of the tongue, then the tip of the tongue, lastly the jaw. Three years ago she came under Mr. Harmer's care, and he gave her tuberculin, and that improved the larynx and base of the tongue, but had no effect on the anterior side of the tongue or the jaw. Then 60 gr. sodium iodide by ionisation was tried, twenty applications, and she has had forty applications of the Simpson lamp. That was last November, and I did not see her again until a fortnight ago, when she was steadily becoming worse; therefore I decided to try the effect of Spengler's I.K. therapy. I have had only a small experience of that treatment, but it has been so striking in the person of my wife that it seemed worth trying in this case. Spengler advised it in lupus and tubercle, and the result has been most surprising in a fortnight, the tongue condition having half cleared up in that time, and the girl eats better and feels improved in every way. On testing by Spengler's precipitation test, which he admits is only a rough-and-ready method, an enormous improvement in the patient's resistance is seen. My wife's case was a most striking one: she had been "going down hill" for seven years, and at one time had twenty bacilli per field (that was last October); now she has only one bacillus in five fields, she is putting on weight, and in the last ten weeks her temperature has only once been above the normal.

The PRESIDENT: With regard to lupus of the throat, nose, larynx, etc., in my experience one falls into the pit now and then if one fails to have a Wassermann test carried out and carefully done. I have seen many cases diagnosed as lupus when the condition was syphilis, and *vice versâ*.

Mr. HUGHES: Wassermann's reaction was negative.

Abstracts.

PHARYNX.

Roy, Dunbar.—Partial Paralysis of the Soft Palate following Removal of Tonsil and Adenoids. "Laryngoscope," 1915, p. 361.

The writer has apparently had his nerve somewhat badly shaken by an unfortunate result of removal of adenoids and tonsils. The patient was a male, aged four, who was operated on on May 20, 1913. Complete enucleation was accomplished without trouble, and "with less traumatism than usual." Two days later there was no pain in the throat, but a week after that the child was brought back with a history of fever (101° F.), malaise and inability to articulate distinctly. On swallowing, liquids returned through the nose. Examination showed the pharynx to be in good condition—both pillars appearing normal. The tongue was coated. The child was given small doses of strychnine, and later the naso-pharynx was irrigated with alkaline lotion and touched with argyrol. Within ten days the temperature subsided and the patient was able to swallow better, but the soft palate still had a leathery look. Within the next month the voice was practically normal.

Roy gives it as his opinion that operations for the removal of tonsils and adenoids should not be looked upon as a simple procedure, but should have the same thought and care "as any other major surgical operation." Within the last few years Roy has seen various mutilations of the pharynx caused by the so-called tonsillectomies. The anterior and posterior pillars are often united into one flat cicatrix, and in many

cases the movements of the palate are markedly restricted. Roy has also seen stripping of the mucous membrane from the soft palate and total ablation of the uvula. He thinks that the case reported above may have been due to injury to the muscles of the soft palate during the removal of adenoids, and holds that an unnecessary amount of force and traumatism is frequently used in this operation. It is very easy to over-stretch the soft palate even by a digital examination of the naso-pharynx. In the present case Roy used a small-sized Brandege's forceps for the removal of the adenoids, but since then he has abandoned forceps. He believes that the La Force adenotome is a good instrument, and follows this with a small Gottstein curette.

So much has been written, especially in the secular periodicals, concerning the ill effects of adenoids, that parents now make their own diagnosis. If one were to credit all that is written on this subject, mothers would soon believe that their offspring would become raving idiots if their adenoids were not removed. Roy holds that every young child has adenoid tissue in the naso-pharynx, and even if a child is a habitual mouth breather it by no means proves that he has a large mass of adenoids. The parent or physician who thinks that the removal of adenoids will cure all symptoms of mouth breathing in every case will be sadly disappointed. Mouth breathing is often due to a short upper lip associated with a high-arched palate. In these cases the work of the dentist is needed to widen the palatal arch.

According to Roy, a swift operation on the naso-pharynx, frequently with the palate obscured by blood, is by no means an infrequent occurrence among the best of us. Many of these cases are never seen again, and it is therefore impossible to know the end result. The cases should be kept under observation.

Roy has circularised fifty-five specialists in the United States on the question of paresis of the palate following operation, and has received answers from thirty-nine men. Opinions were almost equally divided, about half the specialists denying any knowledge of paralysis of the palate. (This group included Kerrisen, Kyle, Loeb, McKernon, Sluder, Stein, Harmon Smith, and Yankauer.) On the other hand, Ballenger has seen a few cases of partial and total paralysis, in all of which regurgitation through the nose was present. Barnhill has had several, while Beck finds that about 10 per cent. of private cases have a nasal twang after operation. Hurd has seen a number of cases in which the soft palate was so much deformed and so rigid as to appear immobile. Hudson Makuen has observed one case of almost complete paralysis of the soft palate following digital examination. *J. S. Fraser.*

NOSE.

