The author thinks that the death rate of the tracheotomies performed in the cases treated with antitoxin affords the strongest evidence in favour of the treatment.

The following statistics are quoted :—

1.	Mortality	before introduction of antitoxin		77·5 per cent.
	,,	after	,,	52·4 (Körte)
2.	,,	before	,,	59·5
	,,	after	,,	48·4 (Metropolitan Hospitals)
3.	,,	before	,,	79
	,,	after	,,	34·5 (Marsh)
4.	,,	before	,,	75
	,,	after	,,	59·1 (Birmingham)

At the end of this very thoughtful and carefully reasoned contribution to this question, Dr. Russell once more lays stress on this diminution of the tracheotomy mortality, which he considers is the one unassailable piece of evidence that we have before us, and proves antitoxin to be of value. *Barclay J. Baron.*

NOSE, &c.

Baber, Cresswell.—*Notes on the Diagnosis of Latent Abscess of the Maxillary Antrum.* "Brit. Med. Journ.," June 27, 1896.

THE author describes the recognized diagnostic methods, and recommends in doubtful cases puncture through the inferior meatus with Grünwald's trocar and canula. Where no pus appears on aspiration through the canula, he employs Grünwald's method of injecting air and inspecting the middle meatus for discharge of pus. Aspiration may also be repeated after the air injection—a manœuvre which after previous failure may give a positive result, due to the frothing of the pus, bringing the latter to the level of the orifice of the canula.

By tilting the head well back the most dependent part of the antrum may be reached by the canula. Grünwald recommends repeated diagnostic puncture when results are negative and symptoms marked, on the supposition that the cavity at one time contains pus, at another none.

In twenty-six cases the author has never failed to reach the antrum, and has seen no ill results. *Ernest Waggett.*

Fürst, L. (Berlin).—*On the Treatment of Rhagades and Coryza Sicca in Young Children.* "Therapeut. Monatshefte," June, 1896.

DRYNESS of the nasal mucosa and the formation of fine fissures at the orifices of the nostrils are very common and troublesome affections in children. Painting with a one per cent. solution of nitrate of silver will cause any fissures present to heal, but does not affect the dryness of the mucous membrane, so the fissures return again. In young children the result of the dryness of the nasal mucosa is, first of all, that any mucus present is not removed sufficiently, but accumulates, mixed with dust and bacteria, into little lumps and crusts, which may interfere with nasal respiration to a very considerable extent. Further, the mucous membrane loses its elasticity, and even undergoes a kind of atrophy. Older children help the formation of the fissures by scratching inside the nose with their finger-points and nails. Treatment must, therefore, commence with the removal of all crusts, etc., which is best done by washing out with—

Sod. Chlorat.	0·5
Acid. Boric	1·0
Aq. Dest.	100·0

Then carefully paint with boro-glycerin-lanolin (Byrolin; Graf & Co., Berlin). At the same time, fissures are to be treated, as above, with silver nitrate.

Arthur J. Hutchison.

Frank (Kirchheim and Tock).—*A Case of Aërial Goître.* "Münchener Med. Woch.," No. 22, 1896.

THE patient, a man of fifty-three, who had never suffered with goître and whose family was free from the disease, presented himself for treatment, with the following history. In 1870 he was wounded in the neck by a rifle bullet; whilst under treatment he felt a little crackling, as if something had ruptured. Some years later he noticed, on coughing, that a tumour developed in his neck which afterwards disappeared. On examination a tumour the size of a small apple is found on the right side in the jugular fossa. During coughing a tumour the size of the fist arose on either side. The author thinks that this is an aërial bronchocele, and not a tracheocele. *Michael.*

Gleitsmann, J. W. (New York).—*Treatment of Diseases of the Accessory Cavities of the Nose.* "Annals of Ophthal. and Otol.," April, 1896.

THIS is a short paper on the diagnosis and treatment of empyema of the accessory cavities, not professing to be complete or to contain anything new. Only one or two points need be referred to.

Diagnosis.—If pressure on the anterior wall of the frontal sinus or tapping the glabella excites pain or increases the headache, "an affection of the frontal sinus is almost certainly present." Transillumination, although its value has been somewhat overrated, ought never to be omitted, as a positive result confirms a doubtful diagnosis. It is most useful in antral cases, but much less satisfactory in dealing with the frontal sinus.

