the lithotrite; and many days may be allowed to elapse in an attempt to combat the existing troubles by rest, medicine, baths, &c. Meantime there is prolonged contact between the rough fragments and the mucous membrane, and damage to the latter is surely taking place. The best remedy in such circumstances is again to crush and so reduce the irritating fragments to fine débris, which, moreover, is largely removed at the same time. I have often seen urine which had been purulent and bloody for days become almost clear within four hours after the use of the lithotrite. At every point of contact between the numerous sharp angles of broken fragments and the delicate lining of the bladder, a minute ulceration commences, and gives issue to a little blood; no sooner are the fragments crushed than the wounded points rapidly heal, and the bleeding ceases. But if the intervals between each crushing are prolonged, dangerous contact is prolonged also, and by repetitions of this error the bladder is brought into a condition in which more or less permanent mischief is sustained, and the phosphatic trouble commences its chronic course. In order to avoid this, then, I repeat that it is essential not to prolong the intervals between each sitting beyond two or three days, unless there is some more important reason for doing so than the presence of cystitis, which is, on the contrary, a ground not for delay but for action. Indeed, no occurrence except repeated attacks of fever or severe orchitis should postpone the use of the lithotrite when the operation has once been commenced.

The next practical question for consideration is the treatment of the bladder itself when phosphatic deposits and concretions are formed there, and show a tendency to remain, or, after expulsion, to be again produced.

The first condition indisputably necessary to success is that the organ, if incapable of emptying itself, should be artificially emptied by the patient in the easiest manner, as often in the twenty-four hours as his comfort demands, and never less than twice a day, however small the quantity left behind. Next, as organs thus affected are by no means always quite emptied, even by the catheter, a small quantity of warm water should be injected once, twice, or thrice daily after catheterism, to wash out the remaining urine if any such there be, and the phosphatic precipitate, which will be certainly found therein. For this purpose the four-ounce indiarubber bottle with brass nozzle and stopcock is the best instrument; one-third only of its contents is to be injected at a time, and this quantity is to run out before the succeeding third is introduced. To the water should be always added either carbolic acid in the proportion of one grain to the ounce, or the solution of permanganate of potash (Condy's), six or eight minims to the ounce. Either of these disinfectant solutions, the first-named being perhaps mostly preferable, should be employed as preliminary to all other injections; they are not in the slightest degree irritant to the bladder and they deodorise and cleanse the interior. Further, and this is a fact of some importance, carbolic acid does not decompose any solution of metallic salts which it may be desirable to inject immediately afterwards. It ought not to be necessary to add, in passing, that all instruments should be placed, before and after use, in a bath of carbolic acid solution, but double the strength of that mentioned above. This, of course, relates to all instruments which are at any time or for any purpose to be introduced into the urinary passages.

The bladder being thus kept in good sanitary condition, the next consideration is, what agents are to be employed to promote healing action in the diseased mucous membrane? The best are salts of silver, copper, and lead, very weak solutions of which should be used at the first occasion of applying them, watching carefully the result before augmenting their strength, and doing so very gradually. The nitrate of silver should at first not exceed in strength the proportion of one grain to four ounces of distilled water; even one to six ounces is preferable if a patient is more than usually susceptible. It should always be preceded by a cleansing or deodorising injection, to remove from the surface to be acted upon the muco-pus which is coagulated by the solution of silver, and tends to hinder contact with the agent. This injection is to be employed in the gentle manner directed above for the first application. If very little inconvenience follows, a slightly stronger solu-