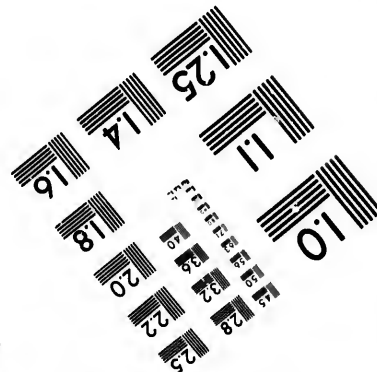
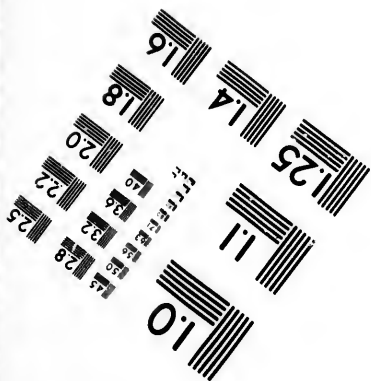
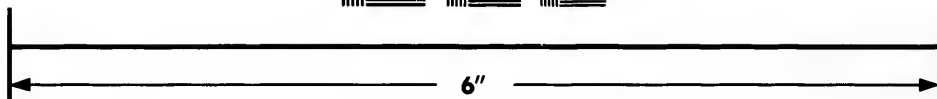
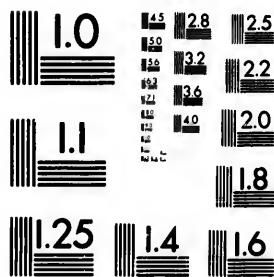


