enced by medical remedies. They are best treated by means of the galvano-cautery snare, puncture, or simple furrowing, the mucous membrane having previously been rendered insensitive by the application of a 5 to 10 per cent. solution of cocaine hydrochlorate. The sensitive areas within the nose, upon whose irritation cough or asthma seems to depend, are also best treated by the application of the galvano-cautery. With regard to polypi, the great advantage of the galvano-cautery is, that not only can we remove the larger polypi, but by passing the cautery freely over and through the rootlets of those which cannot be removed, we have a greater chance of preventing their growth and assumption of the place of the larger polypi. In the cases of necrosis with polypi, the diseased bone ought also to be removed. It ought to be remembered that the inferior turbinate, being a separate bone, is much more tolerant of interference than the superior or middle turbinates, which are parts of the ethmoid.

I have not attempted to enumerate to you the various therapeutical agencies which may be adopted for the treatment of chronic rhinitis, as these will subsequently, in my lecture on "Respiratory Therapeutics," be considered in greater detail. I am more anxious that you should grasp the principles upon which this treatment should be founded, and recognise the necessity of examining not only the chest and throat, but also the nose, in all cases of recurrent or spasmodic laryngeal or pulmonary affections.

THERAPEUTICS OF HAY FEVER.

By CARL GENTH, M.D.,

Langen Schwallbach.

THE approach of the time at which hay fever usually appears induces me to offer you the following notes and observations.

For the past ten years, a young medical man of my acquaintance has suffered, from the beginning of May to the end of June, so severely from hay fever that his practice has been seriously interfered with. It will be understood, as a matter of course, that he had in succession tried all the many and much-lauded remedies without any good result. Quinine, in large quantities, alone produced favourable results, and not before symptoms of poisoning presented themselves. It may not be without interest to mention that urticaria broke out, beginning on each side of the spine, following the course of the chief nerve-branches down the arms and legs, and finally covering the whole body. This painful state lasted for three days, at the end of which the hay fever disappeared—leaving, however, in the patient no desire to repeat the experiment with quinine.

In a comparatively large number of cases of hay fever, I found that the primary indication of the disease was a slight twitching sensation at the inner corner of the eye. This sensation becomes more intense day by day; next follows a swelling of the conjunctiva, with all the accompanying symptoms of acute conjunctivitis, and the symptoms referable to the mucous membrane of the nose, asthma, etc., set in later. These slight premonitory symptoms, which sometimes precede the final outbreak by a fortnight, and perhaps disappear with a change of weather, may easily be forgotten. But even assuming that, now and again, the disease does not begin in the eyes, but in the nose or the bronchial tubes—a possibility which in principle cannot be rejected—the exception would not by any means invalidate the assertion that hay fever usually begins with the symptoms of conjunctivitis.

Upon these facts I build my therapeutic plan. Since the first symptoms of hay fever manifest themselves in the eye, it is probable that the agent which is to be regarded as the cause of the hay fever (I do not here refer to the pollen grains which are everywhere present during the season in which the fever prevails, and are consequently to be found in the secretion of the conjunctiva and in the mucus of the respiratory tracts) first attacks the conjunctiva; under favourable circumstances (heat) it multiplies there, and then diffuses itself over the mucous membrane of the respiratory organs, perhaps through the medium of the laryngeal canal. To be effective the condition must be attacked by local treatment, directed to the eyes at the earliest possible date.

I will pass over the details of the experiments that were ineffectual. On the advice of my learned friend Dr. Pagenstecher, of Wiesbaden, I chose instillation and bathing of the conjunctiva with sublimate solution, of the strength of 1 in 3,000. The bathing began perhaps fourteen days before the appearance of the hay fever, whenever the patient returned home after open-air exercise. The patient was besides required to keep as cool as possible, and

to wear pale blue spectacles. The result of the treatment was that he remained free from his trouble for a length of time. Not before the end of June did slight irritation of the conjunctiva reappear, which, however, could not be compared in intensity to former attacks, and involved no complication. Relying probably upon his generally healthy condition, the bathing had not been performed with sufficient energy. Although the sublimate solution came in contact with the mucous membranes of the nose or throat only slightly, or perhaps not at all, neither of these organs was affected, which must have happened if the virus of the hay fever passed into the body through the nose and mouth. In such an exceptional case, it would be simple enough to apply the solution by a nose douche, by garglings, or perhaps even by cautious inhalation.

THE VALUE OF INSPECTING THE ORIFICES OF THE URETERS BY ELECTRIC LIGHT IN THE DIAGNOSIS OF "SYMPTOMLESS" HÆMATURIA AND PYURIA.¹

By E. HURRY FENWICK, F.R.C.S.,

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IN the endoscopic examination of the eye, the ear, or larynx, the operator first directs the light upon the most important structure—the optic disc, the drum, or vocal cords, and having satisfied himself as to their condition, he turns his scrutiny to their surroundings. The need for it in exploration becomes more pressing as the field we have to search enlarges, and in the wider areas the rule of starting from some fixed important point is often no mean factor of success. Thus, in abdominal section for obstruction the hand first feels the cæcum to ascertain if it be full or empty, and from thence the fingers trace the coils of large or small intestine according to the clue which cæcal distension or contraction may afford.

In the exploration of the bladder with the electric light it is necessary to have some such starting point in order that the examination may be systematic, rapid and effective. The most important section of the bladder, speaking cystoscopically, is the inferior zone, and the cardinal points in this area are the orifices of the ureters. Upon them the operator should first direct the light,² and from them the search should radiate. There are several reasons for this choice. From the orifices of the ureters may be seen to issue fine jets of renal blood in kidney bleeding, the semi-vividness of which may prove fallacious (without the cystoscope) in the diagnosis of the source of symptomless hæmaturia. Upon their lips or in their immediate neighbourhood are most often to be found those tumours which can baffle diagnosis.³ Moreover, their appearance, their clean-cut, slit-like openings, or their tumid, gaping mouths—that is, their healthy or unhealthy aspect—is an index to the soundness or unsoundness of the remainder of the mucous membrane, which cannot be neglected in the treatment or prognosis of disease.

In hæmaturia I generally first satisfy myself that the ureters are free from tumours, and then make a rapid survey of the rest of the bladder, proceeding from below upwards (that is, inversely to the tendency the zones evince to growth).⁴ If I can find no cause for hæmorrhage I return to the orifice of each ureter, and watch the colour and amount of its efflux. In three cases lately I have thus been able to detect the renal source of symptomless hæmaturia, which otherwise I might have overlooked.

CASE I.—Mr. B. consulted me in January, 1888, in reference to a hæmaturia. He brought with him a specimen of bloody urine

¹ Excerpt from a demonstration of the value of the electric light in the diagnosis and treatment of obscure vesico-urethral diseases given before the Staffordshire Branch of the British Medical Association, May 31st, 1888. This subject is an appropriate addition to an editorial on "The Surgery of the Ureter," in the JOURNAL, June 2nd, 1888.

² Vide author: A Description of the Electric Cystoscope, JOURNAL, February 4th, 1888.

³ Single villous papillomata are found at the right ureteral orifice in 43 per cent., and at the left in 26 per cent. of the cases. Fibromata and small single myxomata in 90 per cent. of the cases are situated at the ureteral orifices. Author, *Lancet*, March 10th, 1888.

⁴ The liability of the three zones to become affected by single cancerous growths may be expressed thus:—The upper : middle : lower zone :: 1 : 3 : 6. Author, *Pathological Transactions*, Carcinoma of the Bladder, 1888.