

knife was slightly lateralized with its edge inclined to the left ischium, division having been effected the knife was carefully withdrawn, scratching the staff as it was disengaged. The left fore finger was now introduced through the wound; while within the posterior part this was dilated, and upon entering the bladder the stone was felt. The staff was withdrawn; a pair of forceps was introduced and the stone seized, when caught the finger was removed and a gush of urine followed. In attempting its extraction it was so very friable that the outer shell cracked, and only a part came away. The forceps being re-introduced some little difficulty was experienced in removing the remainder, because being of small size it sank low down into the bas-fond of the bladder, and the organ itself became spasmodically contracted; at length, with the aid of a finger in the rectum, it was grasped and extracted. Some debris resulting from the fracture were scooped out and washed away. A large elastic catheter was put into the bladder through the wound, and retained in situ by tapes; the patient carried to his bed; ʒi tr Hyoscyami given, hot stupes directed to the abdomen, and gum water prescribed as a drink. Very little blood was lost. Consciousness and sensation were not abolished by the anæsthetic. The stone weighed one drachm and two scruples; it was the size of a red plum, and consisted of a central nucleus of a dark fawn color, smooth, dense and uniform, and of an enveloping crust, 3 or 4 lines thick, whitish, granular and easily comminuted. Its section presented a surface of the appearance represented in the following woodcut.



Upon inspection it will be seen that the nucleolus is a minute filament enclosed within a distinctly ovoidal formation, about which latter is a remarkable encrustation produced by the coalescence together of several fragments of an angular or crystalline form; and over this other strata, three of which are sufficiently obvious, are deposited in a more or less circular manner. Chemical examination proved that the calculus was composed centrally of oxalate of lime, and peripherally of ammonia-co-magnesian phosphate; these are distinguished in the drawing