The second case was that of a man in whom bilateral ankylosis of the crico-arytenoid articulation had occurred as the result of wearing an ill-fitting tracheotomy tube for many years.

Albert A. Gray.

Hinsberg.—The Treatment of Stenosis of the Larynx and Trachea by means of the Mickelicz Glass Canula. "Wissenschaftliche Mittheilungen Arztliche Rundschau," August, 1904.

The great advantage of this canula is that it is made of glass. The secretion from the wound does not cause corrosion nor adhere so firmly to the smooth surface as is the case when metal or horn is the material of which the canula is made. A metal canula must also be changed at least once daily, whereas the glass tube can be left *in situ* for weeks.

When the stenosis is produced by kinking of the hinder wall of the trachea above the seat of the tracheotomy canula the Mickulicz glass canula is excellent. It is so inserted that its upper end is under the glottis, and therefore does not interfere with the action of the vocal cords.

Hinsberg strongly recommends that the glass handle of the canula be hollow, so that an air channel is provided should ædema of the glottis or other complication in the upper part of the trachea arise.

A. Westerman.

EAR.

Koller, Carl.—Scarlatinal Panotitis; exfoliation of a Portion of the Labyrinth; Radical Operation. "Med. Record," January 30, 1904.

The patient, a female child aged four, was taken suddenly ill with vomiting and fever, the vomiting lasting three days. The scarlatinal rash rapidly developed, and this was followed a few days afterwards by diphtheria. Upon the eighth day of the disease the child complained of pain in the ears and deafness. This was soon followed by profuse discharge. When the child got up out of bed at the end of four weeks she was noticed to stagger. Two months after the onset of her illness she was admitted to hospital. Large perforations were found to be present, and both tympanic cavities were full of granulations. Upon the left side, bare bone could be felt with a probe. A diagnosis of panotitis with necrosis of the labyrinth was made, and operation advised The left antrum was found full of pus and granulations, as was also the attic. Upon the medial wall of the attic a loose sequestrum was detached, and found to consist of the superior and external ampullæ and adjoining parts of the superior and external semicircular canals. Here the small sequestrum, consisting of a portion of the annulus tympanicus, was also removed. The patient made an uninterrupted recovery, but without any return in her hearing-power. The serious effects of scarlatinal diphtheria upon the organ of hearing are detailed by the author, and the relation of this disease to deaf-mutism is discussed. W. Milligan.

Veis.—The Prophylaxis of Acute Otitis Media. "Monatsschr. f. Ohrenheilk.," February, 1904.

Most cases of acute otitis media are caused by the unintentional performance of Valsalva's experiment, either in blowing the nose or in sneezing. In text-books of otology instructions are generally given to close one side of the nose, leaving the other quite freely open when blowing the nose. This the author considers insufficient precaution, and

advises that all people be taught to blow their noses with both sides freely open. After a little practice in this new method of nose-blowing, quite satisfactory results are obtained, and the most fruitful source of acute middle ear inflammations is cut off.

Arthur J. Hutchison.

Schulze, Walter.—Cases of Mistaken Diagnosis in Aural Surgery. "Archiv für Ohrenheilkunde," February, 1904.

The author describes two cases where the clinical symptoms pointed to an otitic intracranial lesion, and yet operation and *post-mortem* examination proved the contrary.

The first case was a woman with a long-standing left-sided otorrhoad who, eight days before admission, had pain in the ear, severe headache, vomiting, and increasing attacks of giddiness. The membrana tympani was completely destroyed with a large fistula leading into the attic. There was pain on pressure over the mastoid process and upper cervical vertebræ and on percussion over the whole head, most marked over the left side. The urine contained a trace of albumen. There was no optic neuritis.

Increasing drowsiness, paralysis of the right arm, partial aphasia and pyrexia of 101—102°, called for the complete mastoid operation and exploration of the temporosphenoidal lobe and cerebellum. The antrum and mastoid cells contained cholesteatomatous *débris*, the dura mater was hyperæmic, but no abscess was discovered.

The autopsy, next day, showed congestion of the brain and its meninges, ædema of the lungs, arteriosclerosis, and chronic interstitial

It was apparently a case of uræmia, where the clinical picture, owing to the simultaneous onset of uræmic coma with an exacerbation of the chronic mastoid disease, simulated an inflammatory affection of the brain and its meninges.

The second case was a boy with a left-sided otorrhea for two years.