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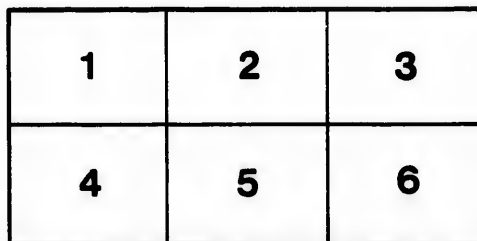
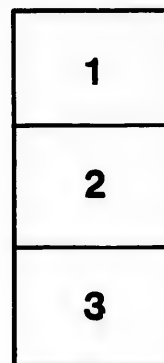
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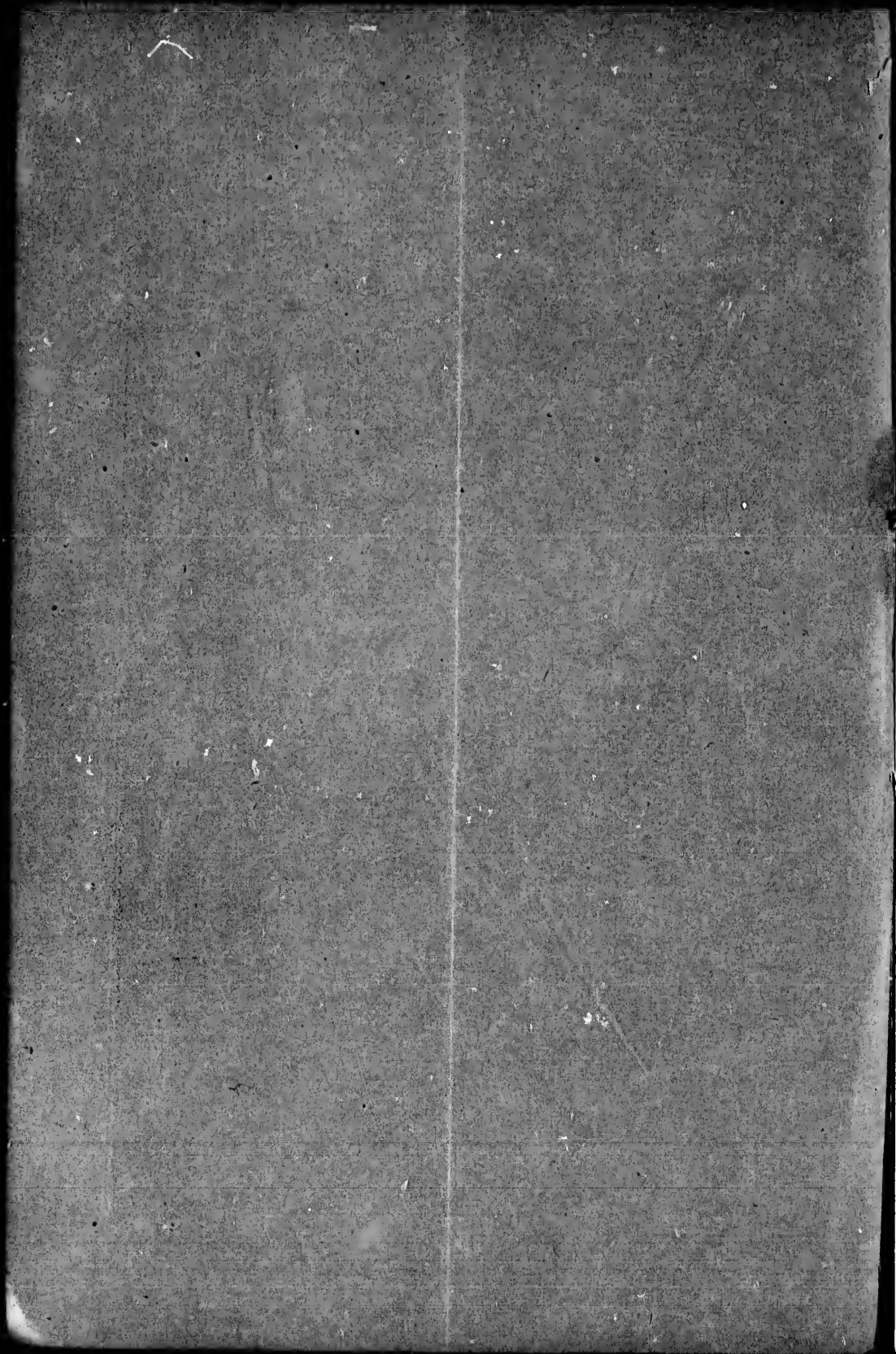
