loose cellular tissue in front of the bladder. Catch this organ, now exposed to view, with a tenaculum, and open it with the point of your knife. Carry your finger into the bladder, and examine it. Open the bladder as low down as you safely can—not higher than the top of the pubes. Let the water out of the rectal bag and remove it. The bladder will then fall back into the cavity of the pelvis. Take one or two stitches in the lower part of the wound through the skin. Don't include the muscles in your sutures. When completed, the opening in the bladder should be as low down as you can get it, and the opening in the skin at the upper end of the incision.

For several hours, to permit the wound to glaze, and for the sake of cleanliness, he uses a large drainage tube through this track. Keep the urine acid, for acid urine is aseptic, and this is the nearest approach you can get to antiseptic dressing in cystotomy. The urine will drain through the wound as fast as it is formed; and if all goes well for two or three weeks, the opening will be reduced to a fistulous track which will admit a good size bougie, say a No. 10 or 12, American scale. Now the man will begin to urinate through the fistula at will. He can retain the water two, three or four hours, and in one of his cases as long as six hours, without dribbling, and pass it when he desires. The fistula does not leak, no matter what may be the position of his body, unless he contracts his bladder to make water, or the urine accumulates to a point above the level of the top of the fistula. If the operation is properly performed, the fistula should be from $2\frac{1}{2}$ to $3\frac{1}{2}$ inches long, and occupy the same relation to the bladder that the spout of a coffee pot does to the pot.

The operation is so simple, comparatively so free from danger, involves no important blood-vessels nor nerves, is made at a safe distance from the peritoneum, and requires for its execution only a knife, a pair of forceps, tenaculum, and grooved director. Indeed, if carefully done, he has found it so safe that he does not hesitate to perform it in cases of diseases of the bladder where the diagnosis is difficult or impossible, simply that he may explore the bladder. If a laparotomy for diagnostic purposes is justifiable, the much less hazardous undertaking of making a supra-pubic cystotomy for the same purpose is certainly so. You will at least do this good: Drain the bladder and put it at rest, which in cystitis is worth more in one day than any drug or set of drugs would be worth in a month. It is astonishing to see how soon the patient begins to improve after the opening is made. The urine soon becomes free from mucus, pus and blood, which it formerly contained in such abundance. The vesical tenesmus and irritability rapidly pass away.

In one of his cases, a man 69 years old, so fee-

ble that he could, unaided, barely walk across the room, and reduced almost to a skeleton, in six weeks fattened fifteen pounds and could walk two or three miles without fatigue. This man got out of bed in sixteen days after being cut, and soon afterwards went about his business, wearing over the opening, to prevent chafing, a bit of absorbent cotton.

In his cases, Dr. McGuire had had, for the first two months, no trouble to keep the artificial track open. If the obstruction at the neck of the bladder is great, you need not expect the fistula to close at an early day, even if you introduce nothing into it. But at the end of about eight weeks, the prostate will diminish in size, all congestion and inflammation will disappear, and Nature will now make an effort to send the water through the natural urethra, and close up the artificial one. In the case just referred to, at the end of the eight weeks the man got up one morning, made an attempt to pass the urine through the artificial track, which was temporarily closed by a clot of mucus, and to his surprise, found the urine passing through the natural urethra. This was the first water he voided in that way for more than three years. Another interesting fact in regard to this patient: For the first time in ten years he has had a return of some sexual desire and power. All this goes to show the improvement which has taken place about the neck of his bladder. But at the end of eight or ten weeks the track must be kept open by the daily use of bougies, or by the introduction of a silver or a hard rubber plug as long as the artificial urethra, and about the size of a No. 8 or 10 American scale bougie. This should be kept in an hour or more every day.

NEURALGIA OF THE LINGUAL BRANCH OF THE RIGHT TRI-FACIAL NERVE.

Read before the Medical Society of the District of Columbia, May 23, 1888.

BY SAMUEL C. BUSEY, M.D., LL.D.,
OF WASHINGTON, D.C.

Mrs. A., æt. 63, has suffered for seven years with a painful affection, which she describes as follows: Six years ago, while residing in the State of Florida, after much reading aloud for several weeks, she was seized with an acute paroxysmal pain, beginning at the root of the tongue and extending along its right border to the tip. At first it came in quickly recurring flashes of momentary duration followed by longer or shorter intervals of complete freedom; but as the time passed the painful periods became more frequent, and the paroxysmal pains increased in duration and intensity until, finally, these periods would last for several hours, during which the pain would come and go. The first attack began in the autumn and continued until spring set in.