Cooke, Robert A. (New York City).—The Treatment of Hay Fever by Active Immunisation. "Laryngoscope," 1915, p. 108.

Any form of foreign protein introduced within the living body gives rise to the formation of a specific immune or antibody which exists either attached to certain cells or free. When union takes place between protein and free antibody there is no clinical evidence of reaction, but when a union takes place between protein and fixed antibody a reaction takes place. When there is a large excess of antibody circulating free we have an immune state, and when there is little antibody, and that for the most part attached, we have the sensitised state (anaphylaxis). We do

not know why certain individuals become and remain sensitised, though we know that the capacity is largely inherited (64 per cent. of cases).

In America hay fever occurs in two well-defined groups of cases—(*a*) the Spring type, beginning May 1 to 15 and ending July 15 to 30, (*b*) the Fall type, beginning August 10 to 20 and ending October 1 to 15. The early and late types are due to different kinds of grasses. The diagnosis may be made by means of the cutaneous reaction. Solutions of pollen protein injected intra-dermally give rise almost at once, in individuals sensitised to that protein, to the formation of an urticarial weal surrounded by a distinct zone of hyperæmia and usually attended by considerable itching of the skin. Practically all hay fever cases show multiple sensitisation, *i. e.* they react positively to more than one protein. Ten per cent. of cases have both spring and autumn symptoms, while 32 per cent. have sensitisation to different proteins, *e. g.* cat, egg, lobster, celery, etc. The clinical manifestations may be urticaria, asthma, angio-neurotic œdema, hay fever, and gastro-enteritis. The pollens of the *Graminaceæ* are by far the most important in the early cases.

Preparation of the Pollen Extracts.—Dried pollen is ground in a mortar with sand, using n/200 NaOH ·9 NaCl solution. It is then shaken for twenty-four hours and afterwards filtered through sand and then through a sterile Berkefeld filter. Doses are expressed in fractions of a milligramme of nitrogen content.

Treatment.—The intra-dermal tests have first to be applied in order to determine the specific etiological factors in the case. Prophylactic treatment is begun about two months before the anticipated attack. Injections are given subcutaneously at weekly intervals, the dose at first being very minute and gradually increasing at subsequent injections. Ten or twelve injections in all are required. On the other hand, cases that present themselves for treatment during the attack are given minute doses on four successive days, and then at intervals of from three to five days. Cooke gives some illustrative cases: Female, suffering from late hay fever, which started sixteen years ago; no asthma. Shell-fish produced an intense itching of the entire skin. Intra-dermal test: Rag-weed and Golden-rod both positive. Treatment: Ten injections, after which the patient was entirely free.

Cooke admits that cases once rendered immune do not, as a rule, retain a sufficiently high degree of immunity to protect them during the ensuing year. Out of sixty cases there was marked improvement in 60 per cent., some improvement in 30 per cent., while less than 10 per cent. were failures. It is more difficult to obtain immunisation in the late type of infection. In conclusion Cooke utters a word of caution against the liberal use of this form of treatment in highly sensitised individuals, especially asthma cases, as alarming symptoms are apt to arise and death from anaphylactic shock is not impossible.

J. S. Fraser.

Meyer, A. W.—Sinister Unrecorded Anomalies of the Sphenoid. "Annals of Otology," xxiv, p. 257.

Describes two specimens in which diverticula of the mucous lining of the sphenoidal sinuses protruded directly into the subdural space. One case was aged twenty-eight, the other thirty. Sphenoidal sinusitis in either would probably have resulted in meningitis; whilst probing, irrigation, or other operative procedures would have resulted disastrously through no lack of skill or foresight on the part of the operator. Such anomalies must be rare.

Macleod Yearsley.

ŒSOPHAGUS.

Richmond McKinney (Memphis, Tenn.)—Simple Inflammatory Stenosis of the Œsophagus. "Laryngoscope," 1915, p. 354.