Treatment.—Simple cases of antral empyema can be treated through the inferior meatus, but the more obstinate cases must be opened into through the alveolus or canine fossa. When in doubt as to whether a case is one of frontal or ethmoid disease, Gleitsmann prefers to deal first with the ethmoid cells, opening them, irrigating and applying powders and caustics.

In dealing with the frontal sinus, as intranasal treatment does not promise good results, the external operation is preferable; the incision should be through the eyebrow.

Opening the sphenoid sinus is not difficult, as the anterior wall is generally implicated and softened by disease. Sphenoid disease is not so dangerous as some American specialists consider it, but requires a longer time for treatment than do affections of the other sinuses. *Arthur J. Hutchison.*

Hansell, Howard F. (Philadelphia).—*A Case of Acute Loss of Vision from Disease of the Ethmoid and Sphenoid Cavities.* "Philad. Polycl.," May 23, 1896.

REPORT of a case showing the following symptoms: A boy, aged seventeen, in fair health, was suddenly seized with severe headache, principally in the frontal region; this was followed by failing sight and mental dulness. Upon examination the following was the ocular condition: lids and conjunctivæ normal; cornea and anterior chambers clear; irides moderately dilated, not responsive to light; lenses clear; vitreous chambers clouded by minute opacities; the optic discs were pale, the arteries contracted; there was no optic neuritis; each retina was œdematous, showing a few greyish curved lines marking linear detachments of the retina from the choroid; vision was reduced to a perception of light. On examination of the nose the turbinals were found swollen, completely obstructing

the passages, with considerable secretion of muco-pus posteriorly. Upon contraction after the application of cocaine, pus was seen to be flowing freely from both the superior and middle meatus, right and left, and from the upper and back part of the left fossæ. Transillumination of the maxillary and frontal sinuses led to the diagnosis of acute purulent inflammation of the anterior and posterior ethmoidal cells on both sides and the left sphenoidal sinus. Atropin internally, and appropriate local treatment, relieved the inflammation, and the nasal condition was normal in about ten days; notwithstanding all treatment, however, and although the changes in the vitreous and retina disappeared, the vision remained seriously defective and showed little improvement. No symptoms other than those described, namely, pertaining to the eye and nasal cavities, were elicited, after the most careful scrutiny. The author therefore concludes that we must depend on the ocular and nasal examination to determine the source of the blindness. *StGeorge Reid.*

Kenny, A. L.—1. *Ulceration of the Tip of the Nose.* "Australasian Med. Gazette," April 20, 1896.

TUBERCULIN had been injected twice without effect; a third very strong injection caused intense general reaction, of the effects of which the patient complained for a month. The local reaction was slight, but the ulcer commenced to heal, and is now completely covered with skin. In the opinion of some members, the healing was not yet perfect. Emplast. salicylic acid and creosote (Unna) was used locally, but not until the reaction was established.

2. *Microscopic Specimens of a Naso-pharyngeal Sarcoma* removed from a young man, aged twenty. The growth commenced at the roof of the naso-pharynx, filled the whole cavity, causing complete nasal obstruction, and bled profusely on the slightest touch. An operation, as for post-nasal growths, was performed by the mouth, with cutting forceps and curettes, and zinc chloride was afterwards liberally applied. Some time previously another surgeon had removed a mass of sarcomatous glands from the left side of the neck, below the ear and behind the angle of the jaw. There is some recurrence in this part. The specimens were round-celled sarcoma.

Kent-Hughes, W.—*Case of Empyema of the Antrum.* "Australasian Med. Gazette," April 20, 1896.

A GIRL, aged twenty-two, for two years had had symptoms of antral disease, and three months previous to operation pus had discharged into the mouth after extraction of the second bicuspid. The facial wall of the cavity was chiselled through, and the pyogenic membrane thoroughly removed by scraping. The antrum was stuffed with gauze for ten days, the gauze being renewed daily, and the cavity was well irrigated with carbolic lotion (one in sixty). At the end of that period the wound was allowed to close. *A. B. Kelly.*

Lichtwitz.—*Complications of Empyemas of the Accessory Cavities of the Nose.* "Ann. des Mal. de l'Oreille," Feb., 1896.

COMPLICATIONS may involve (I.) the neighbouring organs, nasal fossæ, pharynx, ears, eyes, or be cranio-facial; (II.) distant organs, the bronchial branches, digestive tube, etc.; (III.) the general condition, enfeeblement, loss of flesh, fever, etc.

I.

