Largin is also of service after trachoma operations, as, for example, squeezing or "brushing" the conjunctiva, where, in my experience, it is equal to silver nitrate.

Largin will sometimes bring about a speedy cure in that form of chronic ophthalmia associated with the diplo-bacillus of Morax. But, as a rule, it is markedly inferior to a watery solution of zinc sulphate, 10 to 40 grs. to the ounce.

CASE V.—A. F., aged 7 years, suffered from slight congestion of the palpebral conjunctiva, soreness at the angles of the lids, and a mucous secretion from the eyes. Enormous masses of diplobacilli were present in cover-glass preparations from the secretion, and the organisms were cultivated on blood serum and blood agar. After eight daily applications of 5 per cent. largin, the condition of the conjunctiva was good and diplobacilli could not be demonstrated.

CASE VI.—In the case of E. G., aged 8 years, the characteristic micro-parasites did not disappear until twelve applications had been made of 10 per cent. largin.

In the more acute forms of blepharitis associated with redness and swelling of the conjunctiva and a rather profuse secretion (the blepharo-conjunctivitis of German authors), largin has rendered me service.

CASE VII.—J. W., aged 5 years, was seen on July 19th, 1899. His left upper lid was red and markedly swollen, while his eye was discharging freely. The ocular conjunctiva was congested and ecchymotic; the semilunar fold was red and swollen; the palpebral conjunctiva was inflamed. The accompanying muco-purulent secretion was smeared on cover glasses and examined with negative results. On agar-agar, however, pure cultures of the staphylococcus pyogenes aureus were obtained. The case was treated with boric lotion and 3 per cent. largin, and five days later the eye was almost well. The patient was discharged on July 31st, after eleven days' treatment.

In some few cases of lachrymal trouble I have had encouraging results from largin injections with the ordinary treatment by probes.

CASE VIII.—On September 14th, 1899, I was consulted about J. C., aged 8 years, whose eyes were stated to be perpetually watering and discharging matter. Upon examination he was found to be suffering from bilateral stenosis of the nasal duct. The secretion from the lachrymal sacs contained (a) pneumococci, and (b) pneumobacilli. No nasal affection could be made out. On September 16th each lower canaliculus was slit, and a small Bowman's probe passed down the nasal ducts. After eleven probings and injections of largin, there was neither lachrymation nor regurgitation from the sacs, and the case appeared to be cured.

In brief, I cannot help thinking that largin seems likely to help us in dealing with this very troublesome class of case.

Largin, when applied to the conjunctiva, causes little if any pain, and in that respect has an obvious advantage over silver nitrate. At the same time, in my experience, it is even more likely than lunar caustic or protargol to stain the palpebral conjunctiva of an indelible light brownish hue. The discoloration affects mainly those parts to which the largin has been directly applied—namely, the lower and the upper tarsal conjunctiva. It is due to the deposition of tiny granules of silver in the lymphatic and perilymphatic structures of the mucous membrane. I have collected the following ten instances of this so-called argyrosis.

1. A. D., aged 6½ years, slight conjunctival staining noted after ten applications of a 3 per cent. and twenty-nine applications of a 10 per cent. largin solution.
2. G. C., aged 2 years, affected with subacute trachoma, slight discoloration of conjunctiva after twenty-one applications of 10 per cent. largin.
3. C. P., aged 12 years, staining after thirty-seven applications of a 5 per cent. solution.
4. A. P., aged 13 years, argyrosis noticed after fifty-one applications of 10 per cent. largin.
5. E. P., aged 10 years, as in last case.
6. M. W., aged 6 years, a little conjunctival staining after fifty-one applications of 3 per cent. largin.
7. M. L., aged 12 years, argyrosis after using once a day for sixty-one days a 3 per cent. solution.
8. A. E., aged 12 years, suffering from subacute trachoma with pneumococci in the conjunctival secretion, was ordered a daily application of 5 per cent. largin on October 21st, 1899. On November 24th a 10 per cent. solution was prescribed. On January 6th, 1900, staining of the conjunctiva was observed.
9. M. M., aged 10 years, conjunctiva found to be stained after sixty-four applications of 10 per cent. largin for relief of subacute trachoma.
10. P. W., aged 7 years, affected with subacute trachoma and pannus, was found to have a stained conjunctiva after forty-nine applications of a 3 per cent. and forty-seven applications of a 10 per cent. largin solution.

