

than it should. The uric acid passed in this way may not be perceptible at first, as it is to a certain extent soluble in hot water, but as the water cools it will be thrown down, as it is almost insoluble in cold water. If, however, it is in great excess, it will pass even in hot urine as fine bright crystals. Now the urine that contains these, contains them when it is in the kidney, as well as when it is in the bladder. Hence, we have stone in the kidney, or a stone may begin there and pass to the bladder, before it is large enough to be felt in its passage down the ureter, and increase after it reaches the bladder. It will be seen, then, that the formation of uric acid calculus in no way depends upon a diseased condition of the kidneys, nor should the treatment of such cases be directed to the stimulation of these organs. They are attempting the work of another organ, and the strain upon them should be removed by inducing this other organ to perform its own function. However vague our knowledge may be as to the action of certain drugs on the liver, or indeed with regard to the exact mode by which the liver gives off, or does not give off bile, practically we know that these cases are benefited by small doses of mercury, and more or less by all those drugs which are commonly used as substitutes for it, such as taraxicum, nitric acid, etc.

But of all the remedies used for this purpose, the sulphate of soda seems to be the most efficacious, particularly when used in the form of a natural mineral water, a form in which a comparatively small quantity of this salt will be found to act much more freely than a very much larger dose of the crystal. It is very remarkable, but it is nevertheless a fact, that this salt in an artificially prepared form is of little or no value, whether in the form of an artificially prepared mineral water, or as a crystal. More than this—if a natural mineral water, such as Friedrichshalle, be evaporated, the resulting salt will not have the same effect that it had when in its natural solution. Therefore for our purpose the artificially prepared waters, though they may be what is called elegant preparations, fail in the essential qualities that we want.

The most valuable water of the saline group is the Hunyadi Janos, or Hungarian water, which contains about  $2\frac{1}{2}$  drachms each of sulphate of soda and sulphate of magnesia to an English pint. Next, and nearly equal to it in efficacy, comes Püllna, though it has the objection that it sometimes purges too freely, often gripes, and is very nauseous. Then we have Friedrichshalle, a very reliable water, containing something less than one drachm of sulphate of soda, and about  $\frac{3}{4}$  of a drachm of sulphate of magnesia, to the pint. Now the dose of sulphate of soda given in the British Pharmacopœia is from two drachms to one ounce, and that of sulphate of magnesia from one drachm to four drachms. But in the best of these mineral waters there is only about  $2\frac{1}{2}$  drachms (a very moderate dose) of each of these salts to the pint of water, and yet you would not think of ordering a pint for a dose, for about half a drachm of sulphate of soda, with the same quantity of sulphate of magnesia, in their natural combination as they come from the spring, will suffice as an agreeable aperient for most people. This action cannot be obtained from this quantity of these salts in any other form; not even if the salt which is obtained by evaporating the mineral water in a warm-water bath, so as to avoid decomposition of the salt, or even less of the water of crystallization, be used. There is a peculiarity in the proper administration of these mineral waters which is worthy of note, the ignorance of which has led many to condemn them as useless. It is this: many of these waters in their natural condition, as they are obtained at the springs, are too hot to drink, and have to be allowed to cool slightly. They are all drunk more or less hot, and it will be found that in using them as we get them, they must be warmed before they are taken. The best way is to put a dose into a large tumbler, then add sufficient boiling water to make the whole so hot that it can be drunk with comfort. This should be done an hour before breakfast, on rising in the morning, or it may be taken at intervals while dressing. The hot tea or coffee taken at breakfast seems to hasten the action of the water, and as a consequence