On February 27th urinalysis showed: React., sharply acid; S.G., 10.10; albumin, very faint trace; sugar, none; micro., many epithelial and very many pus and white blood cells, few red blood cells, no casts.

On February 28th the segregator was used, and the urine found to contain: From the right kidney, albumin, many deg. rd. ep., very many pus cells, very many red blood cells, no casts; from the left kidney, albumin, a trace, few red blood cells, few pus cells, few rd. ep., single hyaline cast.

A tumor was felt in the right hypogastrium, kidney-shaped, but twice the size of a normal kidney. This could be pushed back into the right lumbar region.

On the 2nd of March the segregator was again used. The urine from the right kidney contained a few epithelial, very many pus cells, and some albumin, but no casts. The urine from the left kidney contained a few epithelial cells, a few pus cells, hyaline casts, and a trace of albumin. The urine dropping into the tubes had an entirely different appearance, the left tube being clear, while the right was quite cloudy. The right tube filled up more quickly than the left. Urea, 1.8 per cent.

On the 4th of March the blood count was as follows: Red blood corpuscles, 4,270,000; white blood corpuscles, 7,600; Hb., 80 per cent.

A diagnosis of tubercular or calculous pyonephrosis was made. Details of operation were the same as in Case I. In separating the upper part of the kidney a small tear, about an inch long, was made in the peritoneum, which was sewn with cat-gut. The operation took thirty-five minutes.

On March 9th, twenty-four hours after the operation, she had passed 30 ounces of urine.

On March 10th, forty-eight hours after the operation, the urine passed in twenty-four hours measured 31 ounces, and urinalysis showed many epithelial and pus cells, but no casts and only a trace of albumin.

On the morning of March 11th the urine passed during the previous twenty-four hours measured 46 ounces. The percentage of urea was 2.2.

On March 12th an examination of the urine showed no albumin and no casts, but a great many pus and white blood cells. It contained 2.2 per cent. of urea.

On the 13th of March, the total amount of urine passed during the previous twenty-four hours was 32 ounces. Percentage of urea was 2.4.

On the 14th of March the urine passed in twenty-four hours measured 28 ounces. It contained 2.3 per cent. of urea.

March 15th, examination showed a little albumin, some pus cells, no casts, and urea 2.2 per cent. The amount of urine passed during twenty-four hours was 31 ounces.