Three days before admission he had sudden pain in the ear, with rigors. He lay on his back with retraction of the neck and marked lordosis. The wrists and arms were flexed. There was general hyperæsthenia excepting the right arm, which, together with the right leg, was paretic. The patellar reflexes were absent. There was partial aphasia. The optic fundi were normal. Lumbar puncture gave a negative result. The face and arms twitched spasmodically. A soft, doughy, inflammatory swelling extended from behind the ear down into the neck tissues. Pyrexia reached 102°.

The complete mastoid operation was performed and the lateral sinus freely exposed and found covered with granulations. The sinus was opened, found patent, and plugged. The left temporosphenoidal lobe was then explored with negative result.

Autopsy, next day, showed general congestion of the brain, but the meninges and sinuses were healthy; there was no intracranial abscess. Pus was found in the infiltrated neck tissue. Before operation lateral sinus thrombosis was diagnosed. On finding it patent the negative lumbar puncture, the paresis of the right arm and leg, together with incomplete aphasia, etc., suggested an extradural or cerebral abscess rather than meningitis.

The author suggests that death was due to "toxemia," due to absorption from the wall of the lateral sinus, and possibly also from the abscess in the neck, and explains the cerebral symptoms by the possibility

of the left side being the first part to be infected, owing to its contiguity with the primary focus.

Hunter Tod.

F. Grossmann.—Sinus Thrombosis of Tuberculous Orgin. "Archiv für Ohrenheilkunde," February, 1904.

A child aged five, having had a right-sided otorrhea and enlargement of the cervical glands for over a year, with a swelling behind the ear for six weeks, underwent the complete mastoid operation.

The antrum and mastoid cells contained pale granulations, and the bone was carious.

Soft caseating material surrounded the lateral sinus, in which there was a large fistula at the tip of the mastoid process. Similar caseating masses plugged the sinus below the fistula; above it the wall of the sinus seemed adherent, and the sinus to be full of blood. Four days later symptoms of tubercular meningitis were confirmed by finding tubercle bacilli in the cerebro-spinal fluid taken from a lumbar puncture.

Autopsy, two days later, showed general miliary tuberculosis, with an old tubercular lesion at the apex of the left lung. The lateral sinus was filled with caseating masses as far as the torcular herophili. The author gives a very good micro-photograph of the sinus, in which giant cells and a few tubercle bacilli can be seen. He emphasises the fact that the tunica intima of the vessel was chiefly affected.

He does not consider the thrombosis of the lateral sinus was due to the general tuberculous infection, and doubts whether the involvement of the sinus with tubercle produced the miliary tuberculosis. tubercular lesion of the lung was probably the primary one; infection then spread to the mastoid through the Eustachian tube, and the outer wall of the sinus became infected. Thrombosis occurred and then a fistula. The fact that at the time of operation the sinus above the fistula seemed full of blood and yet five days later, at the autopsy, was found thrombosed, nearly to the torcular, by tubercular changes which had chiefly involved the tunica intima, is regarded by the author as a conclusive proof that the tuberculous infection spread to the sinus from without, and that the pathological change in a vessel infected by tubercle is an "endophlebitis tuberculosa proliferans." Hunter Tod.

Heinrich Halasz.—Removal of a Foreign Body from the External Meatus by means of Hydrogen Peroxide. "Archiv für Ohrenheilkunde," February, 1904.

After many attempts to remove a bean which had remained two weeks in a boy's ear and had caused suppuration and partial occlusion of the meatus, the author, in order to cleanse the ear prior to performing a post-aural operation, filled the meatus with liquor hydrogen peroxide. The bean was soon dislodged. The author suggests that the force of the gas generated by the decomposition of the hydrogen peroxide drove out the foreign body.

Hunter Tod.

Segura, Eliseo V.—On a Case of Double Bezold's Mastoiditis; Operation; Recovery. "Annales des Maladies de l'Oreille du Larynx du nez et du Pharynx," February, 1904.

On April 8, 1902, a man aged sixty-five presented himself at the Hospital of San Rogue, complaining of a painful swelling of the left

superior lateral side of the neck, rendering rotation of the head difficult. This condition was consecutive to influenza. There was nothing of note about his history.

