study each case by itself, and, in the best interests of his patient, select the operation which best meets the indications and requirements. He will, in this way, obtain better results than are possible to the mere advocate of a special operation, however expert he may be in its performance.

Where a stone in the bladder is too large to pass *per vias naturales* one of two methods may be adopted, either opening the bladder through the perineum, or above the pubes; or crushing the calculus so that it may be removed through the urethra.

The first method of "cutting for stone" is one of the oldest operations known to surgeons, and dates back before the time of Hippocrates, and since Celsus, with a scalpel alone, cut blindly "on the gripe" the operation of perineal lithotomy has undergone many modifications. It was practised by priests and laymen with great success as late as the earlier part of the eighteenth century. To Cheselden, in England, is due the credit of placing the lateral operation on a scientific anatomical basis. He performed 213 lateral lithotomies with a mortality of only 5 per cent. Suprapubic lithotomy was first performed by Pierre Franco, in 1550, but was not recommended by him, and was lost to sight for a long time. It was revived in the eighteenth century by Douglass and Cheselden, in England, and was frequently practised during the earlier part of last century, but gradually declined in popularity, being more dangerous than the perineal route. In 1880 it was again revived by Petersen, of Kiel, who improved the operation by distention of the bladder and rectum with water. To this procedure, and the application of antiseptic methods, the operation owes its present popularity.

In 1818, Civiale published his work on lithotrity. He advocated the crushing of the stone in the bladder, at many short sittings, and left the fragments to be passed with the urine. His first successful operation was performed in 1824, and although operating with inferior appliances, he demonstrated the possibility of pulverizing stones by instruments introduced through the urethra. Subsequently various improvements were made in the instruments used, until the invention of the modern lithotrite, when the operation reached a high degree of perfection, although the death-rate was high.

It was, however, to the genius of Henry J. Bigelow, of Boston, that the origin of "lithotrity at one sitting" or litholapaxy is to be attributed. This occurred in 1878, when he introduced improved instruments, and proposed, under anesthesia, not only to crush the stone through the urethra, but by a powerful evacuator to wholly remove the fragments at one and the same sitting.