1. *Nasal Fossæ.*—The mucous membrane of the turbinateds may be atrophied, as in thirteen of the author's cases, and may simulate true ozœna. Three of his patients had been previously treated for ozœna, which he cured by treating the

sphenoidal sinus. Six others had employed nasal douches, and been cauterized; in these the nasal secretion diminished after the first irrigation of the sphenoidal sinus, and cephalalgia ceased entirely. In three other cases there seemed to be true ozœna with propagation to the sphenoidal sinus, and in the last case only maxillary sinusitis had been detected.

Hypertrophic rhinitis is frequently met with. In these cases the affection of the sinus appeared to resemble caseous coryza, the left maxillary sinuses being filled with thick fœtid pus. There was also slight exophthalmos with left strabismus and diplopia and terrible cephalalgia. A malignant tumour of the superior maxilla was thought of; the patient, however, was cured by evacuation of the pus from the nose and antrum. Two other patients presented a similar condition of the frontal sinus and ethmoidal cells, but without orbital symptoms. In both the head symptoms were cured on removal of the pus. In twelve cases he found small polypi or granulations over the semilunar hiatus, and in eighteen cases large mucous polypi, filling both sides of the nose, along with unilateral sinusitis. The polypi were probably rather the cause than the consequence of the empyema. Kakosmia was present in a third of his cases.

2. *Naso-Pharyngeal Cavity and Oral Pharynx.*—Many of his patients, chiefly those with sphenoidal or frontal sinusitis, presented symptoms formerly described under the name of naso-pharyngeal catarrh, or Tornwaldt's disease. In many of his cases he has noted a complication of swelling and abscess of the palatine and pharyngeal tonsils.

3. *Eyes.*—He has only observed the following complications in these cases: dacryo-cystitis, three times, in two cases due to suppuration of several sinuses, and in one case to suppuration of the maxillary antrum; two cases of exophthalmos; and once he observed intense injection of the retinal veins in a patient who for twenty-four years had suffered from frontal sinusitis: they recovered their normal aspect when the empyema was cured. In two of his cases there was atrophy of the optic nerve, limited in one of his patients to a portion only of the retina; this patient had suppuration of the frontal sinus with irruption of the pus into the orbit. In the other case it was probably due to sphenoidal sinusitis. Once he noticed papillary inequality in a case of sphenoidal sinusitis.

4. *Ears.*—He has observed fifteen cases of old or recent suppurative otitis, once with mastoiditis; seven times sub-acute otitis; fourteen times chronic median otitis, with or without Eustachian obstruction; nine times nervous buzzings, and three times vertigo.

5. *Cranio-Facial Complications.*—The most frequent is cephalalgia, generally when the sinusitis is sphenoidal or frontal. Four times he has found facial neuralgia with maxillary sinusitis. In one of his cases irrigation of the right sphenoidal sinus caused epileptiform crises, with loss of consciousness.

6. *Cutaneous Affections of the Face.*—Five patients had recurrent erysipelas; he believes it to be a consequence and not a cause of sinusitis. Nasal eczema and acne rosacea have been observed by him in several cases. He has seen erythema and fugitive œdema after injection of antiseptic fluids.

II.

7. *Bronchial Complications.*—He has often seen acute or sub-acute laryngeal catarrh, twice with thickening of the cords, and many times with pareses of the glottic constrictors. Pseudo-phyma—this complication has not been sufficiently studied. In seven of his cases several distinguished *confrères* had diagnosed pulmonary tuberculosis; this, however, was only a temporary broncho-pneumonic process originating in empyema of the sinuses. We find congestion and sub-crepitant râles at the apex, or only roughness of the inspiratory murmur, which

sometimes dates from a long period antecedent; the symptoms appear and disappear frequently; there is no Koch's bacillus, and the lesion disappears after treatment of the sinusitis. The condition is probably caused by penetration of pus into the bronchi, specially during sleep. Sometimes rebellious bronchorrhœa follows. One of his patients had signs of a pulmonary abscess or lobular pleuritis. Three times he noted cough, disappearing only after evacuation of the sinus; five patients had symptoms resembling asthma.

8. *Elementary Symptoms.*—Four times he found dyspepsia, and three times rebellious diarrhœa alternating with constipation, and he believes these symptoms to be more frequent still.

