

Fort Gibson, Arkansas, February 6, 1839.—Amongst the numerous sick of the 4th Infantry, which reached this position, were seven cases of hemeralopia. In one case I was informed the disease had existed three months, no other case less than two weeks. The men had been on severe duty in the mountainous sections of North Carolina, undergoing great fatigue, the eyes affected by rays of light reflected from snow. Had received the best attention the circumstances of the service would allow. With the exception of one case of constitutional scorbutis, the patients were in good general health. The pupils of the eyes presented the same appearances as in the preceding cases. No medicine was administered; ordered the patients into a darkened room, where they remained for thirty-six hours; at the expiration thereof, the vision of six of the patients was restored, and they returned to duty. In the case of the scorbutic patient, it required twenty-four hours longer to effect a cure.

Fort Gibson, Cherokee Nation, West.

ART. X.—Case of Calculus—Enlarged Prostate Gland—Thickened and Sacculated B'lder—Bifurcation of the Ureter—Abscesses in the Kidneys. By GEORGE SUTTON, M. D., of Aurora, Indiana.

FROM what I can learn of the early history of this case, which is very imperfect, Mr. Caldwell, twenty years previous to his death, fell while descending a flight of stairs, and received an injury across the small of his back; this was followed by violent pain in the lumbar region, which confined him to his bed for several months; as the more violent symptoms subsided, dysury succeeded connected with vertigo; this last symptom wore off gradually in a few years, but the dysury continued until complete retention of urine took place, and for ten years previous to his death he had to depend entirely upon the catheter for the evacuation of his bladder. Occasionally he was attacked with the most excruciating pain in the region of the bladder and perineum, to allay which he would resort to narcotics in large doses until he became so habituated to them, that he considered life intolerable unless under their influence. In December, 1838, during a violent attack of his disease a small calculus passed into the urethra and lodged about two inches from the glans penis. A neighbouring physician was sent for, who made an incision through the urethra and removed it. After this he was comparatively free from pain for several months.

In the spring of 1839, Mr. Caldwell came to Aurora to reside. I was shortly afterwards called to attend him during a violent attack of one of his paroxysms. I found him under the stimulating effects of opium. His pulse about one hundred, rather soft; tongue dry and red around the edges; constant and ineffectual desire to pass his urine; tenesmus; most violent pain in the region of the bladder and perineum; the pain occasionally passing towards the lumbar region; numbness of the thighs; skin hot and dry; his mind very much excited. He informed me that he was about seventy years old; that he had been subject to these attacks for twenty years; that he was never entirely free from pain except while under the influence of opium or morphia; that he had been under the treatment of a great number of physicians and some of the most eminent in Cincinnati; that no one had ever been able to detect the presence of stone in his bladder, but that he had always been confident of

their existence there and the passage of the stone in 1838 confirmed him in his opinion. He also stated that about two months since, he had felt another stone descending into his urethra and that it had lodged near the neck of the bladder, and the symptoms he now felt were precisely similar to those which preceded the expulsion of the stone before. He was very anxious I should perform the operation of lithotomy, offering a handsome remuneration. I sounded him in several positions but was unable to detect the presence of calculi, and considering him to be labouring under a disease of the prostate gland and bladder, I prescribed as a palliative the warm bath, anodyne injections, mucilaginous drinks, ʒi of ol. ricini, followed by the blue pill, &c. The warm bath and anodyne injections speedily produced relief and he became comparatively free from pain. He frequently called upon me afterwards requesting that I would perform the operation of lithotomy on him, and so confident was he of the existence of stone in his bladder that he would declare; "if all the physicians in the world were to tell him to the contrary he would not believe them;" and since the passage of the calculus in 1838 the only treatment he had been willing to receive, except during the paroxysms, was for the direct removal of stone. Finding no person in this neighbourhood that would operate for him, he went to Cincinnati for that purpose and placed himself under the care of Professor Mussey. The Dr. has since informed me that he sounded him carefully and was unable to detect any stone. He told him, however, there might be calculi embedded in the coats of the bladder, but he considered his case a disease of the bladder and recommended a course of treatment accordingly. Our patient remained in Cincinnati about a week, and after his return his spirits were entirely prostrated. For eight or nine months previous to his death he had borne his sufferings with the hope that an operation would produce speedy and permanent relief, but having failed in this last resource and finding no one that would operate on him, his firmness of character, for which he was remarkable, forsook him, and about a week before his death he was seized with diarrhœa which terminated his existence.