Hitherto, strictures of the gullet have been classified into: (1) malignant; (2) traumatic; and (3) spasmodic. Simple inflammatory stenosis has not been recognised, though, according to McKinney, such a condition may at times endanger life. It is best to make the œsophagoscopic examination without the aid of cocaine, which causes blanching and retraction of the tissues. The commonest symptom of simple inflammatory stenosis is regurgitation of food. There is no pain, but, should the stricture continue long enough, there is loss of weight. The treatment consists in gradual dilatation applied through the œsophagoscope, no anæsthesia being necessary. Guisez says that the œsophagus may become completely stenosed under the influence of irritation and of simple chronic inflammation. He finds that inflammatory stenoses occur at the contracted extremities of the gullet; they may be due to two causes: (1) Simple thickening of the wall following œsophagitis due to chronic irritation, indigestion, or alcohol; (2) spasms terminating in permanent stenosis. Stasis of food following upon the spasm causes inflammation of the œsophageal wall, which results in cicatricial degeneration. The initial spasm occurs in patients who eat rapidly and masticate poorly. The condition is to be differentiated from cardio-spasm, since the latter condition causes hypertrophy of the œsophageal musculature, with subsequent atony and dilatation, but does not cause a true organic and annular stricture. McKinney believes that there is always a primary œsophagitis in organic inflammatory strictures, the œsophagitis being due to localised irritation. McKinney records the following cases: Case 1.—Male, aged sixty-two, with increasing dysphagia for eight months. The food seemed to be arrested in the upper portion of the gullet, and was frequently regurgitated. The patient was a rapid and hearty eater, and suffered from indigestion. Œsophagoscopy showed an annular stricture at the mouth of the gullet, through which McKinney could pass an 8 mm. tracheal tube. The stricture was 24 cm. from the incisor teeth. There was no pouching of the hypo-pharynx. The stricture was dilated by flexible bougies and a cure was obtained. Case 2: Male, aged sixty-five, dysphagia for one year; food lodged in throat and slowly went down. No loss of weight, but the patient had bad teeth and indigestion. Œsophagoscopy showed a constriction at the mouth of the gullet which yielded to gentle pressure with a linen bougie, size 15 F. At the end of one month a size 40 F. was passed without difficulty. Simple œsophageal strictures are not transitory; when they once begin they continue gradually to grow worse. They are not due to hysteria. McKinney holds that it is comparatively easy to exclude cancer as the simple strictures are annular, attended by no pain, and are easily treated. Guisez has seen twelve cases of inflammatory stenosis, six of which occurred at the cardiac end. McKinney's cases number four, and in all the cervical region was affected. He finds that the area of constriction is always more deeply congested than the part above. Dilatation should be practised with extreme care for fear of rupturing the wall of the gullet. This accident occurred in a case of McKinney's, in which the stricture was caused by the accidental swallowing of concentrated lye. During the writer's absence the patient was removed from his wards by a general surgeon who attempted reversed dilatation through a gastric fistula. The patient died within twenty-four hours. *J. S. Fraser.*

MISCELLANEOUS.

Kahn, H., and **Gordon, L. E.—The Use of Pituitary Extract as a Coagulant in Injury of the Nose and Throat.** "Annals of Otology," xxiv, p. 322.

The authors tabulate fifty cases and conclude: (1) The coagulation time of the blood is materially reduced by the hypodermic administration of pituitary extract. (2) The hæmorrhage following nasal and throat operations is much reduced, especially those on the turbinal body. (3) The effect on the blood-pressure of children is variable, as follows: Systolic pressure was increased in 55·31 per cent. of the cases, reduced in 36 per cent., and unchanged in 8·5 per cent. Diastolic pressure was increased in 35·5 per cent., reduced in 35·5 per cent., and unchanged in 29 per cent. Pulse-pressure was increased in 61 per cent. and decreased in 39 per cent. The method of administration followed was to give 12 minims hypodermically to children and 15 minims to adults, not less than fifteen minutes before the intended anæsthetic.

Macleod Yearsley.

REVIEWS.

Diseases of the Nose and Throat. By JONATHAN WRIGHT, M.D., Director of the Department of the Laboratories, New York Post-Graduate Medical School and Hospital, and HARMON SMITH, M.D., Surgeon to Throat Department of the Manhattan Eye, Ear, Nose, and Throat Hospital; Clinical Professor of Laryngology and Rhinology, Cornell University Medical School. Illustrated with 313 engravings and 14 plates. Pp. 683. London: Baillière, Tindall & Cox, 1915.

As a combination of forces nothing could surpass the co-operation of Dr. Jonathan Wright and Dr. Harmon Smith in the presentation of the pathological and clinical aspects of diseases of the throat and nose. Dr. Jonathan Wright has been so long known to the older generation of laryngologists as a zealous and original investigator that it might have been thought that his time for retiring from work had arrived. The frequent appearance of fresh contributions from him prove that he is still active, and a visit to him in his laboratory in New York enables one to judge that he is likely to continue his contributions for many years to come.

The book is emphatically a good one, and every article has some distinctive feature about it. Dr. Harmon Smith is essentially practical, and has evidently got his ideas thoroughly clarified as the result of much thought and observation. We find, therefore, that many of the chapters contain in a concise form an extraordinarily complete account of any given branch of the subject. This will be evident to anyone who reads the accounts of distortions of the septum or of the diseases of the accessory sinuses. The essentials which are of most use to the young specialist are to be found shorn of the less relevant elaboration and repetition which are apt to confuse him. The older specialist also can scarcely fail to find many points of fresh interest either from their actual newness or from the new manner in which they are presented.

The tonsils afford much material for the pathologist and the clinician,