No method of treatment, either by local applications or internal medication, afforded any relief. Hypodermatic injections of $\frac{1}{2}$ grain of morphine failed even to mitigate the suffering.

During the six succeeding years, in the early autumn, with the beginning of the first cold snap, her suffering had commenced only to terminate with the coming of mild weather of returning spring. After the attack was over last spring she abandoned Florida as a place of residence, passed the summer in the North, and came to this city early in the autumn of 1887. As usual, during the past summer she was entirely free from pain and enjoyed her accustomed good health. In the month of November last, during an inclement day, whilst in a green-house, she felt the first twinge of pain along the right border of her tongue, which came and disappeared in less time than it took to tell of it. It, however, followed the course of the previous seizures, continuously increasing in frequency and intensity.

On December 10, I saw her for the first time. I found a lady of marked intelligence, with a bright and cheerful disposition, remarkably well-preserved, and with a history of unusual good health throughout her life. Her appetite was good, bowels regular, and habits of life regular and suitable for one of her age. There was no circumstance of life or physical infirmity with which her suffering could be associated in the relation of cause and effect beyond the facts stated by the patient and elicited by examination. During this interview, whilst narrating the history of her case, she was seized with the usual pains, sometimes at intervals of one and then of several minutes, which varied in duration from a few seconds to a minute or more, and in acuteness from a mere passing flash to momentary agony, which would be exhibited in distortion of the face expressive of great suffering, followed, as it suddenly ceased, with the returning smile of relief and the utterance of the words "gone again." These paroxysms of pain far most frequently began at the base of the tongue and darted along the right border to the tip; but sometimes one would begin at the distal end of the right anterior dental branch of the fifth pair; another in the inferior dental, behind the angle of the lower maxilla; then one would seem to start from numerous points on the right side of the face; but wherever the locality of beginning the pain always reached its maximum intensity and remained longest along the course of the right lingual. During pain conversation was always suspended, because of inability to articulate. Sometimes the interruption of speech would begin with the utterance of the first or second syllable of a word. The cessation of the darts, pangs and longer paroxysms of pain was as sudden as the onset, beginning without warning and ceasing at maximum intensity. There was no oscil-

lation with gradual increase in degree and gradual decline to ease. During the periods of painful seizures, which included several or many momentary or longer paroxysms of pain, the right buccal cavity became very dry, and the tongue was thickened and dry along the right border. During sleep the periods recurred less frequently and did not continue so long. There were fewer pangs or paroxysms of pain, but they were equally intense and sudden in onset and cessation.

The seizures were induced by conversation, drafts of air upon the right side of the face, by surprise, the unexpected entrance of a person into her room, a quickly spoken word by one not engaged in conversation with her, a startling noise, falling temperature or inclement weather, by attempts at chewing on the right side, by efforts to swallow liquids—unless the fluid was confined to the left buccal cavity—by every attempt to masticate and swallow bread or potatoes, and by every movement of the tongue which approximated it to the roof of the mouth. Meats could be chewed on the left side of the mouth and swallowed with facility and ease. I attempted, without success, to produce pain by pressure, rubbing and pricking the right border of the tongue and buccal surface, by jarring the upper and lower teeth on the same side, and by pressing, pricking, rubbing and pinching the external surface. Every attempt to produce artificially any condition similar or apparently identical with the current circumstances, before recited as exciting agencies, failed to induce a fleeting pang or paroxysm. For instance, the attempt to chew food on the right side would quickly induce pain, but the striking of the crowns of the teeth with a piece of metal or the pressure of the finger upon them failed. The movements of the tongue in articulation would, but the enforced movements of the organ would not excite pain.

The patient felt convinced that she was the victim of an incurable disease. All medication had failed; in fact, in very many instances she felt that her suffering had been increased by efforts to cure. She had tried a change of climate, place of residence and broken up a long established routine of life without securing relief. The pain began with the autumnal fall of temperature and departed with its rise in the following spring. Season seems to have been the constant and unfailing etiological influence. All the other circumstances and conditions were ineffective except during the season of inclement weather and low temperatures. The fluctuations of temperature, and sudden falls occurring during the seasons of rising and high temperatures, even when associated with inclement weather did not produce a period of suffering or even a paroxysm of pain. I advised the lady to have prepared a protector to cover the entire right side of her face, and suggested the trial of electricity.

