after the spraying the patient must not gargle. The throat may be sprayed through the nose when necessary. Children soon get accustomed to its use. Clinically Sauer observed a rapid diminution of the diphtheritic membrane, with a rapid disappearance of the diphtheria bacilli from the throat. The sore throat of scarlet fever was rapidly relieved and the membrane disappeared in three to four days. Vincent's angina was cured in from two to three days. Cases of ordinary tonsillitis rapidly improved, both as regards the disappearance of the membrane and the subsidence of the fever and general symptoms. He does not believe that pyocyanase can take the place of diphtheria antitoxin, although it may be a useful adjuvant in the treatment of diphtheria. It may also allow the use of smaller doses of antitoxin than are usually thought necessary.

The Treatment of Tetanus by Means of the Local Application of Lipoid Substances.—BROCKENHEIMER (*Archiv f. klin. Chir.*, 1908, lxxxvi), in his investigations of this subject, has taken advantage of the known power of some lipid bodies to bind toxins. This fact is notable in the case of snake venoms which are bound by cholesterol and of botulism toxin, which act similarly with other lipid bodies. The fats used by the author were olive oil, cod-liver oil, liquid paraffin, vaseline, and a salve of Peruvian balsam. The experimental research was conducted on guinea-pigs, which are quite susceptible to tetanus, and the inoculations were made so as to approximate the conditions of infection in man. The fats were applied to the area of infection. The best results were secured with Peruvian balsam salve, which prolonged the period of incubation to twice that of control animals, and caused the tetanus when developed to appear less virulent than in the controls. Brockenheimer reviews the cases of tetanus occurring in von Bergman's clinic for the last twenty-five years. There have been in this period 29 cases of tetanus, with a mortality of 86.2 per cent. Of 20 cases treated by means of antitoxin, 3 recovered, and in these 3 the period of incubation was prolonged, allowing a more efficient antitoxin treatment. Brockenheimer considers the proper treatment of wounds suspected to be infected with tetanus: (1) Cleansing and washing out with hydrogen peroxide, since this checks the growth of tetanus bacilli. (2) Applications of Peruvian balsam salve to delay the incubation period. (3) The daily use of antitoxin during the doubtful period. Amputation is advised in the cases of local tetanus which develop in the first two weeks after injury.

The Treatment of Gout.—L. A. AMBLARD (*Arch. gén. de méd.*, 1908, lxxxviii, 411) gives in detail a review of the recent advances in the treatment of gout, especially as regards the dietetic régime necessary for the best results. After a thorough review of the literature he is inclined to believe that the uric acid is most probably kept soluble by the action of thymic acid, hence the importance of the use of this latter agent therapeutically. As high temperatures destroy the combinations of this acid with the purins, rare meats are more desirable than those well cooked. Food stuffs, poor in purins, should be given as much as possible (these may be found in Hall's dietetic tables accompanying the article). White meats contain nearly as much purins as dark meats,

as do also beans and oat meal, so that the best articles of diet are milk, butter, fresh cheese and eggs, and possibly a little red meat each day. As regards the medicinal treatment the wine of colchicum is of most importance in the acute cases, many other drugs being used during the course of the disease for their supposedly dissolving effect on the uric acid; these are the various alkaline drugs—salicylates, piperazine, aspirin, and thymic acid, which latter Amblard advocates on account of its soluble action on the uric acid. Finally the free use of mineral waters and of exercise are of the utmost importance.

PEDIATRICS.

UNDER THE CHARGE OF

LOUIS STARR, M.D., AND THOMPSON S. WESTCOTT, M.D.,
OF PHILADELPHIA.

Spontaneous Hemorrhage from the Ear Terminating in Death.—H. HALASZ (*Archiv f. Ohrenheilk.*, 1908, lxxvi, 78) reports the case of a child of two weeks, born at seven months, which died after bleeding from the right ear, the hemorrhage extending over a period of eight days. Such cases are extremely rare and in most instances are preceded by a suppurating condition of the ear. There are but 2 cases (his own being one) in which no such illness preceded the hemorrhage. At first the blood came from the ear, flowing but slowly with occasional cessation of one or more hours. After a few days a sausage-shaped mass developed at the right side of the neck, which ruptured, with the result of blood escaping from this wound also. About this time the child became jaundiced. The mass mentioned was three inches long, the size of the middle finger, hard, not pulsating, and the blood escaping from it as well as from the ear was dark red. No operation was permitted and death occurred on the eighth day. In the absence of an autopsy the cause of the bleeding could not be accurately determined. The bleeding was evidently venous—jugular vein or transverse sinus—as proved by the slow flow, the dark color, and the absence of pulsation in the mass, which latter was probably the thrombosed jugular vein. The cause might have been syphilis, tuberculosis, acute yellow atrophy, or leukemia.

Congenital Dislocation of the Hip Treated according to the Method of Lorenz.—VAN DEN BERGH (*Ann. et bull. de la soc. de méd. d'Anvers*, 1908, lxx, 17) reports 15 cases of congenital dislocation of the hip, 7 of which were right-sided, 3 left-sided, and 5 bilateral. Fourteen of the patients were girls and one a boy. Three were less than two years old; 2 of these were still under treatment, while the third died of meningitis, two and one-half months after the reduction; 4 were three years old and 3 of these recovered, the last remaining without improvement; 1 of these cases was operated on ten years ago; 1 at four operated

on four years ago remains well; 3 were operated on at five, with two known good results; the third was lost sight of; 1 patient at six was not improved; 1 at eight and 1 at eleven were cured; another at eleven was made somewhat better. Van Den Bergh has not had radiograms made to control his good results, of which there were 8 in all, and thinks that in several cases the head was fixed in anterior luxation, but with perfect and permanent functional result.

