house from the "crooked billet" to the "crooked arm." This was
done to annoy the local doctor who had had a bad result in the
treatment of a case of fracture in one of the publican's children.
The results on the practice were said to have been disastrous and
the doctor had to leave the district. Fortunately for us the eye
hardly lends itself to such a theme. We suggest our heading as a
possible sign for an inn in the hope that some eminent English
artist may feel inclined to draw a portrait of the oldest inhabitant
minus one eye.

ABSTRACTS

MISCELLANEOUS

(1) Powell, L. S. and Smith, H. S. (Lawrence and Osawatomic,
Kansas).—Eye studies following lumbar puncture. Amer. Jl.
of Ophthal., Vol. XXIII, p. 792, 1940.

(1) Powell and Smith report their investigations on visual
acuity, intra-ocular pressure, blood pressure and ophthalmoscopic
appearances of the fundus and disc in 56 patients whose ages
ranged from 16 to 62 years, 34 were males and 22 females.

There seems to have been no appreciable change in visual acuity,
intra-ocular pressure and blood pressure after lumbar puncture. In
16 patients hyperaemia of the disc was noted, which in most cases
the authors state was mild and non-persistent, but in some it was
quite marked and persistent. Slight papilloedema was noted in
three patients and of these one had no symptoms, one complained
of headache and the other had nausea and headache.

H. B. Stallard.

(2) Burke, T. W. (Washington).—Field changes after satisfac-
tory filtration operations for glaucoma. Amer. Jl. of
Ophthal., Vol. XXIII, p. 657, 1940.

(2) Burke has examined the visual field changes for five years or
more in 48 patients with glaucoma who underwent some form of filtra-
tion operation, and in none of whom was the intra-ocular pressure
above 26 mm. Hg as assessed by a Schiotz tonometer. Subacute,
chronic and secondary glaucoma due to uveitis are included in the
series. Either Lagrange's operation or Elliot's trephine was
performed in all cases.

After a successful filtration operation 50 per cent. showed further
field loss over a long period of years, but most of them retained central fixation and useful vision. The author considers that the rate of field loss was not so rapid as it would have been had the patients not been operated on. He sees no justification in hesitating to operate when the field defect is adjacent to the fixation point for although central vision may occasionally be lost, useful vision is retained in the majority of cases and the visual field defect checked.

The best results as regards post-operative retention of visual fields are in those cases in which little loss has occurred before operation. Neither age nor low tension after operation had any relationship to the field changes. The author discusses possible causes such as stretching of the nerve fibres over the edge of the excavated optic disc, a progressive degenerative process, ischaemia and direct pressure on the retina.

H. B. STALLARD.

(3) Barkan, H. (San Francisco).—Use of the Shahan thermophore in hypotony of the eyeball as a result of the Elliot trephining operation. *Amer. Jl. of Ophthal.*, Vol XXIII, p. 692, 1940.

Barkan describes a use for the Shahan thermophore in the treatment of hypotony following Elliot’s trephine operation for glaucoma. The small tip of this instrument is applied at a temperature of 165° to 170° F. to various points on the bleb for 5-10 seconds, an interval of a few seconds being allowed to elapse before re-applying the tip at another point. This procedure is repeated at intervals of several days. The author claims that it is effective in making the trephine bleb dense and flatter, and in raising the intraocular pressure.

H. B. STALLARD.


Albus comments on the greater frequency of benign melanoma of the choroid than is generally supposed. He found this new growth 26 times in 2,300 (1-88) patients, higher than the incidence of malignant melanoma. Benign melanomata are usually in the posterior half of the fundus, are oval or circular in shape, and vary from $\frac{1}{2}$ to 4 optic disc diameters. They have a definite edge, there is no marginal pigmentary disturbance or light fringe, and no measurable retinal elevation. They may be multiple. There were no field defects in eight of the author’s cases.

Benign melanomata are composed of congenital circumscribed accumulations of chromatophores, uniform dense pigment in the outer layers of the choroid, spindle-shaped cells in the centre and
round at the periphery. The cells are densely pigmented, the nuclei are fairly well seen, there is no extra-cellular pigment, the chorio-capillaris is not involved. The choroid is increased in thickness at the site of the lesion and the retinal pigment epithelium is normal. The origin of the benign melanomata is considered to be neuro-ectodermal.

The author describes the case of a female, aged 60 years, in whose amblyopic left eye a benign melanoma in the upper half of the retina had been noted eight years previously. This became malignant and the patient presented herself on account of secondary glaucoma. The diagnosis was confirmed by pathological examination and she died two years after excision of the eye.

