irritation than any of them, in one case, at least.

From the time of Sir B. Brodie, down to the present, a ¼ gr. to the ounce solution of nitrate of silver appears to have been the favorite, and is said to lessen the quantity of mucus, also the phosphates. I shall simply mention the others:

Permanganate of potash, or carbolic acid, if there is fetor. Heath prefers quinine and dilute sulphuric acid, if there be much pus and ammonia. Devergir used balsam of copaiba, with opium or belladonna in barley water. Either boracic acid, borax, or zinc sulphate is recommended, if there be simply an excess of mucus without other change in the urine.

So much has been said of late of the desirability, in obstinate cases, of opening into the bladder for the purpose of draining, that an expression of opinion from the members, on this point especially, would be interesting; for, at the very best, it is usually an intractable disease to manage. I had intended to narrate two or three cases bearing on cystitis; but, as the paper has unintentionally grown already too long, I shall only relate the particulars of a case in which an accidental complication brought about a cure, and made it self-evident in this particular instance, that any means that can be devised for the constant drainage of the bladder, without the apparatus proving in itself a source of irritation, will solve the problem, how best keep this organ, when inflamed, in a state of perfect rest. Such being accomplished, a case of persistent cystitis, unless the cause be irremovable, would be a curiosity.

Several years ago I attended in labor Mrs. F., a healthy Englishwoman. The fœtal head was abnormally large; and, although the pelvis was well shaped, the labor was severe and slow. I tried the forceps—perhaps I used too much traction and too little compression, or perhaps, in my short-sightedness, I misapplied the instrument; at any rate, they slipped, but did not cause any observable external injury, and, luckily for my reputation, as I was then a new beginner and could not have survived many lacerations of the perineum, I then performed version, and without much difficulty. Everything went well until the third day, the urine being voided normally, when to my horror, symptoms of acute cystitis set in, which became aggravated for a day or two, when the strangury suddenly ceased, and the urine escaped per vagina. I introduced a small sound into the bladder, and by conjoined digital examination, found that a very small vesico-vaginal fistula had formed.

By this time, symptoms of endometritis of rather severe character began to appear. Consequently, I was obliged to let the bladder take care of itself, which it did beyond my most sanguine expectations; for while I had to meet the vaginal irritation excited by the occasional urinary trickling, after the uterine trouble disappeared, the cystitis gradually improved; and to cut the story short, the treatment consisted simply in keeping the patient on the side, the occasional application of nitrate of silver to the fistula, and the use of the catheter, together with antiseptic irrigation of the bladder; in about six weeks the fistula closed and the cystitis disappeared.

As this occurred in the neighborhood of ten years ago, and there have been no bladder symptoms since, I suppose it may be set down as a radical cure. It is quite evident that the blade of the forceps, or the pressure of the fœtal head, caused a fistula, and gave nature an opportunity, which she eagerly seized, to cure an inflamed bladder by drainage and absolute rest from contraction.

TUBERCULOSIS.

BY C. W. PURCELL; READ AT FIRST MEETING OF VETERINARY MEDICAL ASSOCIATION IN THE ONTARIO VETERINARY COLLEGE.

(Continued from last issue.)

Prof. Koch, by a special process of staining, has demonstrated the constant presence of peculiar bacilli, in cases of acute tuberculosis, cheesey broncho-pneumonia, tubercular nodule in the brain and intestinal tuberculosis in man. Cats, dogs, monkeys, and rodents were artificially infected and were investigated with a like result.

The bacilli of tubercle manifest themselves in the form of threads of extreme tenuity, in length about 1–5000 of an inch, in thickness about one-fifth their length. They are non-motile, rounded at the ends and generally appear beaded—clear spots alternating with stained parts. They are usually straight but may be curved, they occur singly but sometimes in pairs. They multiply from spores only within the body. They are found in cells of the tubercle, especially giant cells. Growing at high temperatures only, they probably do not