proof that the entrance to the urethra is considerably swollen and infiltrated.

In the chronic forms very similar pictures, but in a much milder form, are seen. Here, however, the most marked changes are frequently found about the neck of the bladder, and it is at this spot that the patient feels the most pain when the instrument is being passed.

A much more important subject for our purpose is ulceration of the bladder. Fenwick has described cases of simple solitary ulcer. It generally lies behind a ureteral orifice, has a sloughy base, and is about the size of a twenty-five-cent piece, and surrounded by normal bladder wall. Such an ulcer runs a very chronic course, being later followed by cystitis and renal symptoms just like a primary tuberculosis of the bladder, and, in fact, many believe them to have their origin in the tubercle bacillus. When we come to deal with true tubercular ulceration, however, there is less difference of opinion. Formerly it was doubted whether tuberculosis ever affected the bladder as a primary infection, but cystoscopy has demonstrated in conclusive form that it does, although it is by no means of common occurrence. The ulceration is usually present on the postero-superior surface. It may first show as a sharply defined dull red patch the size of a five-cent piece, and if the patient has been given methylene blue an hour or so previously these patches will be stained green, demonstrating that the epithelium has been shed. The color of the patch is due to infiltration, and here and there a curled up flake of cast-off epithelium or muco-pus may be seen attached to the patch. At this stage the surrounding bladder wall appears normal, nor is there anything suggestive of disease in the ureteral orifices. According to Pumpel, the primary lesion may show as more or less round areas about the size of pinheads of a pale yellow color and surrounded by a red areola. These certainly appear in generalized miliary tuberculosis with vesical involvement, but apart from that I think they are very rare indeed. It is to be noted, however, that it is the hyperemic zone surrounding the yellowish spot that is significant, as yellowish white nodules are of common enough occurrence in normal bladders, and probably due to distended glands or lymph spaces. If a bladder with primary tuberculosis be examined months later, when renal complications are present, the cystoscopic appearance is exactly similar to that found in a severe secondary infection. The following is a case in point:—

Mr. S., age 32, referred by Dr. J. M. McCormack, complained of frequency and dysuria for months. Urine contains much pus;