the circles become triangular with sinous sides. It is therefore a keratoconus.

All traces of spring catarrh have disappeared so much so that any ophthalmologist seeing the child for the first time, would not know to what cause to ascribe the myopic irregular astigmatism of the right eye, nor the conical cornea in the left.

Is it possible that the astigmatism in the right eye is only an early symptom of a coming keratoconus in that eye also? Time alone can decide this question. But the keratoconus in the left eye developed in a short time, from December, 1918, to August, 1919. To correct it we have ordered glasses, and instillations of pilocarpin with a compressive bandage. R —4. Sph. ⊂ —1 cyl. Axis 90°. L —8 D. Sph.

I again insist that the prognosis of spring conjunctivitis is always darkened by astigmatism (irregular) or keratoconus, complications which are very serious occurring in youth. Therefore it is important to cure the vernal catarrh as soon as possible in order to avoid the danger of ametropias and corneal deformities. The ophthalmologist should not hopefuly wait for the disease to disappear, as we have evidences that the circumcorneal vegetations really exert some dangerous influence upon the nutrition of the cornea, diminishing its resistance and allowing to some degree its becoming *deformed and even conical.*

FIVE CILIA IN THE ANTERIOR CHAMBER.

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According to Würdemann's Textbook on Injuries of the Eye, which perhaps is the most comprehensive work on the subject, cilia in the anterior chamber following accident or operation are rare; and they generally are tolerated for years without causing the least symptoms, though they may give rise to irritation, ciliary injection, photophobia, lacrimation, pain, or to the development of epidermal tumors of the iris, cysts, with subsequent glaucoma, blindness, or loss of the eye.

He quotes Vieweger as having collected twenty-nine cases from the literature, in several of which a number of hairs (in one case 14 cilia) were found. In these cases the hairs enter thru a perforating wound of the cornea, usually at the limbus, and are there seen floating freely in the aqueous or with one end impacted in the wound or its resulting cicatrix. These hairs may be retained for a long time without causing irritation. Müller (Wien. med. Woch. No. 13, 1894) reports one in the anterior chamber for twenty-four years.

Two cases of sympathetic inflammation have been reported from cilia impacted in the anterior chamber—one by Cuvier and the other by von Graefe. Würdemann reports two cases, in which cysts of the iris formed; and he says that as cilia are apt from irritation to give rise to cysts of the iris, they should be removed by corneal incision and extraction by the forceps. From the literature that is available it is evident that cases are comparatively rare, and cases in which more than one cilium is found in the anterior chamber are rarer still. Accordingly, I have felt that a report of the following case may be interesting.

The patient, Mr. G. H., aged 33, an employe of the Berghoff Brewing Company, was first seen on January 3, 1917, following an injury to the left eye by the rebounding of a stiff piece of wire which he was cutting. The patient stated that the vision was completely lost immediately following the injury.

Examination disclosed a triangular wound in the cornea, about five or six millimeters in length, to the inner side of the visual center. There was no prolapse of iris, but the anterior chamber was so full of clotted blood that determination of the extent of the injury to the intraocular structures was not possible. An X-ray examination disclosed no foreign body, and the patient was placed upon an expectant plan of treatment. The blood in the anterior chamber was absorbed slowly, but the

eye continued to be irritable and painful.

On January 15, or nearly two weeks after the injury, the blood and exudate in the anterior chamber had absorbed sufficiently to show some dark streaks across the pupillary area which by examination with the loupe were thought to be cilia, tho the number seemed to discredit that assumption. As the eye was improving slowly the expectant plan of treatment was continued; but on February 3 (exactly one month after the injury) the anterior chamber was sufficiently clear to make certain a diagnosis of five eyelashes, lying across the pupil and resting upon the anterior capsule of the lens and partly upon the lower pupillary margin of the iris.

The patient was advised to have the eyelashes removed, but owing to his desire to have his employers provide him with compensation while off duty, as well as to pay any expenses incident to his operation, and a controversy between the employers and the liability insurance company concerning liability for this compensation, the matter was given no attention until May 2, or four months after the injury, when the patient was brought in for operation, and with a report that the eye had continued to be irritable, with more or less lacrimation and photophobia. At that time the vision was 5/200, the impairment of vision being due to the corneal scar and a very slight cloudiness of the lens, the latter probably being caused in a measure by the irritation produced by the eyelashes which were partly lying upon the anterior capsule.

Under cocain anesthesia a small incision was made at the limbus, and with a pair of Liebrecht's iris forceps five, apparently full length, cilia were removed intact from the anterior chamber, one by one. No undue reaction followed this operation, and the patient not only made an uneventful recovery, but the irritation, with attending photophobia and lacrimation which had existed for weeks, disappeared; and at the last examination the vision was 5/200, or about as good as could be expected in view of the scar tissue and slight cloudiness of the lens. The eye has remained quite up to the present writing, and there has been no development of a cyst or epidermal tumor of the iris, which according to the literature on the subject seems to be one of the possibilities.

UNILATERAL PROGRESSIVE MYOPIA.

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This case, reported before the Louisville Eye and Ear Society, December 11th, 1919, seems to be rather an unusual one.

Mrs. A., age 30 years, a housekeeper with a good personal and family history, was first seen by me in December, 1903, when she was 15 years old. She was attending high school at the time and complained of burning of her eyes after reading for a short time, blurring of type and an occasional headache. Shadow test at this time showed 1.0 D. hyperopia in the horizontal meridian, and 0.5 D. h. in the vertical. The interior of both eyes was normal. In the subjective test, made with the patient fully under the influence of a cycloplegic, she accepted with the right eye+0.75 D. cylinder, axis 105° ⊃ +0.25 D. S., which gave her 20/15 vision. With the left, +0.5 D. cylinder, axis 75° ⊃ +0.5 D. S. vision 20/15. She was given glasses correcting her astigmatism, to be used constantly, with complete relief of the asthenopia.

Three years later she consulted me on account of phlyctenular disease. After recovery from this I found upon casual examination that with her old lenses, which were still comfortable, her vision in both eyes was 20/15—. She was then 18 years old, was living at home assisting her mother in her household duties, and doing but little reading.

I did not see her again until April, 1915. She then gave the interesting history of a gradual impairment of vision in the right eye until it had