Examination revealed a marked swelling at the level of the insertion of the sterno-mastoid, passing a little downward in the direction of the muscle, invading the superior part of the mastoid region, and ending immediately below the summit of the mastoid process. Pain on pressure was experienced at the antral level, intolerable over the apex of the mastoid and adjacent portion of the sterno-mastoid. Otoscopic examination showed a distinct sagging of the postero-superior wall of the meatus, and that part of the membrana tympani which could be observed was injected and thickened; there was no pus present, and patient stated he had never noticed any; also that he had always been free from pain, only having complained of slight discomfort in the ear at the outset of the trouble. Notwithstanding the integrity of the middle ear, from the local nature of the affection, the fact that it was not dependent upon glandular inflammation, that the parotid was normal, the general trend of events, and lastly, the age of the patient, the author considered the possibility of Bezold's mastoiditis.

Warm fomentations were applied, and the patient was kept under close observation. From April 9 to 10 the man's condition remained stationary. His temperature scarcely reached 37.6° C., but there was slight increase of the swelling and more pain.

April 11. Intense headache was complained of, preventing sleep; local conditions the same; temperature 37.6° C.; neither vomiting, nor vertigo; urine free from albumen.

April 12. As headache increased and became continuous, temperature 38° C., and general condition not so good, an operation was decided upon. A retro-auricular incision was made from the base of the mastoid as far as the insertion of the sterno-mastoid. On laying bare the bone, the cortex appeared vascularized, but there were no obvious points of osteitis. The antrum, after it had been opened with chisel and mallet, was found, with the mastoid process, to have been hollowed into one extensive cavity filled with pus, and a perforation was discovered on the inner wall, by which the inflammatory process had tracked into the digastric fossa. Having reached this situation, the pus passed in two directions, downwards and backwards, thus forming a bifurcated abscess. In the course of the operation, which was done radically, the lateral sinus was found exposed, as well as a small portion of the dura mater on a level with the middle cerebral fossa. The post-operative cavity was carefully curetted, tamponned with iodoform gauze, and left open.

April 13. Temperature 37.3° C., headache practically disappeared, and general state good. April 15. Wound dressed, satisfactory.

All went well till April 23, when patient was seized with shivers and headache. Temperature 39° C. The edges of the wound were swollen and red, but the aspect of the cavity was healthy. At this time a grave intra-cranial lesion was suspected, but was negatived by an examination. The next day erysipelas was diagnosed; this ran a favourable course, and did not influence the patient's condition more than protracting somewhat the healing of the retro-auricular wound, which was not completed till two months after the operation.

A few days before leaving the hospital, cured, patient was seized with an acute naso-pharyngeal catarrh, which rapidly extended to the right tympanum, producing an acute purulent inflammation.

June 15. Patient had pain in ear, extending to the mastoid process. A free paracentesis was performed. June 17. Abundant flow of pus;

mastoid process painful; headache; anorexia. June 19. Tissues over mastoid were swollen. June 20. Tympanum almost dry; meatus congested, but contour normal; swelling over mastoid increased, especially at tip; very painful on pressure. June 21. Surgical intervention was decided on. A similar incision to that on the left side was made, cortex exposed and removed. Abundance of pus flowed from a capacious cavity. On probing, an osseous perforation was made out on its internal wall, through which pus had already escaped, and commenced to infiltrate the sheath of the sterno-mastoid. The mastoid was totally resected, parts curetted and dressed with iodoform gauze, leaving wound open. June 24. Dressings changed; wound healthy; general state good; temperature 37.3° C. June 26. Drum dry; small tympanic perforation; wound satisfactory. The dressings were subsequently changed every two or three days, and patient made an uninterrupted recovery, far more rapidly than in the case of the other side. When he left hospital bilateral audition was good.

The author remarks that Bezold's mastoiditis is usually a complication of acute purulent tympanic inflammation, and that the bone is involved carly in these cases. The extensive destruction of bone met with is what one would expect as a result of active inflammation in pneumatic tissue. The case of the right side in his patient conformed to this type. On the left side there had never been any suppuration of the drum, and the writer considers that the infection reached the mastoid process $vi\hat{a}$ the Eustachian tube and tympanum, but without causing trouble in the

latter, which he points out is an exception.

To explain this unusual course of things he advances two hypotheses: either the tympanum was divided into two by a complete partition which isolated the superior part from the inferior, or that from the very first there was a complete obliteration of the aditus established. The first condition of things is generally the result of adhesions which would invariably be accompanied by profound derangement of audition, a trouble from which the patient was singularly free. The second hypothesis the author considers the true one. The infection passed directly from the tube to the antrum without tangibly involving the middle ear. The two latter cavities were early shut off by occlusion of the aditus ad antrum, and the septic germs played their part exclusively in the mastoid The writer observes how great an importance should be attached to the structure of the mastoid process in old people, as a contributory factor in the production of these abscesses. Such mastoids are essentially pneumatic, the cells being large at the apex. Their external cortex is thick and the internal very thin. H. Clayton Fox.