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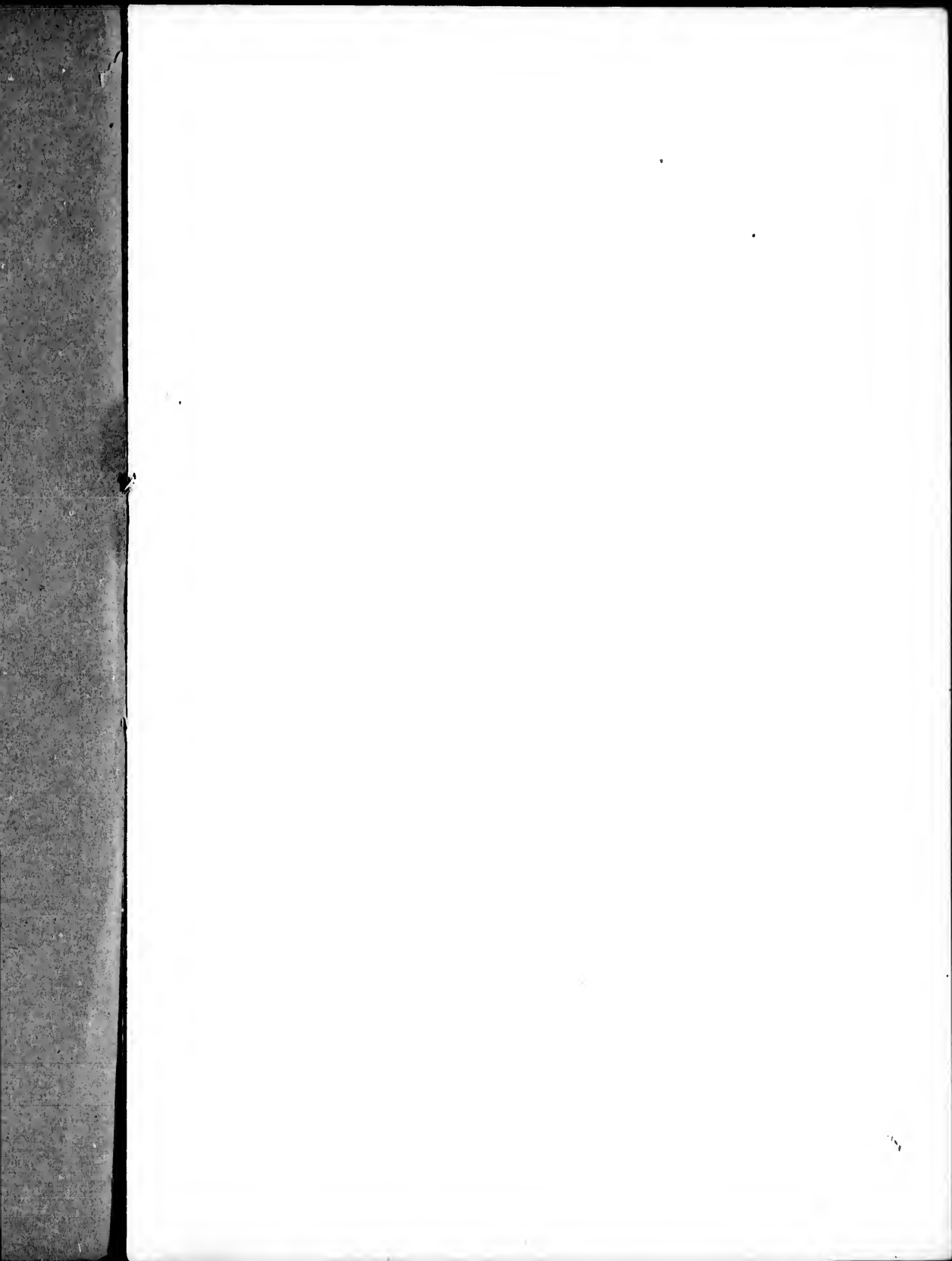
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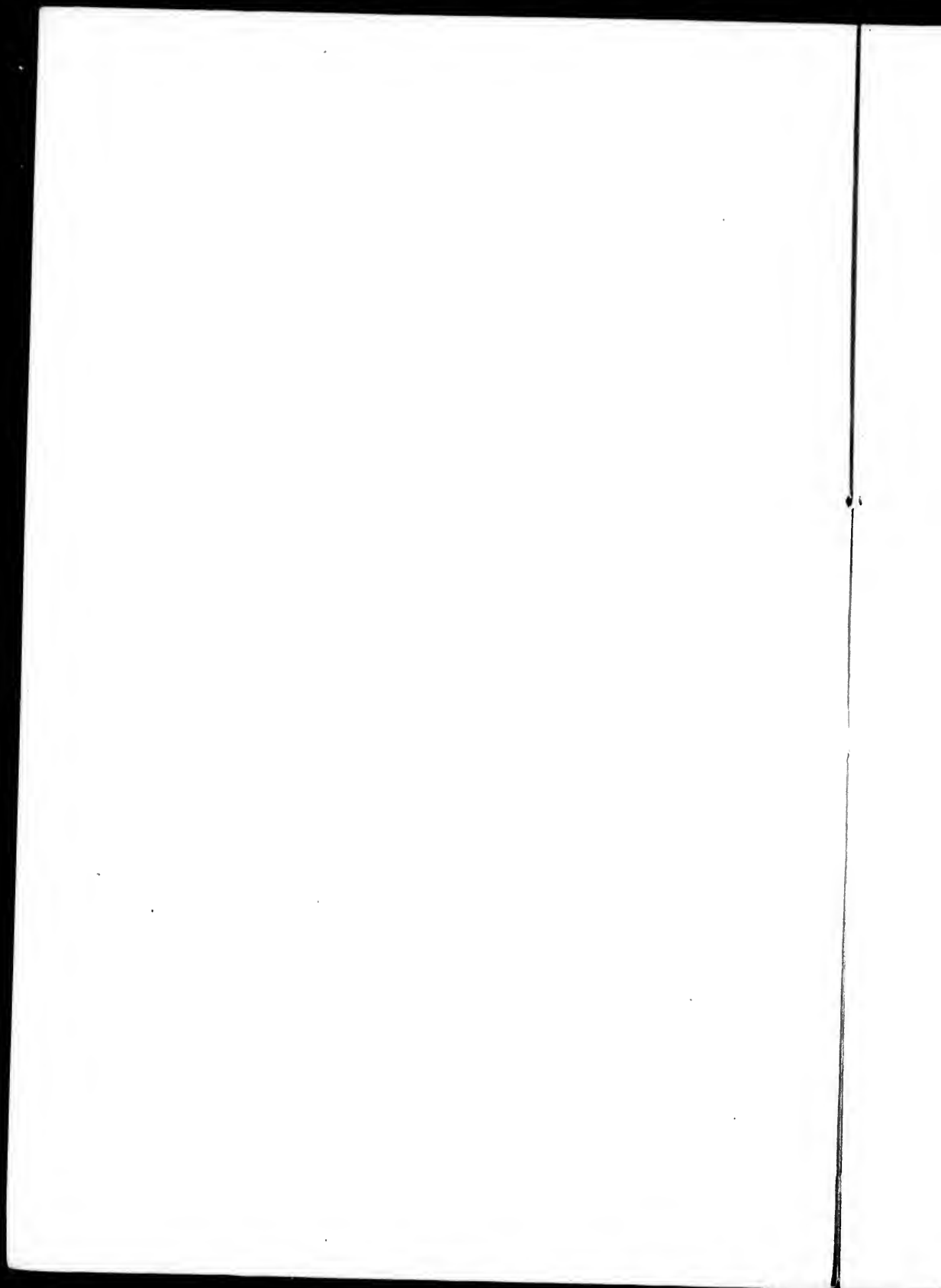
(Read before the Canada Medical Association, September 8th, 1883.)

