nerable to attack how easily destroyed by slight free to escape in any direction from the presinjuries, and how vitally essential to the efficient working of the human machine the eye is, our admiration of the means provided for its protection is enhanced. Though the eye must necessarily be presented to all attacks, and used directly in all manual processes, and is thus, under all cir-- cumstances, placed in the most likely position for injury, it is relatively but seldom that it sustains a destructive injury, and it enjoys comparative immunity from the extensive lesions which every day present themselves as the result of blows about the face. The lightning speed of this warning from the eye to the brain and back again to the lid-muscles is almost inconceivable.

You must have observed this fact for yourselves, for in the daily run of hospital injuries all parts of the face and head seem to suffer more than the eye, though it is usually the object selected for attack.

Let us consider what it is which affords so sure a guard to the eye.

In the first place, the strong orbital ridges of the frontal, malar, and maxillary bones, effectually bear off blows from any body larger than the eye itself; while the eye keeps guard, and by giving the signal for a rapid jerk of the head, and the involuntary and spasmodic closure of the lids, protects the globe from the access of small--er bodies. A remarkable instance of this has been recently noted in the medical journals. -chemist was examining a small bottle of explosive liquid between his eye and the light, at half arm's length. By a shake the liquid exploded, . and the fragments of the bottle and its contents were violently scattered. On recovering from the shock of the explosion, which was so violent as to blow him off his feet, the chemist at once -felt that his face and lids were severely burned. To his great relief, he found, however, that his -eyes were perfectly safe, the small fraction of a second which the contents of the bottle occupied in traversing the distance from hand to .eyes, had sufficed for the retina to receive its impression, to transmit the signal to the brain, and for the brain to issue its order to the orbicularis palpebrarum, which closed tightly in compliance. That this latter protection is of great importance is proved by the frequent occurrence of accidents to one eye, when the other has been previously lost.

With lightning speed the retina transmits to the brain its warning of danger. By an instantaneous, almost convulsive and involuntary movement the head is removed from the direction of danger, and the eye is tightly covered by the lid; even if the blow or missile take effect in the exact direction of the eye, the whole force is sustained by the anterior arches of the orbit, if it be too large to penetrate within the cavity; and if sufficiently small to enter, it meets with nothing on which to expend its force, except a hard light, slippery globe, resting on a cushion of fat, and sure.

The lashes, also, acting as a sort of grating or sieve, entrap all sorts of minute objects, which, should they, in spite of all these protections, obtain an entrance, are met by an instantaneous deluge of tears which carries them away before they can inflict any injury.

In addition to these extrinsic protective provisions, the eye derives its greatest security from its own perfect mobility, and the elasticity of the cushion of adipose and cellular tissue on which it rests, and from the extreme strength of the sclerotic; so that, while the body of the eye itself will bear almost any amount of violence from a blunt or rounded missile, the structures on which it rests will receive without injury the greater part of any shock which may be communicated to it. The every-day proof of this fact is, that amongst the thousand black eyes given and received, rupture of the eyeball is a rare accident.

Ecchymosis beneath the Conjunctiva.—Proceeding now to the injuries of the eye-ball itself, and to some of the consequences therefrom, I present to you, firstly, an illustration of an ecchymosis beneath the conjunctiva (Fig. 1), with the appearance of which it is necessary that you should be familiar, as you may easily be deceived respecting the gravity of the accident by the very alarming appearance which the eye pre-Sub-conjunctival ecchymoses are more sents. usually caused by a slight scratch than by a heavy blow, and are very commonly the result of great straining on the part of the patient, either in coughing or retching, especially those who are in the anœmic condition which encourages small hæmorrhages under the skin, and in such cases there need be no injury at all. In this way ecchymoses are frequently observed in cases of purpura, and occasionally in Asiatic cholera. The effusion of blood beneath the conjunctiva may be distinguished from any other form of vascularity-

a. By its brilliant uniform scarlet, velvety surface, when recent, which completely hides the sclerotic.

b. By the absence of any visible blood-vessels.

c. By the irregular ragged edge.

It may be so large as to occupy the whole subconjunctival cellular tissue, and to raise up the conjunctiva into folds, or it may amount to no more than a small scarlet spot on the sclerotic. It never invades the corneal conjunctiva, because the attachments of the conjunctiva to the anterior elastic cornea are much closer than those which connect it with the sclerotic.

Treatment.-Surgical interference for sub-conjunctival hæmorrhage is neither necessary nor effective. If the patient will wait, the ecchymoses are best let alone, and they will go through the sequences of colour usual in the case of a black eye, until they finally disappear in eight