comparing the 1906 cases treated with formic acid with 1905 cases treated with strychnine:

Year.	No. of cases.		8.	Percentage deaths.	Percentage fatal heart failure.		Percentage paralysis.		Percentage albuminura.	
1905		507		8.0	3.07		9.09		23.7	
1906		412		6.2	1.94		2.9		15.7	

The death-rate of laryngeal cases fell from 18 to 16, and the death-rate of tracheotomy and intubation cases from 35.28 to 27.5 per cent.

The authors consider the effect on fatal heart failures rate disappointing, but they are convinced that a few cases recovered with the formic acid that otherwise would have died.

The most striking result was the great reduction in the percentage of paralysis cases, and the reduction in albuminuria cases is also worth noting.

The authors regard these results as due to the treatment and not to any change in type of disease.

Arthur J. Hutchison.

## NOSE AND ACCESSORY SINUSES.

Turner, Logan A.—Mucocele of the Accessory Nasal Sinuses. "Edin. Med. Journ.," November and December, 1907.

In this paper Turner records seven cases of mucocele of the frontal sinus and three of the ethnoidal labyrinth which have come under his observation since the date of publication of his paper on bone cysts in the nose, viz. 1904. Of the ten patients seven were females, three were males. The condition seemed to have commenced at an early age in some, viz. ten, twelve, and sixteen and a half years old, and in at least seven of the whole series it had begun before the age of forty.

For details of the cases see the original paper.

Clinical Features.—Orbital swelling is generally the first feature that draws the patient's attention to the existence of some abnormal condition. The swelling progresses very slowly, and is not accompanied by any pain or tenderness. It is usually confined to the upper eyelid, but may spread on to the forehead and the root of the nose. Its exact position is not of much value in the differential diagnosis between frontal and ethmoidal mucoceles. The skin over the swelling is normal in appearance unless the mucocele has been infected by pyogenic organisms (one case), when, of course, acute inflammation alters the conditions entirely.

On palpation there is no tenderness. The swelling is soft, elastic, and fluctuating, with, in some cases, a distinct bony margin, which may be of the nature of an exostosis. In none of these ten cases could eggshell crackling be made out. Cystic dilatation of the tear-sac, dermoid cysts of the orbit, and malignant growths of the frontal sinus may all simulate mucocele.

Displacement of the eyeball occurred in seven of these cases, and was torwards, downwards and outwards in five, forwards and downwards in one, outwards and downwards in one. Displacement forward may occur with both frontal and ethmoidal mucoceles; downward displacement is usually present in frontal, but is less common in ethmoidal cases.

Notwithstanding the displacement, movements of the eyeball may be

interfered with but little or not at all.

The most common disturbance of vision is diplopia, but that is not always present. In two of Turner's, and in a number of other cases, epiphora was the earliest symptom noticed.

Intra-nasal examination is negative in many cases, but in some aids the diagnosis.

Turner's cases apparently throw no light on the ætiology of the condition.

Of the frontal sinus cases absorption of a part or of the whole of the bony floor of the sinus had taken place in six, of part of the posterior or cerebral wall in two, but in none was there any absorption of the anterior wall

In the three ethmoid cases the os planum or lamina papyracea had been more or less destroyed. Turner doubts whether distension of the sinus occurs; the walls are eroded and thinned, but probably distension is more apparent than real.

The contents of a mucocele are usually of a thick tenacious mucoid consistence, but may be clear like serum or cerebro-spinal fluid, or may

look purulent although microscopically they are not pus.

Operation may in a few ethmoid cases be carried out intra-nasally, but in most cases external operation is to be preferred. Turner establishes a large free opening between the cavity and the nose, puts a rubber drain through the said opening, packs the cavity lightly with gauze, and closes the external wound, except where the end of the gauze strip protrudes. The strip is removed after four or five days, and if the drain is acting well the skin incision is allowed to close. The patient is taught to wash out the cavity through the rubber drain, the latter being left in situ five or six weeks.

Arthur J. Hutchison.

## EAR.

Gilbert, Paul.—Abscess of the Right Temporal Lobe of Otitic Origin:

Operation; Recovery. "Annales des Mal. de l'Oreille du Larynx.
du Nez, et du Pharynx," February, 1908.

A seamstress, aged fourteen, had suffered from purulent otitis in the right ear as long as she could remember. Otoscopy revealed that the whole of the drumhead except Shrapnell's membrane and the annulus fibrosus had disappeared. The manubrium hung bare in the atrium. The promontory was covered with granulations which bled easily, but there was no lesion of the underlying bone. Bare bone was felt in the attic above and internally. Hearing was much impaired, watch, contact. Rinne negative, Weber positive. The labyrinth was not involved. The left ear, nasal fossa, posterior nares, and oro-pharynx were normal. Three months' palliative treatment being ineffectual and there being evidence of infection, temperature 38°C., etc., Stacke's operation was performed on April 9. Whilst curetting the attic the roof was detached in a condition of osteitis. The dura thus exposed appeared healthy. Diseased bone was found in the aditus and antrum. During the succeeding four weeks the temperature did not descend below 38°C. There were anorexia and temporo-parietal headache.

The operated cavity, however, epidermised well, and the patient left hospital on May 11. Headache still continued, and by May 11 there was an appreciable falling off in health attended by pallor and wasting. A few days afterwards drowsiness set in. Pulse 55, temperature 37.4°C. Meningeal symptoms were absent. Brain abscess was diagnosed. On May 25 the osseous opening where the membranes had been previously exposed was enlarged, the dura mater, which was red and bulging, was opened in an antero-posterior direction; gray matter immediately pro-