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COMMON ERRORS IN OPHTHALMIC PRACTICE.

By F. BULLER, M.D., M.R.C.S., ENG.,

Professor of Ophthalmology and Otology, McGill University.

(*Read before the Canada Medical Association, September 6th, 1883.*)

No one can be more fully alive to the dangerous nature of the task I have in hand than I am myself. There are very few of us, in our own minds given to making mistakes, and still fewer willing to admit having been in error. Even to hint at such a thing is to vibrate the most sensitive chord in human nature. And yet, if ten years experience of special practice have demonstrated any one fact to me more clearly than another it is that the diagnosis of diseases of the eye by those who have not made a special study of ophthalmology, is far more often erroneous than correct. There is one disease in particular that I may say I have *never* known to be correctly diagnosed under such circumstances, until irreparable damage had been done to one or both eyes. I allude to glaucoma, a disease which commonly presents no diagnostic difficulties that should puzzle any one possessed of ordinary powers of observation. The question arises wherein lies the fault. Is it that the profession regards the organs of vision as of so little importance as not to be worthy of attentive study? Or is it that the system of medical education in vogue up to the present time does not sufficiently cultivate the observing powers to enable men to unravel and interpret the most obvious signs and symptoms of disease?

I often find myself debating whether it is possible that in general practice there is as much error abroad in regard to diseases of other parts of the body, as in those pertaining to the eye. I would fain believe there is not; perhaps some of the other "ologists" present will kindly enlighten us upon this point. Nothing is further from my intention than to depreciate

the attainments of my professional brethren, most of whom as I well know are earnest and painstaking in the pursuit of knowledge. I only wish to call attention to some points of interest to those who are obliged to engage more or less in ophthalmic medicine and surgery.

One does not require to be the son of a prophet to divine the impossibility of any human mind grasping the entire range of medical science and for my own part I find the comparatively narrow limits of a single specialty quite wide enough to occupy all my spare moments. Nevertheless I am convinced that every one of us would attain a far greater degree of practical and useful knowledge if we only possessed some ready way of separating the wheat from the chaff, of distinguishing between the essential and the trivial or unimportant.

To attain this end it does seem to me that the first step to be taken is to ascertain wherein we are most liable to error, knowing this it would not be difficult to direct our labors to greater advantage and therefore to accomplish more in the short time at our disposal either as students at college or later in life when thrown upon our own resources in the matter of self-improvement.

The diseases of the eye which I have frequently seen incorrectly diagnosticated are for the most part easily recognized by simple inspection, and therefore do not demand for their recognition any profound knowledge of ophthalmology. To make this point clear, I shall be obliged to enumerate some of the characteristic features of each; and I shall commence with the most important of all, viz., *Glaucoma*.

Acute glaucoma I have usually found to be mistaken for neuralgia, or a bilious attack, the eye symptoms being almost entirely ignored, or for iritis, or for "general inflammation of the eye," a vague term evidently intended to fit almost anything. The more chronic forms of glaucoma are usually mistaken for cataract, a fatal mistake for the patient, because it is invariably coupled with the advice to wait until completely blind before having anything done. Sometimes when a case of chronic glaucoma falls into the hands of a practitioner who claims to have "paid a good deal of attention to diseases of the eye," and has mastered the

use of the ophthalmoscope to the extent of seeing "through a glass darkly," the diagnosis of "disease of the optic nerve or retina" will be made, with equally disastrous results for the patient, who will be persuaded to undertake a long course of constitutional treatment, instead of submitting to a timely operation.

Let us now see how easily these errors may be avoided. In the first place, if glaucoma is sufficiently acute to produce pain resembling that of neuralgia, the pain will be accompanied with a considerable impairment of vision, this impairment often being very great; and before the pain becomes severe, there will usually have been observed, on one or more occasions, the phenomenon known as "halos"—that is, a misty circle of colored light around the lamp or candle flame at night. Temporary attacks of dimness of vision, with "halos," will often have been noticed for weeks or months before anything like an acute outbreak of the disease occurs, and they are *characteristic* of what is known as subacute glaucoma throughout its entire course.

To mistake a case of acute glaucoma for a bilious attack might justly be designated "one of the unpardonable sins." If sufficiently severe to induce nausea and vomiting, the patient will be almost blind of one eye at least, and the physician must be blind of both not to notice its condition—that is, the dusky redness of the affected eyeball, its stony hardness, the steamy cornea, shallow anterior chamber, wide, immovable pupil, and the excruciating pain not only in the eye, but about the brow, down the side of the nose, in the back of the head, and sometimes even extending to the neck and arm.