The author comments that the clinical signs of malignancy may be recognised by stippling and irregular pigmentation over the neoplasm.

H. B. STALLARD.


(5) Henderson and Benedict report the case of a rare disorder, essential progressive atrophy of the iris, which affects young adults, particularly females, and is unilateral.

The case described was a nervous male, aged 32 years, whose left pupil at first became displaced to the temporal side and then took the shape of an oval horizontal slit. The iris was light greenish-grey. At the extremities of the oval slit in the 9 o'clock-3 o'clock meridian the iris was about 1 mm. wide and was drawn towards the limbus by band-like tissue, and in this meridian the ectropion uveae was widest. In the majority of cases, glaucoma supervenes in one to eight years after the onset of atrophic changes.

Peripheral synechiae, most developed where the pupil is pulled towards the limbus, contribute to the progress of the disease. The cause of this disorder is at present unknown.

H. B. STALLARD.


(6) Corboy comments on the necessity for suturing the mucosa of the lacrymal sac and the nose at the site of anastomosis and on the technical difficulty of this procedure.

He believes that a strong anterior covering of the ostium is important, and to effect this he fashions two tongue-shaped flaps, one in the nasal mucosa has its base above and its apex below and
the other in the lacrimal sac has the base downwards and the apex of the tongue above. These two tongue-shaped flaps are united by two 000 catgut sutures, the ends of which are knotted to prevent each suture from being pulled through its hole, the free ends of each suture are then tied.

Twenty-two patients have been operated on by this method over approximately two years, and 18 (82 per cent.) have been successful.

H. B. STALLARD.


(7) This is a rare anatomical peculiarity. It was described first in 1916 by van der Hoeve. The case here detailed was a child aged three years; the parents had noticed persistent lacrimation. Both the lower lids were slightly everted; the space between the internal canthi was larger than normal. The inner parts of the lids were united, internal ankyloblepharon. The lower puncta lacrimalia were abnormally far out and did not dip into the lacus lacrimalis. The outer third of each lower lid was in a position of ectropion. The length of the lower canaliculus, measured by a Bowman’s probe was 12 mm., that is about 5 mm. longer than usual. The root of the nose seems broader than normal. The method of production of the deformity is not clear, but it must depend on some defect in the development of the lacrimal apparatus and of the tarsal plate of the lids. Tristaino discusses the question at some length.

HAROLD GRIMSDALE.


(8) Bogoslovsky reports a series of experiments on the influence of light and dark adaptation upon the differential thresholds of brightness in the blue, green, red and white lights for foveal vision and concludes that:

1. For a low level of brilliance of the test field (less than 1 lux on white), the differential thresholds diminish during dark adaptation, whereas during light adaptation they heighten.

2. When the brilliance of the test field increases up to a few lux on white, the differential threshold for the blue, red and white light in the dark heightens and in the light decreases; for green light, however, it remains practically unchanged.

3. In a greater heightening of brightness of the test field up to
several hundred lux on white, the same regularity reported in paragraph 2 for blue, white and red also holds good for green.

4. The established regularities of change in the differential thresholds permit one to raise the question concerning the mechanism of the central regulation of the contrast sensibility and how it is differentiated from its peripheral mechanism.

ARNOLD SORSBY.

(9) Myerson, Abraham and Thau, William (Boston).—Ocular pharmacology of furfuryl trimethyl ammonium iodide. Arch. of Ophthal., October, 1940.

(9) Furfuryl trimethyl ammonium iodide is a new para-sympathetic drug which is very stable in the blood and produces a marked fall in blood pressure, cardiac inhibition, an increase in flow of saliva, and in the tone of the intestine and bladder. It is not synergic with prostigmine, probably because cholinesterases have no effect on its chemical structure. Instilled into the eye in a strength of 10 per cent., it produces miosis in 2-4 minutes, the maximum effect being reached in 5-7 minutes. The anterior chamber becomes shallow in the centre owing to accommodative spasm, the peripheral part being unaffected. Intra-ocular pressure begins to fall in 8-10 minutes, and the maximum effect is produced in about an hour, lasting for 12-24 hours. In view of these findings, Myerson and Thau consider that this drug should be useful in glaucoma.