My second interview took place December 14. She had kept the side of her face protected with a soft warm pad, lined with silk, but the periods of suffering had increased in frequency and duration, and the pains had increased in intensity. I then advised the application of a 4 per cent. solution of cocaine along the course of the right lingual nerve. The next day she expressed the opinion that the applications of cocaine had diminished her suffering, in that the periods of painful seizures had been shortened. I advised its continuance and ordered a mixture containing the salicylate of soda with the oil of gaultheria. This treatment was continued for one week without satisfactory results. I then advised the continuous use of morphia sulphate in $\frac{1}{8}$ grain doses, to be repeated at such longer or shorter intervals as might prove necessary to control the pain. The lady very reluctantly consented because she had lost faith in drugs, and was averse to the use of morphia. She did not follow the method of treatment very assiduously, but sufficiently so to obtain very marked relief. The months of January and February were passed in comparative comfort. With the returning mild weather of spring, the pain, as during the six previous seasons, entirely ceased. The best that can be said is that she suffered very much less than during the same season of either of the previous six years, but a cure cannot be claimed.

Perhaps, a more decided result would have been obtained if the plan of treatment had been more diligently employed.

The history of the case points very clearly to season as the predisposing and determining cause. In this particular there is nothing peculiar. But the curious array of accidental and incidental conditions which would produce longer or shorter periods of paroxysmal pain is certainly surprising, if not unique. Then, too, the paroxysms would recur during sleep, when the incidents detailed could not occur, either singly or concurrently. This fact also points to season as the predominant etiological factor.

Peripheral irritation produced by the movements of the tongue in speech, mastication and deglutition, and certain articles of food was a frequent and direct exciting agency in bringing on pain. Emotional conditions, such as surprise and the unexpected presence of a person, were equally effective. During sleep these influences were in abeyance and the paroxysms recurred much less frequently, but with equal severity. Sudden falls of temperature and inclement weather, during the autumn and winter seasons, even though the patient remained in-doors during such atmospheric changes, would also induce attacks.

The initial attack began under like conditions and circumstances for seven successive years, and followed the same course, the paroxysms gradu-

ally and continuously increasing in frequency, duration and intensity during the autumn and winter seasons, and ceasing abruptly with the beginning of spring-weather. The pain was always limited to branches of the right tri-facial, but the point of beginning varied. Far most frequently it began at the base of the tongue and was limited to the right lingual branch. When beginning at other points it was expended along the course of that nerve.

CANCER OF THE INTESTINE.

*Read before the Medical Society of the District of Columbia,
May 23, 1888.*

BY G. WYTHE COOK, M.D.,
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C. H., a mulatto woman, married, æt. about 38 years, was first seen by me on November 11, 1887. She gave the following history: She has always suffered more or less at her menstrual periods. About six years ago she had a miscarriage, since which time she has not been pregnant. Has suffered for a number of years from hæmorrhoids. Of late has had much pain in defecation. During last March she noticed an enlargement of her abdomen, and in May following her physician made a vaginal examination and introduced a sound into the uterus. Since that time she has not menstruated. She has been under the care of several physicians, but has continued to grow worse. She has been taking morphia and belladonna in suppositories to relieve her pain. She is now much emaciated and has had a diarrhœa for several days, her temperature is 102°. There is a fluctuating tumor just above the pubis and extending entirely across the abdomen. It is very painful to touch. Vaginal examination shows the uterus enlarged and fixed, but the examination is unsatisfactory, owing to the pain produced in the manipulation. No positive diagnosis was made, but medication was directed to the control of the diarrhœa; this was partially successful after a few days' treatment. A large hæmorrhoidal tumor, about an inch in diameter, was now protruding and caused much suffering. To relieve this the tumor was injected with carbolic acid and glycerine with most satisfactory results. The hæmorrhoid disappeared entirely and the patient expressed herself as much more comfortable than she had been for a long time.

After this the diarrhœa was pretty well controlled, and less morphia was necessary to soothe her pain, but there was no change in the abdominal tumor. A few days later I was told that a profuse diarrhœa had set in, and the discharges were described as being of a slimy, pasty character. I found the tumor much reduced in size, and I at once concluded that it was a subperitoneal abscess, and that it had discharged through the