practicable. The technical difficulties are relieved by the use of sedo-tablets. The fare, usually so monotonous and distasteful, becomes palatable and tasty.—N. Y. Med. Jour.

## TREATMENT OF GALL STONES.

Ludwig V. Aldor (Wien. klin. Woch., No. 18, 1912) deals with the treatment of cholelithiasis in the light of the recent investigations as to the cause of the condition. The experimental and pathological investigations of Aschoff and Backmeister have awakened widespread interest. These workers, while they agree with Naunyn in the view that infection of the gall passages is a necessary factor in the production of symptoms of gall stones, differ from him in that they hold that in the majority of cases a non-inflammatory stone formation precedes the inflammatory process. They find also that gall stones may be formed in different ways according to their different composition, and that while the pigmented stones of salts of lime are the result of an infectious inflammatory process, the radiating cholesterin stone which always appears as a solitary stone, is the result exclusively of stagnation of bile without any bacterial infection. They show conclusively that cholesterin may crystalize out of stagnant bile in the absence of bacteria, and that the chief mass of the cholesterin which goes to make up the stone is formed from the bile itself and not from the epithelium of the gall bladder. While prophylactic treatment appears to be more of a hopeful possibility on Aschoff and Backmeister's theory than on Naunyn's, the fact remains that at present we have no successful prophylactic treatment. The present author does not believe that the well-known caustic factors in the production of gall stones act in virtue of their tendency to cause stagnation of bile. In all his large experience he does not know of a case in which he could determine that a sedentary way of life had given rise to stagnation of bile, and he has met with gall stone disease in a strikingly large number of men and women most active in sports. Moreover, he has repeatedly seen cases in which an attack of acute cholecystitis has followed immediately upon active bodily movements. The two main causes which appear to predispose to a first attack are pregnancy and acute infectious diseases, especially gastric and intestinal catarrh. Pregnancy has been usually considered to lead to stagnation of bile from the pressure of the growing uterus. but the author points out that in more than half of his cases the attacks during pregnancy occurred during the first three or four months when pressure on the abdominal organs was insignificant, while conditions