CONCLUSIONS.

The application of largin, even in concentrated form, is painless, but, when prolonged beyond a few weeks, may stain the conjunctiva. It acts well in blepharo-conjunctivitis, and in some cases of dacryocystitis. It is an efficient substitute for silver nitrate in any of the conjunctival inflammations associated with the Koch-Weeks bacillus, such as acute infectious ophthalmia and acute or subacute trachoma. It acts admirably as a temporary remedy after any of the

operations commonly practised for the relief of chronic trachoma. In gonorrhoeal ophthalmia, on the contrary, it is, in my experience, distinctly inferior both to protargol and to silver nitrate. In diplo-bacillary conjunctivitis, too, it does not succeed so well as zinc sulphate. In short, largin seems likely to gain a permanent place among the somewhat restricted number of remedies employed in everyday eye work.

REFERENCES.

¹ Merck's *Annual Report on the Year 1898*. ² Pezzoli and Finger, *Wien. klin. Woch.*, Nos. 11 and 12, 1898. ³ Falta, *Centraltbl. f. prak. Aug.*, February, 1899. ⁴ A paper by Welander (*Arch. f. Derm. u. Syph.*, xlvii, 3, 1898) on largin has recently fallen under my notice.

DETACHMENT OF CORNEAL EPITHELIUM (?)

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THE following case seems to be worthy of record because of the long duration of the symptoms and the immediate relief ultimately obtained. Mrs. W. consulted me on August 4th, 1899, and gave the following history. Five years previously the right eye was struck and "cut" by a cricket ball. Since that time there had been pain exactly as if there was a foreign body under the lid or embedded in the cornea. There was a pricking feeling on winking, and the patient could not bear to have the upper lid touched in its outer half. She could only obtain ease by keeping the eyes closed and perfectly still, or wide open with the lids motionless. On examination no foreign body could be seen, and the lids were normal. In the lower outer quadrant of the cornea careful observation showed that the epithelium was ruffled and freely movable over a small area, and in part of the same area was a tiny circular, slightly opaque, raised patch of the corneal tissue. Nothing more could be made out. I prescribed a bandage and some boric lotion with cocaine. Two months later, on October 6th, I again saw the patient, who was then in precisely the same condition as before, and had been so during the two months' interval. She was in such misery that I decided to adopt surgical measures at once. Accordingly, after instilling cocaine, I carefully explored the painful area with a needle, but could detect no foreign body. I then scraped the part thoroughly with a sharp spoon, removing the epithelium for some little distance around, and a fair amount of corneal tissue in the affected area. The following day there was some smarting, but the eye could be moved freely under the lid, and there was no pain on pressure over the previously tender spot. Progress was uninterrupted. The epithelium grew over the denuded surface, and no opacity resulted. The eye now is perfectly right and the vision is normal.

I should have put the difficulty I had in making a diagnosis down to my having overlooked some detail, had it not been that the patient was for a considerable time under treatment at an eye hospital. The explanation I am inclined to adopt, for want of a better, is this, that the original blow caused the anterior elastic lamina with the epithelium to become detached. The nutrition of the epithelium might thus be kept up, and every movement which pressed upon the surface would bring the detached membrane down on the corneal nerve filaments. But it must be confessed it is not easy to understand how this condition could remain stationary for five years.

PELLAGRA IN ITALY.—In the *Giornale degli Economisti* Signor Pietro Pitta gives the results of an investigation as to the diffusion of pellagra in Italy. In the Venetian provinces, which are the cradle of the disease, there has, owing to the preventive measures taken by local sanitary authorities, been a notable decrease in the number of deaths attributed to the disease. Whereas in 1887 it was 29,836, in 1891 it had fallen to 5,581; and this figure represented the average number of deaths from pellagra during the remainder of the decennium. But while the scourge has diminished in intensity, it has spread over a larger area. Deaths from pellagra are beginning to be reported in Lazio, the Abruzzi, in Apulia, in Basilicata, Campania, and Calabria, and are increasing in number. Signor Pitta urges the adoption of strict prophylactic measures in these and other places where the disease has made its appearance.