

Calculi.—The recognition of these in the kidney, ureter or bladder depends to a very great extent on the amount of inorganic salts contained in them. I have so far utterly failed to locate uric acid calculi. The oxalates offer less difficulty. Calculi, composed of uric acid and oxalates, or uric acid and phosphates, can be skiagraphed, the density of the shadow being proportionate to the amount of inorganic matter in the calculi. The X-ray negative is much more satisfactory than fluorescent screen in making examinations for calculi. Unless the stones are very large and composed of oxalate or phosphate of calcium the screen is valueless. Gall-stones are recognized with great difficulty, especially in stout persons. Beck, at a meeting of the New York Academy of Medicine, January, 1901, showed several good skiagrams of gall-stones. As apparatus and technique improve we may hope for better results in this direction.

INTERNAL ORGANS.

Heart.—The outlines of the heart stand out prominently on the fluorescent screen. This is especially true of the left ventricle. The pulsations can be counted even by the most inexperienced. We have no other means of acquiring so accurate information of the size and location of the heart as that given by the ray. Every physician has experienced, for example, the difficulty in distinguishing between dilatation of the heart and pericarditis with effusion. A diagnosis without the ray is notoriously uncertain, with it the task is comparatively easy. In pericardial effusion the regular wavy outline of the left ventricle, with each systole, is no longer evident, its place having been usurped by a bulging mass, the appearance of which is at once diagnostic. Among other displacements, readily recognized, those the result of pleuritic adhesions, pneumothorax, pulmonary fibrosis, etc., may be mentioned. The degree of displacement of the heart, following pleuritic effusion, cannot be accurately determined by percussion, since the heart may be pushed into the body of an emphysematous lung and the dull area therefore much lessened.