of twice the length. I have also found a rubber ear syringe (one in which the ball and nozzle are composed of black rubber) to be most useful for washing the glass tubes, since one can affix the compressed ball to the tube and allow it to suck up water or alcohol for cleaning, and thereafter by compressing it the fluid is entirely discharged.

Edinburgh.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

NOTE ON BREAD AS A SOURCE OF URIC ACID.

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IN Professor Armand Gautier's "Diet and Dietetics," of which there is a not very satisfactory translation published by Messrs. Constable and Co., he draws attention to a fact which is little known in this country—that bread may be a source of uric acid by setting free an excess of phosphoric acid (0.239 gramme of phosphoric acid per 100 grammes of new bread), an acid that does not find any base which can neutralise it.

In the early part of this year a boy, aged nine years, was admitted into the General Hospital, Birmingham, under my care for acute nephritis. There was swelling of his face and legs; his urine was scanty and high coloured and contained blood, albumin, and epithelial and granular casts. His body was covered with numerous scabs and scratches and little raw red spots, and it seemed to me probable that the nephritis was caused by the absorption of some irritating substance which had been applied to his skin, although we were never able to obtain absolute proof of this.

The patient was treated at first by being put to bed in blankets and given imperial drink; his bowels were opened by scammony resin, and boric acid fomentations were applied to the sores on his legs. A week later the whole of his body was anointed daily with the following lotion: Sodium biboras, 3 drachms; oleum olivæ, 4 ounces; aq. rosarum to 8 ounces. The skin soon became perfectly healthy. The blood and casts disappeared from the urine although there was occasionally a haze of albumin, but there was a very copious deposit of uric acid which was first noticed on Feb. 12th, about a month after his admission, although he was on a diet containing only milk, bread, butter, light puddings, cocoa, and fish. The uric acid persisted in spite of large doses of citrate of lithium up to 15 grains at bedtime. The cocoa and fish were stopped on Feb. 20th; on the 22nd he was given urotropin, five grains at bedtime, and this was increased to twice and three times a day without effect. On March 3rd lithia was again tried, 15 grains first at bedtime, then twice a day, then three times a day, and on the 18th five grains of urotropin were added to each dose of the mixture, entirely without effect. From March 19th to April 8th soluroi up to four tablets daily was given, also without apparent influence. On April 26th potatoes were substituted for bread, which was removed from his diet, and during the time that he took no bread no uric acid appeared. On the 30th he was allowed two ounces of toast with each meal, with the result that the uric acid reappeared occasionally so that the quantity of toast was reduced to one ounce.

As the boy was in other respects well and had been in the hospital nearly three months we were obliged to let him go and the observation was discontinued, but so far as it went it supports Professor Gautier's opinion. As the influence of bread as a possible cause of the deposit of uric acid is not generally admitted I have thought it worth while to publish this brief note to call attention to it.

Birmingham.

NOTE ON THE SYMPTOMS AND TREATMENT OF HAY FEVER.

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HAY fever, or hay asthma, is an extremely distressing disease. It is also a very prevalent one. Unfortunately the treatment is unsatisfactory, so much so that Watson Williams, reviewing it for the *Medical Annual* of 1905 (p. 312),

says: "The prevalence of this troublesome complaint demands full trial of any method which is likely to be successful." I believe this failure in treatment is to be explained on the ground that the disease is looked upon too exclusively as a disease of the nose and upper respiratory passages, whilst the affection of the conjunctiva is overlooked. Yet I believe the eye affection is at the root of the disease and precedes by several hours the irritation in the nares. Before mentioning the treatment which I have found most satisfactory I shall briefly enumerate the symptoms in the order in which they occur.

On the first bright warm June day the disease manifests itself by a feeling of itchiness at each inner canthus. On examining the eyes a slight hyperæmia of the bulbar conjunctiva is noticed. This gradually increases and causes photophobia and sneezing when the eyes are turned towards a bright light. There is no secretion from the conjunctiva, although there is a copious flow of tears. The hyperæmia assumes a distinctly conical shape, with the apex touching the cornea, the base being towards the nose. The intense irritation in the eyes forms one of the most distressing features of the disease. As the eye affection grows worse the frequency of sneezing increases until scarcely an hour of the day passes without violent paroxysms. A feeling of intense irritation in the mucous membrane of both anterior and posterior nares occurs and a watery secretion runs from the nose. The sneezing causes intense occipital headache. The disease is now at its worst. Great depression and malaise ensue. The general health is so impaired that the skin breaks out into profuse perspiration after each fit of sneezing. The disease lasts for about three weeks.

The points which I wish to emphasise are these: 1. That the disease begins as a hyperæmia of the conjunctiva and that the other symptoms are mostly reflex. 2. That the eye affection known as pterygium is merely an exaggerated condition of the same affection of the eye made permanent in hot climates "where the air is filled with fine sand or other minute particles."¹ 3. That sufferers from pterygium are invariably great sufferers from hay fever.

The eye being the chief seat of the disease one is not surprised that the profession, led by such popular works as Osler's "Principles and Practice of Medicine" or Whittle's "Dictionary of Treatment," which describe the disease as entirely an affection of the nasal mucous membrane, has gone astray on the question of treatment. The disease lies quite as much within the province of the ophthalmic surgeon. On consulting Swanzy's "Diseases of the Eye" (second edition, p. 83) I find that he recommends dark glasses for protection from the light, weak astringent collyria, &c. The fact is, the eye wants protection, not from the light, but from the dust. Intolerance of light is only secondary to the irritation caused by the dust. This protection is afforded quite as well by colourless glasses as by tinted ones and they are not so unsightly. The colourless glasses should be fitted into frames of the pince-nez variety, for the reason that they best protect the inner canthi, and also for the physiological reason that pinching the root of the nose often stops a sneeze. Protecting the eyes does not cure the disease but all the symptoms are so effectually relieved that hay fever becomes a comparatively trivial affection which scarcely interferes with the routine of life.

Exeter.

A CASE OF THE APPENDIX IN A FEMORAL HERNIA, THE PATIENT ALSO EXHIBITING A CURIOUS CYANOTIC CONDITION.

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AN unmarried woman, aged 44 years, was admitted into the Great Northern Central Hospital on May 21st with a double hernia. An operation was performed by Mr. E. C. Stabb on May 22nd. On the right side an oblique incision was made over the lump and a tense swelling was discovered which felt like an enlarged lymphatic gland. This after a little dissection proved to be a hydrocele in the distal end of the femoral sac. The proximal end of the sac was found coming through the lower end of the crural canal. On opening the sac the appendix was found, the tip being very adherent to it. The appendix was removed, without enlarging the opening, by the cuff method, the stump being buried by Lembert sutures.

¹ Swanzy's Handbook of Diseases of the Eye, second edition, p. 109.