Zur-Mühlen, A. V. (Riga).—Two Cases of Aneurysm of the Arteria Carotis Cerebri. "Arch. of Otol.," vol. xxxii, No. 5.

The first was in a middle-aged woman whose children showed evidence of hereditary lues. The symptom complained of was a ringing in the right ear relieved by compressing the side of the neck. There was a history of a fall six months previously with injury to the head and unconsciousness of one hour's duration. A systolic murmur of uniform intensity was heard on auscultation over the whole head. There was a temporary anosmia, and this led the writer to localise the aneurysm as at the branching of the carotid into the anterior and middle cerebral arteries.

The second was marked by pronounced exophthalmos, and was diagnosed as "rupture of an aneurysm of the carotid into the cavernous sinus." There was a beating tinnitus and nerve-deafness greater for

deep than for high tones. Ligature of the carotid effected much improvement. The writer thinks such aneurysms commoner than is supposed.

Dundas Grant.

Bezold (Munich).—General Sepsis in Middle-ear Suppurations with a Central Perforation of the Drum. "Arch. of Otol.," vol. xxxii, No. 5.

This is related as occurring in three cases, two fatal, in which there was neither cholesteatoma nor caries, and in which the perforation in the drum was not peripheral, but central, the situation considered by Bezold to be the most harmless. All were cases of acute exacerbation in long-standing chronic suppuration. The micro-organisms in all three were the Streptococcus pyogenes and small rod-shaped bacteria like the influenza bacillus. In the first (fatal) there was a thrombo-phlebitis of the internal jugular vein and a parietal thrombus in the bulb, though the sigmoid sinus contained liquid blood. There was exceedingly little change in the tympanum. In the second case, also fatal, there was pus between the dura and bone over the tegmen, and several minute coagula on the inner surface of the neighbouring parts of the lateral sinus, the wall being reddened and infiltrated with blood. The bulb was occluded by a fresh coagulum. Death in both cases seemed explainable only by extreme virulence of the infective agent. In the third case there was early operation on the mastoid. There was infiltration of the lymphatic glands, the mastoid cells were few and small, and contained a fibrinous exudation and pus. The antrum was free from pus. The patient was feverish for two weeks after the operation, but then rapidly recovered. Dundas Grant.

Le Beuf and Joachim.—A Case of Typhoid Fever and Pneumonia, with Ear Complications as a Sequela of being Buried Alive; Recovery. "New Orleans Medical and Surgical Journal," May, 1904.

The patient was a Frenchwoman, aged twenty years, a circus performer, She gave a long history of various illnesses, including yellow fever. pneumonia, measles, mumps, scarlet fever, diphtheria, and acute rheumatism. Recently she had been acting as a hypnotic subject. Two years before she had been hypnotised, placed in a coffin, and lowered into a tank of water for a week. Her last feat had been to be buried, whilst in the hypnotic state, in a grave 6 ft. deep for several days. This was followed by enteric fever and pneumonia. Pain in the left ear occurred, followed by rupture of the drum and a free flow of pus. Three days later the right ear became similarly affected. She recovered slowly.

Macleod Yearsley.

Chalupecky.—Colour-hearing. "Wiener Klinische Rundschau," May 22—29, 1904.

Chalupecky has written a series of articles on this form of so-called double sensation.

Double sensation—sometimes spoken of as secondary sensation—is that sensation which irritation of one special sense organ brings forth in another sense area simultaneously to that produced in its own area.

Of such sensation, sometimes called photismen or phonismen, quite a number have been observed.

(a) Sound photismen—colour image by sound perception.

(b) Light photismen—sound conception by light sensation.

- (c) Smell photismen—colour image by smell sensation.
- (d) Taste photismen—colour image by taste sensation.

(e) Cutaneous sensibility photismen—colour image by pain, temperature, or touch sensation.

(f) Form photismen—colour image and light perception by seeing of forms.

The remainder of the paper, having largely to do with individual cases, is unsuitable for a short abstract.

A. Westerman.

Nacht.—The Therapeutic use of Hydrogen Peroxide. "Arztliche Rundschau," June 25, 1904.

In the above article the value of hydrogen peroxide in the treatment of ear diseases is discussed.

