introduced it in order to simulate the appearance of rape.

¹ Wien. klin. Rundschau, May, 1898.

² Monatsh. f. geburtsh., Band 9, Heft 3.

³ Indépendance médicale; Arch. d'Anthrop. crim., Mar., 1899.

F. Neugebauer¹ gives an analysis of 50 cases of **marriage between persons of the same sex**, with several cases of divorce from errors of sex.

Injury of Domestic Animals by Sexual Perverts.—A. Guillebeau² emphasizes the importance of veterinarians being familiar with the evidence of such acts. In cases of sadism valuable cattle were found to be destroyed. The unnatural sexual acts were, however, fatal only in the case of hens; these showed rupture of the liver and fatal bleeding, and sometimes broken bones. In 1 case human spermatozoa were found in the cloaca, which was unusually widened. Wounds of the vagina, with rectal and peritoneal perforation were met with in cattle subject to sadistic acts. In 1 case a cattle-tender was shown to have introduced a pitchfork handle into the vagina and twisted it round.

Case of Precipitate Labor in a Primipara of 43.—Knepper³ tells of a child that was born with only very short pains, taken for desire for defecation, into a chamber-pot. The escape of the liquor amnii was first noted afterward. The child was a girl, weighing 3000 gm., diameters of the head not given. About 4 months later a slight prolapse of the anterior vaginal wall was noted.

Exceptional Cause of Syncope during Accouchement.—P. de la Touche⁴ relates the case of a woman, weak and in poor health, who was confined alone. After feeling with her hand the head protruding from the vagina the labor did not advance. She then passed in a pair of scissors between the head and perineum, and divided the perineum. The pain caused her to faint. Subsequently, on coming to, the child lay between her legs. She tied a knot on the cord. On the arrival of the neighbors the child was found to be dead.

Self-inflicted Vaginal Injuries by a Fragment of Copper Sulphate.—Kuhn⁵ says that a girl of 23 had a discharge of slimy blue fluid from her vagina; the vaginal mucosa was eroded and discolored blue-gray; there was deep-seated corrosion of the posterior vaginal wall, with sloughing of the surface. She had placed a piece of blue vitriol, as large as a plum, in the vagina to relieve constipation. After separation of the sloughs the wound healed rapidly.

Coffin-birth.—A case is reported by Langerhans.⁶ The body, that of a girl of 16, dead of phthisis, was placed upon the autopsy-table 60 hours after death, in February, with no signs of decomposition. The attendant noticed a prolapse of the uterus, and on his return about 20 minutes later the head of the child was seen to be completely delivered. There were no signs of liquor amnii. Pregnancy had not been diagnosed. The development of the child indicated 7½ months.

MENTAL.

G. Villeneuve and E. P. Chagnon⁷ report a number of cases in which lunatics were condemned by mistake by the courts. This subject has also been made the subject of a very full discussion by the French Congress of Alienists in 1899.

¹ Rev. de Gyn., Mar. and Apr., 1899.

² Viertelj. ger. Med., Oct., 1899.

³ Viertelj. ger. Med., July, 1899.

⁴ Schweizer Arch. f. Thierheilk., i., 1899.

⁵ Ann. d'Hyg. pub., Apr., 1899.

⁶ Ibid., Jan., 1899.

⁷ L'Union méd. du Canada, June, 1899.

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