The treatment he had received from the different physicians whom he had been under, had been principally for disease of the bladder, but it does not appear that any course of treatment had done more than palliate his sufferings.

In presence of a young physician and several of his friends I made the following examination.

Autopsy, eight hours after death. *Exterior*, unusual emaciation, slight rigidity of the upper and lower extremities. *Omentum* remarkably contracted, scarcely perceptible. Intestines of a dark red colour, very much injected. *Stomach* small and contracted to about two inches in breadth, its internal surface almost entirely destitute of rugæ. It contained about half a gill of viscid mucus slightly tinged with bile. The mucous membrane of a dark red and abnormal colour throughout, but more particularly near the pylorus, where it was softened and in several places ulcerated. *Pancreas* of a deep orange colour, the head of it about the size of a hen's egg and very much indurated, it finally adhered by cellular membrane to the stomach and duodenum. *Liver* rather small, healthy with the exception of the right lobe a small portion of which was indurated; gall bladder moderately distended with bile and healthy. *Kidneys*; the right one small and of a dark pink colour almost as firm as cartilage and full of cicatrices; in its superior half was an abscess about the size of a pigeon's egg containing a thick whitish pus. The pelvis of the kidney was filled with muco-purulent matter, and its mucous membrane as

well as calices and papilla of the kidney were almost entirely destroyed; but one or two papillæ remaining. The ureter was from half to three quarters of an inch in diameter, and greatly thickened; its mucous membrane of a deep red colour and in several places ulcerated. About two inches above where it passed into the bladder it bifurcated, one branch containing three small calculi the largest about the size of a pea, the smallest that of a radish seed. These were situated three quarters of an inch apart, and the ureter between them was impervious resembling a ligament. The capsula renalis was about one-fourth of its usual size and nearly the consistence of cartilage.

Left kidney rather smaller than natural, ureter about half an inch in diameter, and at its upper and lower extremity the mucous membrane of a dark red colour, two or three of the papillæ were destroyed and the mucous membrane around them of a deep red. In the body of the kidney there were several large cicatrices and near the upper part was a small abscess about the size of a hazel nut filled with a whitish pus.

The bladder was surrounded by fat and cellular tissue, and almost resembled a solid substance, its coats being between half and three quarters of an inch in thickness. Its cavity which would scarcely hold half a gill of fluid, contained a small quantity of muco-purulent matter. Its mucous membrane was almost entirely destroyed, having a fibro-cartilaginous appearance. There were numerous cells or pockets throughout the parietes of the bladder communicating by small openings with its cavity. Two calculi were found in the bladder, one nearly a quarter of an inch in thickness and three-quarters of an inch in its longest diameter; the other about half an inch in diameter and about a seventh of an inch in thickness. The nucleus of each of these calculi were small gravel resembling those found in the ureter; they had become lodged beneath a protuberance of the prostate gland, and deposition of calcareous matter had been formed around them. These calculi were found precisely where our patient imagined he felt them and it is rather singular, as we were unable to detect them by the sound, that he should have been so correct in his feelings. The prostate gland resembled a hard scirrhus tumour and measured in length three inches and a half; its lateral diameter three inches, its vertical two inches and three-quarters, the circumference over the longest diameter about nine inches and three-eighths. From the upper part of this gland is a protuberance about the size of a walnut projecting into the bladder and almost filling its cavity; it is globular and is perforated by a number of openings leading to the urethra.

There are at least ten passages to the bladder each large enough to admit a common catheter; some of them passing through the body of the prostate gland, but most of them perforating its protuberance.

The urethra contained a great number of cells or pockets, and was divided by tendinous septa which separated the passages to the bladder. These passages as well as the cells had evidently been made by the constant use of the catheter which was sometimes introduced during the most excruciating pain. I have the bladder which I preserved as an interesting specimen of pathological anatomy.

The friends being anxious that the examination should be discontinued, the thorax and head were not examined.

March, 1840.