9. *Vascular and Cardiac Affections.*—One of his patients, with empyema of all the sinuses, had a slow pulse, 28-30 to the minute, which became normal after treatment. In two patients with old maxillary sinusitis he found two attacks of phlebitis to have occurred. He thinks that in a case of aortic insufficiency sinus suppuration may have been the origin of an endocarditis, and that renal affections which he has met with, articular inflammations, and myalgias observed in some of his cases may have had this origin.

III.

General Affections.—He has noted general enfeeblement and loss of flesh ten times, fever four times, insomnia three times, unconquerable somnolence three times, aprosexia twice, cerebrasthenia several times, and pronounced melancholia four times. Crises resembling *petit mal* in a boy of ten were cured after removal of the pus from the sphenoidal sinuses.

Treatment.—He prefers opening into the maxillary sinus through the alveolar apophysis or canine fossa. For the frontal and sphenoidal sinuses irrigations through the natural orifices have always been sufficient for him, though he has often had to remove the middle turbinated, and enlarge the orifices. Wherever it is possible he prefers the endo-nasal treatment. *R. Norris Wolfenden.*

Makuen, G. Hudson (Philadelphia).—*A Case of Stammering Cured by an Operation.* "Med. and Surg. Rep.," May 23, 1896.

On examination of the case, defective tongue-action, an elongated uvula, and adenoid hypertrophy were found. When asked his name he was unable to tell it, although he made violent efforts to do so. The difficulty seemed to be at the base of the tongue, and even when no attempt was made at speech there were peculiar twitchings of the lingual and facial muscles. The diagnosis arrived at by the author was that of chorea of the facial, lingual, pharyngeal, and laryngeal muscles, chiefly due to adenoid hypertrophy, and in part to some deviation from the normal in the genio-hyo-glossus muscle. The child was put under ether, the frenum of the tongue divided well back, and the adenoids removed. Frequent lingual traction was afterwards made to keep the cut edges of the frenum from uniting. Vocal exercises were prescribed, and a cure quickly effected. *A. B. Kelly.*

Milligan.—*Foreign Bodies in the Nose* (Three Illustrative Cases). "Med. Chron.," June, 1896.

In two of these patients a boot button was the foreign body, in the other a rhinolith. The careful use of the probe, usually under an anæsthetic, is rightly insisted on. Angular forceps, snare, Volkmann's spoons, and bent probes are all useful for removal; also irrigation and the use of Politzer's bag up the unaffected nostril may dislodge the foreign substance. Both are, however, distinctly dangerous, especially the former, unless the dislodgement takes place at once, owing to the risk of setting up middle-ear mischief. *Barclay J. Baron.*

Sattler, Eric E. (Cincinnati).—*Atrophic Rhinitis, with a New Idea as to its Causation and Treatment.* "Clin. Chron.," May, 1896.

THE following are the author's conclusions:—(1) Atrophic rhinitis is a genuine, distinct disease of the nose. (2) It is never a sequel or later stage of true hypertrophic rhinitis. (3) It is not caused by syphilis, tuberculosis, or scrofulosis. (4) It is a disease of the female sex. (5) It is caused by a true degenerative process of the trophic fibres or roots which supply the parts of the nasal membrane involved. It is, therefore, essentially and primarily a nerve disease. (6) Being primarily, then, a degenerative process of the nerve fibres or centres, it is never completely curable. It may be arrested, perhaps, and sometimes is, at some stage of the process. (7) Its treatment is symptomatic—local and constitutional. Local treatment consists in a thorough systematic cleanliness of the parts involved; personal attention to the removal of all crusts; restoration of the function of the membrane as far as possible; and prevention of the consequences of the nasal trouble in the naso-pharynx, pharynx, larynx, and trachea. Constitutional treatment consists of remedies directly in accord with the theory of nerve degeneration advanced, as well as general building up of the system and the stamping out of any dyscrasia that may be associated with, but is not the cause of, the disease. (8) The disease should be termed "trophic rhinitis" rather than "atrophic rhinitis," the atrophic condition being only a symptom. *A. B. Kelly.*

Sattler, Eric E. (Cincinnati).—*Interesting and Instructive Cases.* "Clin. Chron.," May, 1896.

A Button in the Right Nostril for Four and a Half Years.—A girl, aged seven, was brought to the author on account of an occasional bad odour and discharge from the right nasal cavity, and headaches over the right half of the head. About five years previously she had pushed a button into her right nostril. Attempts made to remove it, immediately afterwards, failed. The author found the button wedged between the inferior turbinate and septum, and withdrew it easily. It measured over five-eighths of an inch in diameter. It was covered with mucus, but no concretion had formed around it.