First used by Politzer and Bettmann in 1885, its value has increased with time. Weak solutions can be used to soften hard masses of cerumen.

Its main use, however, is in the treatment of middle-ear suppurations. In the form of drops it is a safe remedy in the hands of the patient. To cleanse the ear and relieve pressure symptoms its use is employed by most specialists and many general practitioners.

Two useful prescriptions are given:

a no aborter preserve	JULIULIAN COLU C	, 1 , C 11 ,			
Hydrogen per	roxid. puris	ss			2.0
Aq. dist.					28.0
The drops, lukewar			the ear	and lef	t ten minutes.
Hydrogen per	roxid. puris	ss			1.2
Aq. dist.					18.8
Spir vini rect					20.0
The drops to be ins	stilled in th	e ear for	five mir	rutes da	aily.

It can be used to destroy fresh granulations and is also a very useful

hæmostatic in operations for the removal of the ossicles.

A. Westerman.

Mignon (Nice).—Spontaneous Othernatoma in a Child. "Rev. Hebdom. de Larvngol.," etc., June 11, 1904.

The author records a case in a child, aged nine years, and remarks upon its rarity at that age. The differential diagnosis from cyst was made by puncture.

Albert A. Gray.

Bonain (Brest).—Notes on Two Cases of Suppurative Middle-Ear Disease, with Endo-cranial Complications. "Rev. Hebdom. de Laryngol.," June 18, 1904.

The first case was that of a patient upon whom the ordinary radical mastoid operation was performed, the lateral sinus being laid bare, but found apparently healthy. Facial paralysis supervened, but otherwise the patient did well, and eight weeks later the cavity was nearly dry. As the paralysis remained, electricity was applied to ascertain the condition of the facial nerve. It was found that partial degeneration had taken place. The following morning the patient was found in a comatose condition, and covered with food which he had vomited during the night. A few hours later he recovered consciousness. Meningeal hamorrhage was diagnosed. The following night respiration suddenly ceased and the patient died.

The second case was that of a localised purulent meningitis on the left side, while the right ear was the diseased one, the left being quite healthy. The sinuses on the right side, however, had evidently been obliterated a long time previously and were reduced to firm cords. The diagnosis was made post-mortem.

Albert A. Gray.

Bar (Nice).—Hæmorrhagic Inflammation of the External Auditory Canal and the Middle Ear. "Archives de Laryngologie, etc.," July August, 1904.

Hæmorrhagic spots were first detected in the external meatus, then spread to the middle ear, the blood appearing in the pharynx; perforation of the membrane followed, accompanied by severe febrile disturbance. This condition is extremely rare and grave, has an infectious origin, and may be a sequela of influenza. Bacteriological examination showed the presence of staphylococcus pyogenes aureus.

Anthony McCall.

Bertemès (Charleville).—Menière's Symptoms in Chronic Catarrhal Otitis, cured by Curetting the Post-nasal Space. "Archives de Laryngologie, etc.," July-August, 1904.

The patient, whose age was fifty-nine, complained of noises and vertigo for eighteen years, and for the last three years a gradual loss of hearing in the left ear. Hypertrophic pharyngitis was present. Politzerisation improved the hearing. After curetting the vertigo disappeared, and the improvement in the hearing remained permanent.

Anthony McCall.

THERAPEUTICS.

Seifert, 0. (Würzburg).—The use of Chlor-methyl Menthol-ether as a Remedy for Catarrh. "Wiener kl. Rundschau," April 2, 1904.

Seifert has had good results from the use of forman in the treatment of a number of cases of simple catarrh, and in a few typical cases of influenza with severe catarrhal symptoms. Several members of two families were simultaneously attacked; those treated with forman recovered within twenty-four hours, while in the others the symptoms were not arrested. Also in cases when the catarrh is at its height, and in influenza the inhalation of forman shortens the progress of the disease. Patients suffering from bronchial asthma experience great relief from it.

A. Westerman.

F. W. Hinkel.—A Consideration of the Value of Topical Applications to the Upper Air-Tract. "The Therapeutic Gazette," May 15, 1904.

The author considers these applications under the heads of insufflations, inhalations, gargles, douches, sprays, pigments, and unguents. In his conclusions he does not consider that the indications for local medication in chronic inflammations of the upper air passages are so definite in many cases as are those for surgical interference, and he summarises the value of topical applications thus:—Insufflation of powders is inefficient. Steam inhalations are serviceable in early stages of catarrhal inflammations. Dry inhalation of the volatile parts of drugs is of little