diminished, and she was able to open her eyes. On the following day the patient was progressing favourably, but had a sudden attack of suffocation, which proved fatal.

Guisez (Paris): The cause of this false passage was certainly the bougie, an instrument which ought to be proscribed. Catheterisation should be carried out with a soft olive, which perhaps gives less valuable information, but is safer. He thought in this case there was cancerous ulceration, and he related some cases of mediastinitis resulting from the passage of œsophageal bougies, cured by making an opening along the sterno-mastoid, turning aside the œsophagus, and drainage. It is necessary to incise to the upper limit of the emphysema. Through this opening retro-œsophageal drainage can be practised and cure obtained (eight authenticated cases).

Molinié (Marseilles) thought that these accidents were not due to the choice of instrument, but to the special pathological condition of the œsophagus. Cases have been cited of œsophago-malacia attended with special friability of the œsophageal mucosa, and of perforation produced independently of any intervention.

Sieur (Paris) had experienced a case of this kind. At the autopsy he found an erosion which had extended to the pleura and involved the lung. In this patient the neoplastic focus adhered to the pleura and lung. In Lubet-Barbon's case he thought dilatation had produced a rupture—the cause of the trouble. The author agreed with Guisez in regard to the treatment after perforations.

Laryngeal Hæmorrhage with Subcutaneous Emphysema of the Laryngeal Region.—Levesque (Nantes).—An adult in perfect health expectorated several small quantities of arterial blood, without cough or exertion; then a swelling in the pre-laryngeal region appeared, with subcutaneous emphysema. It was really a case of lesion of the laryngeal mucosa due to chemical vapours (chlorine and bromine). Hæmorrhage having occurred in the left ventricular region, the patient, in expectorating, caused air to penetrate at the seat of the damaged mucosa.

Abstracts.

NOSE.

Davis, Geo. E.—What is the Best Type of Radical Frontal Sinus Operation? View from Simplicity of Technique, Time of Healing, and Cosmetic Results. "Annals of Otology," etc., xxi, p. 684.

The author's method is not intended to supplant the Killian operation, but to simplify technique and enhance cosmetic effect. He advocates the use of preliminary skiagrams, the use of autogenous vaccines to hasten convalescence, and entering the sinus intra-nasally through the agger nasi cell before operating. The technique of his external operation is, briefly, incision in brow line from supra-orbital notch to articulation of frontal, nasal and maxillary bones; the removal of a strip of bone 6-8 mm wide from anterior sinus wall from a point above supra-orbital notch to nasal process of maxilla and down the latter 5-8 mm. if necessary (the latter gives access to anterior and posterior ethmoidal cells and sphenoidal sinus). After curetting the sinus, etc., it is lightly packed with gauze, the latter emerging from the lower end of the wound, sutured save at that point. Gauze removed second day and an adhesive strip

adjusted to lower end of wound. The advantages claimed are: (1) simplified technique; (2) direct inspection and access; (3) better cosmetic effect. *Macleod Yearsley.*

Tilley, Herbert.—Orbital Complications of Accessory Sinus Suppuration "Proc. Roy. Soc. Med." (Clinical Section), January, 1912.

Case 1: Male, aged seventy-one, complained of double vision, but *not of headache or nasal discharge.* A small, tense swelling was present at inner side of the right eyeball, which was proptosed. Nasal examination showed pus from all sinuses on right side. Killian operation: Posterior wall and floor of sinus found to be destroyed; antrum, ethmoidal cells and sphenoidal sinus contained pus; good recovery. Case 2: Female, aged thirty, suffered from "inflammation of the right eye and face" of five weeks' duration. Right eye proptosed and globe hidden by œdematous conjunctiva; fistula below inner angle of eyebrow: pus in right nose and naso-pharynx: temperature, 102° F. Killian operation: Sequestrum from posterior ethmoidal cells; antrum full of caseated pus. Recovery retarded by pleurisy; slight deformity. Case 3: Female, *aged thirteen*, had had purulent discharge from left nostril for four weeks. Seven days ago "sore throat with shivering fits." Next day pain in left eye and swelling of upper lid followed by vertical headache and severe epistaxis. Examination: Eyelids on left side swollen; marked proptosis; conjunctiva œdematous; ocular movements impaired; fundus normal. Pus in left middle meatus. Operation: Removal of anterior and left middle turbinal. Killian incision externally; pus escaped from inner part of incision and from floor of left frontal sinus; anterior wall removed and mucosa curetted; cavity packed till obliterated.

J. S. Fraser.

EAR.

Ballance, C. A.—A case of Septic Thrombosis of the Left Sigmoid, Left Cavernous, and Left Inferior Petrosal Sinuses, with a Suggestion for Treatment in Future Cases. "Lancet," October 12, 1912, p. 1001.

A paper read at the International Congress at Boston. Boy, aged twelve, suffering from left scarlatinal suppurative otitis since the age of two years. Serious symptoms of one week's duration. At the operation every cell in the mastoid was lined with gangrenous mucous membrane, and the antro-tympanic cavities contained cholesteatoma. The sigmoid groove contained pus, the sinus was thrombosed, and was followed nearly to the torcular. The jugular was divided between ligatures and its tributaries tied. Lumbar puncture gave an ounce of opalescent fluid. Eight days later signs of cavernous sinus thrombosis appeared, and a second intervention, exposing that sinus by the Hartley-Krause incision for operation on the Gasserian ganglion, was performed. At the same time a meningo-cortical abscess of the cerebellum was found. A rigor occurred next day, the temperature rising to 107° F. The patient died next day. At the autopsy the left inferior petrosal sinus was found full of pus, and there was septic clot in the left half of the circular and the left half of the transverse sinuses. The author reviews the literature and discusses the causation and symptoms of thrombosis of the cavernous sinus. He suggests that in future cases in which the inferior petrosal sinus is infected, the jugular bulb should be laid open, so that the opening of the sinus could be seen and its irrigation carried out from the bulb to the cavernous sinus. *Macleod Yearsley.*