Congenital Osseous Occlusion of the Right Posterior Naris.—A lady, aged twenty-four years, consulted the author in regard to a constant profuse mucous discharge from the right side of the nose, which she was unable to expel. She had never breathed through the right nasal cavity. Examination of this cavity revealed great hypertrophy of the inferior turbinate, and, on passing a probe backwards, a solid wall of hard, bony tissue was encountered everywhere. It seemed perfectly smooth, and sprang from the vomer, one and a half to one and three-quarters of an inch from the vestibule. The septum was perfectly straight. By posterior rhinoscopy this unilateral wall of tissue was seen very plainly. Its thickness was estimated at about one-twelfth of an inch. Operation was confined to the cauterization of the inferior turbinate, which effected a diminution in the amount of secretion.

Congenital Osseous Occlusion of the Left Posterior Naris.—This was the case of a lady, aged about thirty years, who had never breathed through the left side of her nose, and had been constantly annoyed by a muco-purulent discharge from this side. The septum was greatly deflected to the left, so that it was impossible to see beyond the deviation. With a probe the posterior part of the nose was thoroughly examined, and a hard, thick obstruction found everywhere. Posterior rhinoscopy revealed a complete closure of the left posterior naris, and a thick ridge of bony structure extending from the lower part some distance into the naso-pharynx, on a level with the floor of the nose. The large anterior deviation of the septum was

first sawed off. A very large, hard, middle turbinate was then found to obstruct a great part of the passage. This was removed, and finally the posterior osseous walls perforated and kept open. The case is still under treatment.

Congenital Web of Larynx.—The patient was a boy, aged thirteen years. His parents had noticed that from birth he had neither cried nor made any sound. Distortion of his face alone showed them when anything was wrong. As he grew up he began to talk in a whisper. When seen by the author he still spoke in a whisper, and if he ran he became short of breath; otherwise his physical condition was good. The laryngoscope showed a web between the cords in front of the vocal processes. It appeared dense and fibrous, and the opening that remained could only have allowed the passage of an ordinary lead pencil. Operation was strenuously urged, but refused by the parents. *A. B. Kelly.*

Seiler, Carl (Philadelphia).—*The Importance of Specific Gravity of Liquids for Topical Medication.* "Med. and Surg. Rep.," May 23, 1896.

THE author calls attention to the importance of having washes, douches, dressings, etc., of a density equal to that of the serum of the blood, so that there may be no interchange by osmosis between the cells or blood-vessels of the tissues and the topical application. In the nose, if the fluid used is of less density, the venous sinuses will become surcharged, thereby causing swelling and pressure upon the nerve filaments, and, consequently, in the first instance pain, and as a secondary effect congestion, owing partly to the irritation of the nerves, and partly to the engorgement of the capillaries, so that the object of the wash or douche is defeated. If, on the other hand, the liquid used is of a greater specific gravity than it should be, the watery elements will ooze out of the tissues by exosmotic action, and shrivelling will take place together with an abnormal accumulation of the solid elements, and again pain as well as congestion will be the result.

The author advises that a concentrated solution be prepared by the druggist, and the patient be directed to add a sufficient amount of this to the exact quantity of water. In this way a perfect solution, and one of the proper specific gravity, is obtained.

In most instances neutral unirritating sodium chloride is the best agent with which to obtain the proper specific gravity—by using fifty-six grains of the salt to a pint of water, to which the other ingredients may be added as desired. If, however, alkalies are indicated in a wash, it is best to make the alkaline solution first of the suitable strength, and then to bring it up to the required standard of density by the subsequent addition of sodium chloride. *A. B. Kelly.*

MOUTH, PHARYNX, &c.

Armstrong.—*Carcinoma of the Tonsil.* "Montreal Med. Journ.," June, 1896.

THE case of a man of fifty-nine, a heavy smoker, who began to notice pain on swallowing two months previous to admission.

Very little increase in the size of the growth had been noticed since its first appearance. The tumour was the size of a marble, and grew from the right tonsil. It was hard and gristly, neither tender nor painful, and freely movable in all directions, and had the microscopic structure of epithelioma. Two enlarged glands were detected in the neck, and the anterior pillars were infiltrated. After preliminary tracheotomy the tonsil was removed by a modification of Cheever's