Examination of Eyes in the Schools of Brussels.—P. DE RIDDER (*Ann. d'ocul.*, 1908, cxi, 27) has examined the eyes of 2820 children of the schools of Brussels. Between six and eight years there were 835 children; 353 (42 per cent.) had abnormal vision; 197 (23 per cent.) were hypermetropes; 48 (5.5 per cent.) myopes, and 83 (10 per cent.) had astigmatism. Between nine and ten years there were 869 children examined; 333 (40 per cent.) had abnormal vision; 172 (19 per cent.) had hypermetropia, 74 (8.5 per cent.) myopia, and 69 (8 per cent.) astigmatism. Between the ages of eleven and twelve, 735 children were examined with 316 (42 per cent.) of abnormalities; 156 (21 per cent.) had hypermetropia, 80 (10 per cent.) myopia, and 61 (9 per cent.) astigmatism. Of 376 children between the ages of thirteen and fourteen examined, 208 (44 per cent.) were found to have abnormal vision; 85 (22 per cent.) of these had hypermetropia, 69 (18 per cent.) myopia, and 45 (12 per cent.) astigmatism. In all there were 607 (21.5 per cent.) hypermetropes, 289 (10 per cent.) myopes, and 272 (9 per cent.) astigmatics. It can be seen from this that hypermetropia and astigmatism are not increased by the work of the schools, but in myopia the proportionate increase is quite marked, this being due directly to the school studies; the same condition is reported from other parts of the world. He concludes from this, that the eyes of all the scholars should be examined, and means to correct their vision devised; on account of the gradual development of myopia the surveillance should be continued throughout the school years to note the appearance of visual alterations; as the scholars quit school they should be advised as to the best line of work for them to take up.

Hemorrhage after Excision of the Tonsils.—Fatal hemorrhage after tonsillectomy or adenoid operations is very rare, and when occurring it may be immediate (connected probably with the operation) or secondary. The former is due usually to injury of the neighboring vessels, the latter to hemophilia, although this disturbance may be the cause of immediate hemorrhage also. HAYMAN (*Archiv f. Laryng. u. Rhin.*, 1908, xxi, 15) reports the case of a boy of fourteen, in whom all three tonsils were removed because of frequently recurring violent attacks of tonsillitis. He had always been a perfectly healthy boy, and there was no history of hemophilia in the family. In earlier years he had been operated on for adenitis without appreciable hemorrhage, and the only thing known to call attention to the disturbance lay in the fact that light injuries to his fingers always resulted in prolonged and marked bleeding. The operation was not accompanied by especial bleeding and what there was ceased completely within a short time. Two hours later blood trickled into the pharynx from the nose in a steady stream, and could not be checked by ordinary measures; later the pharyngeal

tissue began to ooze also. Hydrogen peroxide and styptic powders did not avail, but after the nose was tamponed, bleeding therefrom was checked for a time. It reappeared again, and in spite of adrenalectomy, gelatin, suturing of stumps, tamponing of pharynx, and other procedures it continued, terminating in death sixteen hours after the operation. The autopsy showed a perfectly normal state of the internal organs, and careful search did not reveal any injury of the vessels of the neck. Hayman considers this a case of hemophilia, as no other cause could be discovered in spite of careful consideration.

Pretracheal Abscess in a Case of Scarlet Fever.—GIUSEFFI (*Allg. Wien. med. Woch.*, 1908, liii, 373) reports the case of a girl, aged nine months, who had recovered only a short time before from an attack of measles. She was suffering with a sore throat, from the exudate of which many cocci and some few bacilli were isolated. On the third day of the disease the typical scarlet-fever eruption appeared, and with this was noted a disappearance of a slight hoarseness of the voice. The child had high fever for four days. On the tenth day of the exanthem moderate signs of a stenosis were noted, not sufficient, however, to make an operation seem necessary. The child died during the night from a sudden paroxysm of asphyxia. An elastic tumor the size of a walnut was found beneath the sternohyoid and sternothyroid muscles, which when incised was found to contain thick yellow pus. The abscess extended from the beginning of the trachea to its bifurcation without, however, exerting any pressure upon the pneumogastric or recurrent laryngeal nerves or the oesophagus. The right pulmonary apex was the seat of bronchopneumonic foci. The thymus was attached to the lower pole of the abscess wall. *Streptococcus pyogenes* was isolated from the pus in pure culture. This organism had probably entered the pretracheal glands during the attack of measles. Giuseffi has not been able to discover a similar case in the literature, the few he has been able to note being due to intubation trauma, or aspiration of foreign bodies.

Prophylaxis of Umbilical Tetanus at Saigon (Cochinchina).—At the suggestion of R. MONTEL (*Ann. d'hygiène et de méd. col.*, 1908, xi, 72) a maternity was instituted at Saigon in Cochinchina, and the midwives of the district trained in aseptic obstetrics. This was followed within a few years by a reduction in the tetanus mortality from 30 of every 100 deaths to 2.52, and by a fall of the general mortality of the infants less than one month old from 37.33 out of every 100 born to 21.73 (1905), 13.92 (1906), and 10.22 (1907). Cutting the umbilical cord with sterilized scissors and tying it with an aseptic ligature sufficed to prevent the greater number of tetanus infections. A number of other precautions to diminish the general mortality from other diseases (gonorrheal ophthalmia, hereditary syphilis, etc.) has also been taken.