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.,
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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