F. A. W-N.


(10) Hypertelorism is a congenital anomaly of the skull and face, characterised by a wide separation of the orbits and usually complicated by the presence of a divergent squint. The condition appears to have been known for a long time and Berliner and Gartner reproduce a copy of a drawing by Giovanni Battista of a typical case in 1586, which bears quite a resemblance to some modern efforts at portraiture. The case they report occurred in a woman aged 31 years, who had an interpupillary distance of 84 mm. and a divergent squint of 140 prism dioptres. The right disc was pale, and the retinal vessels were attenuated, with resulting loss of visual acuity, constriction of field and the presence of central scotoma. The left eye was unaffected though both optic foramina were contracted, the right measuring $2 \times 4$ mm. and the left $3 \times 3$ mm. Anatomically, hypertelorism is thought to be due to excessive size of the lesser wings of the sphenoid. The condition is usually
an isolated one, with no familial incidence, though it may be associated with other congenital anomalies.

F. A. W.-N.

(11) Thau, William and Myerson, Abraham (Boston).—Effect of iontophoresis on the eye. *Arch. of Ophthal.*, October, 1940.

(11) Thau and Myerson find that iontophoresis with water or normal saline produces a lowering of intra-ocular pressure. When the positive electrode is used, the effect lasts for 5-7 days; with the negative electrode it lasts 6-9 days. The technique is as follows:—A specially draped, spoon-like copper electrode, well covered with cotton wool and thoroughly moistened with normal saline is placed in the lower fornix and kept in contact with the lower part of the eyeball. Care should be taken not to touch the cornea, or clouding may result. The current is from 5-10 milliamperes and is applied for a period of 8-10 minutes. Some local hyperaemia is produced in the bulbar conjunctiva which disappears in a few days and is of no pathological importance. Since a reduction of tension occurs irrespective of whether the positive or negative electrode is used, the authors consider that the effect is possibly due to stimulation of the ciliary muscle associated with increased blood flow.

F. A. W.-N.


(12) Gradle and Sugar review extensively the literature on exfoliation of the anterior lens capsule. They discuss its relationship with secondary glaucoma and its incidental presence in association with primary glaucoma. They conclude that the disease is a senile degenerative disorder, involving the vitreous and its derivatives, the zonule fibres and the zonular lamella. It is evident that in some cases the vitreous is particularly fluid, and in three of the author's cases, synchysis scintillans was present.

Dense nuclear sclerosis and cortical opacities are common. If cataract extraction should become necessary it is important to do the extra-capsular operation and not the intra-capsular on account of the degenerative nature of the vitreous.

The incidence of secondary glaucoma is discussed, and its progressive nature associated with a relative small rise of intra-ocular pressure, 22 to 25 mm. Hg, is commented upon. Miotics may afford temporary control, but a number of cases require surgical intervention; Elliot's corneo-scleral trephine, cyclodialysis and iridencleisis are the operations more commonly practised.

The histology of exfoliation of the anterior lens capsule is
described and illustrated by six microphotographs. The clinical features of this disorder and the structures affected in association with it are dealt with in detail.

H. B. STALLARD.


(13) Stallard’s operation is designed to relieve the epiphora which so constantly results from fibrous obstruction in the canaliculi particularly after traumatic severance of the canals at the region of the inner canthus.

Under local anaesthesia the lacrimal sac is exposed through the usual incision. The fundus of the sac is dissected free from adjacent tissues and, together with the medial wall, separated from the lacrimal fossa. A suture of fine black silk is passed through the fundus and the sac drawn laterally and slightly forwards to find out if it will come into the inner canthus without undue tension. Next an oblique stab incision 5 mm. long is made with a double-edged knife in the lacus lacrymalis and carried downwards and backwards to emerge at the centre of the lacrimal fossa. After withdrawing the knife a pair of fine forceps is passed along the new route made and made to seize the stitch in the fundus of the sac. The sac is then gently retracted laterally and forwards so as to expose the orbital fascia behind it. This is incised vertically to allow the orbital fat to herniate into the lacrimal fossa and form a soft pad occupying the space between the new oblique position of the sac and the bony wall of the fossa. The sac is drawn upwards and outwards through the incision until 3 mm. of the fundus projects into the inner canthus. It is essential that the sac should not be under tension or kinked, but lie in a plane inclined downwards, mediallywards and backwards.

A fine hook is passed into the lower punctum and traction made downwards to evert the lid margin near its termination at the inner canthus. Four sutures of black silk on half circle arterial needles are inserted through the wall of the sac and the conjunctiva midway along the posterior and anterior lips of the conjunctival incision and at its medial and lateral extremities. The summit of the fundus is then cut off and the patency of the naso-lacrimal duct tested by gently passing a probe. The incision for exposure of the sac is closed in the ordinary way and a dressing applied.

The results were most satisfactory.

Two illustrations show clearly the method of procedure.

R. R. J.