

From the foregoing it will be seen that pain—almost pathognomonic in character—usually accompanies inflammatory affections of the anterior half of the eyeball.

Non-inflammatory pain, so-called, occurs in neuralgia, glaucoma, errors of refraction, and cases in which there is defective action of the motor apparatus, and in asthenopia.

Neuralgia of the eyeball is most frequently found in persons who are subject to neuralgic pains in the head, especially affecting the fifth nerve. The pain is intermittent, may be accompanied by tenderness to the touch, the pupil remains active, usually only one eye is affected, and there are no ophthalmoscopic symptoms.

Glaucoma Simplex, or chronic non-inflammatory glaucoma, may be accompanied by a constant aching pain, with a sense of fullness in the eye, or the pain may be referred to the brows. There is no evidence of inflammation, and the pain is by no means a constant symptom. Of course the characteristic symptoms of glaucoma serve to distinguish this affection from the others on the non-inflammatory list.

The pain experienced in cases in which there is an *Error of Refraction*, and that which occurs with defective action or innervation of the motor apparatus, is very similar, and due to the same cause, viz., a want of proper relation between the amounts of convergence and accommodation brought into play. This form of suffering is familiar to all who have strained their eyes over small type, or read too much in a bad illumination; it consists of a dull, sickening, frontal headache, with a tired feeling in the eyes, or the pain may be diffused through the head. Where the convergence is principally at fault, giddiness may be added to the other symptoms. There is frequently an irritable condition of the conjunctiva, accompanied by blepharitis in hypermetropes, which yields almost immediately when the normal relation between convergence and accommodation is restored by suitable glasses.

The term *Asthenopia* has long been to the ophthalmologist what Debility was to the general practitioner, viz., a harbor of refuge in a sea of doubt. True, every year reduces the number of cases in which we require to generalize in this way; but it is also true, that we are still obliged to evade certain difficulties by resorting to vague-

ness. That there is a form of neurosis which may safely be termed *Retinal Asthenopia*, is a fact familiar to all eye surgeons, and in these cases the symptoms are entirely subjective. Pain is complained of at the back of the eyes, and it may be very severe, occurring after using the eyes for near work; accompanying the pain there is usually extreme sensitiveness to light. Mr. Gunn describes a condition of the retina in these cases, to which he has applied the term "Crick Dots"; but the detection of this anomaly is a refinement of ophthalmoscopy which few may hope to attain to.

A second form of asthenopia appears to be due to a certain existing—but difficult to demonstrate—weakness of the ciliary muscle; it is most frequently found among debilitated women who require to sew a great deal. Another form of asthenopia is referred to hyperæsthesia of the optic centres. Unfortunately, in the present state of our knowledge, it is not easy to indicate in each case the region which is at fault.

Correspondence.

OUR NEW YORK REPORT.

From our own Correspondent.

NEW YORK, Feb. 19th.

A FEW POINTS ON PHTHISIS, PICKED UP AT THE CLINICS AND LECTURES OF 1888.

ETIOLOGY.

Here the sole exciting cause of phthisis is believed to be the tubercle bacillus; this theory is accepted as proven beyond the shadow of a doubt.

DIAGNOSIS.

In reading many of the standard authors of the day, the practitioner and student are directed to look for the earliest signs of phthisis at the apices of the lungs in front, and much stress is laid on careful physical examination of that portion of the lungs situated just below the clavicle. That this view is erroneous is not generally recognized, hence the failure of many physicians to make a diagnosis of incipient phthisis. The regions that the New York physical diagnosticians lay special stress on to examine, are the scapular and supra-scapular, posteriorly; and Prof. Loomis states that much of his success in his earlier days was due to this