

surgical interference should be followed by success in the greater majority of such cases. This should consist in opening and thoroughly draining the inflammation of the space of Retzius just as soon as it appears, and if possible the calculus should be removed. If of small size it should be removed through the fistulous tract, but if the stone is large or the fistula is small, long, or tortuous the calculus should be removed by either the perineal or suprapubic routes, and of the two the perineal route is, as a rule, the method of choice.

The Primary Suture Treatment of Fractures.—VÖLCKER (*Centralblatt für Chir.*, 1902, No. 26) states that it is an assured fact that a good result in a case of fracture depends upon the replacement of the fragments, and the experience of the last few years has shown that under careful asepsis one may cut down on the fractures when there has been a bad result, break up the adhesions, freshen up the ends of the bone, and then place and maintain the fragments in good position by either wires, or screws, or some other appropriate appliance. Experience in the Heidelberg clinic has shown that the indications for the operative treatment of subcutaneous fractures are only limited. In many cases, especially those of separation or fracture of the epiphyses, is the operation a difficult one, and in every case there is the danger of infection. The cases so treated, as a rule, unite much more slowly than when not sutured, and a fistula may result. The principal indication for the use of the primary suture is in those cases of compound fracture where operative interference is a necessity. This operation is indicated in double fractures of the same limb. Experience has shown that those fractures where one is most anxious to get a good result, as in those involving a joint, the primary suture method has not proved to be a success, but future experience may prove that it will have some value in this type of cases.

THERAPEUTICS.

UNDER THE CHARGE OF

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Physiological Action of Male Fern.—DR. W. SCHAUB has been experimenting on the extract of male fern, the active ingredients of which are now considered to be filicic acid, flavaaspidic acid, albaspidin, aspidinol, and derivatives of phloroglucin. By experiments on frogs he found that the lethal dose for filicic and flavaaspidic acids was 2 mg., and for aspidinol and albaspidin 1 mg. for every 60 grammes of body weight of decomposition

products. The filicinic acid butylamin proved to be about five times weaker than filicic acid, while filicinic acid itself was innocuous. To study the effects of these various substances it was not considered advisable to note the irritability of the poisoned muscles toward the electric current, but, instead, the "demarcation current" of Du Bois-Raymond was employed, which occurs when one end of the muscle is suspended in a solution of the drug to be tested. Since with proper concentration a maximum current was obtained, the immersion acted like an artificial transverse division of the muscle; in other words, that portion which came in contact with the solutions was dead, and the principles of male fern were direct muscle poisons. The action on nerve tissues was much less pronounced, and it seemed as if the primary irritability of the nerve trunks was not altered. In arranging the different principles and their derivatives in order of their strength it was found that phloroglucin, filicinic, and butyric acids were inactive; of the remainder the filicinic acid butylamin was least active, then followed aspidinol, flavaspidic acid, albaspidin, and finally filicic acid as most potent. For protozoa the order of toxicity was somewhat different; thus, albaspidin, filicic acid, flavaspidic acid. A number of other non-vertebrates were tested, from cölentates to crustaceæ, and in all, with the exception of certain echinodermata, the great virulence of male fern was demonstrated, and its active principles proved to be strong poison for all kinds of organized plasma, but more particularly for muscle tissue. This was most beautifully shown in the case of worms, and the empirical use of male fern as an anthelmintic finds its scientific proof in these experiments. Since the general experience was that pure filicic acid was much less reliable for therapeutic purposes than the extract, attempts were made to follow its destiny in the organism, and it was found that most of it suffered decomposition, most probably in the intestines.—*Archiv für Experimental Pathologie und Pharmacologie*, 1902, Band xlviii., p. 10.

Alcoholism in Children.—DR. J. GROSZ says that acute alcoholism which is seen occasionally in children presents similar symptoms to those seen in adults. He saw two patients who were brought to the hospital unconscious, with tonic and clonic convulsions, who were controlled by enemata of chloral. The diagnosis was made by the odor of the breath. Several hours of deep sleep followed the disappearance of the convulsions, and one of the patients—a child, aged three years—on awaking asked the nurse for some brandy. In children, therefore, acute alcoholism takes a more intense form than in adults, as convulsions are not seen in the latter. Stimulation of the central nervous system follows the use of small doses of alcohol in children; but this is only apparent, for invariably it is followed by paralysis. The temperature of the body is lowered only by large doses of alcohol, which are very injurious to the organs of the body. Many parents, having the false point of view that alcohol strengthens the body, give small doses to children for a long time, and sometimes it is even given during the nursing period. From one-half to one teaspoonful or more of cognac or tokay, concentrated or diluted, are the quantities usually given. The stimulation of the gastric mucosa produces a dyspepsia which may go on and produce a severe gastritis. Beer and light wines may have the same