There is no such thing as general inflammation of the eye presenting the symptoms just enumerated; and as for iritis, we do not find a wide pupil and shallow anterior chamber in this disease, nor the typical steamy cornea of acute glaucoma. On the contrary, the pupil is abnormally contracted in iritis, and, if carefully observed, will be found more or less irregular from the presence of adhesions of the iris to the lens capsule; moreover, the loss of vision is less rapid and less pronounced in iritis than in acute glaucoma.

Defective vision from subacute or chronic glaucoma is easily

distinguished from that of cataract. 1st, By the positive diminution in the area or field of vision so characteristic of such cases of glaucoma, and never met with in uncomplicated cataract. 2nd, By the absence of any distinct opacity in the crystalline lens, such as may easily be seen by focal illumination, or by the direct illumination of the pupil and lens by means of the ophthalmoscopic mirror. 3rd, By the somewhat wide and inactive pupil of glaucoma, the condition of the pupil being normal in uncomplicated cataract.

Although it must be admitted that a positive diagnosis of a purely chronic case of glaucoma cannot always be made without the aid of the ophthalmoscope, it fortunately happens that any one skilled in the use of this instrument cannot fail, by its aid, to clear up any doubts that may exist in a given case, *and I therefore cannot too strongly insist that, in any case of gradual and progressive failure of vision, not due to any visible or obvious cause, an efficient ophthalmoscopic examination should be made with as little delay as possible.*

I have spoken of glaucoma at greater length than I should have done, but for the fact already stated that it is so rarely recognized in its early stages, and because, of all diseases to which the eye is liable, this one most urgently calls for an early diagnosis, for prompt and decisive treatment.

To many members of this Association it may seem incredible that a disease so common as iritis, and so marked in its character, should ever escape recognition; and yet that it does so escape far too frequently is abundantly proven by the multitudes living to-day with more or less complete posterior-synechia and damaged vision, the result of neglected or badly managed iritis.

So far as I can judge from my own observations, this affection is usually mistaken for conjunctivitis and improperly treated with astringents, such as sulphate of zinc or nitrate of silver, for these two remedies deservedly hold a high rank in the treatment of conjunctival inflammations, and are therefore almost always resorted to when inflammation of the conjunctiva is suspected. Just here I feel in duty bound to emphasize the fact that the use even of weak astringent solutions never fails to intensify inflammation of the iris; but the worst of it is that the physician who

prescribes an astringent imagines that he has done all that is necessary in prescribing an eye wash that he has known to do good service in the treatment of inflammation of the eyes in many other cases, and the unfortunate patient is debarred from the use of *atropine*, the one essential remedy for the successful treatment of his disease. Inflammation of the iris is characterized by symptoms so obvious that I cannot understand how anyone who has ever seen a typical case can ever make a mistake in the diagnosis of this disease as ordinarily met with. The change in the color of the iris, its dull, lustreless appearance, the contracted pupil responding imperfectly, or not at all, to the stimulus of light, the effusion of lymph at the margin of the pupil or in the iris, the dim vision, the peri-corneal character of the injection and the attendant pain, together with the absence of symptoms indicative of inflammation of the cornea or conjunctiva form an assemblage of symptoms that ought to put an error in diagnosis out of the question; and, besides all this, the use of a single drop of atropine will, in the majority of cases, display an irregularity of the pupil that the dullest observer could not possibly overlook. In the name of humanity, I would ask everyone who ever expects to treat disease of the eye to become familiar with the symptoms of iritis. For one badly managed attack of this disease may, and often does, ruin the prospects of a life, whereas if discovered early, and treated efficiently, absolute and perfect recovery is almost a certainty.

There is one common affection of the eye known under the general term *Asthenopia*, which constantly misleads the unwary. *Asthenopia*, in its widest sense, means a functional disturbance which renders the act of vision difficult and uncomfortable. It is usually mistaken for disease of the optic nerve or retina and often leads to the most alarming prognosis. The subject is too extensive for anything like an exhaustive discussion, but I may say that the majority of such cases depend on some error of refraction, on some muscular anomaly, or some fault in the general health, or in excessive use of the eyes. In most of these cases the great point is that the vision when carefully tested shows no actual impairment, and an apparent diminution of vision will often be found to depend on the existence of

astigmatism, in which case a little judicious questioning will usually reveal the important circumstance that vision has never been really perfect. The chief complaint is of pain in or about the eyes when they are used for any length of time, sometimes so severe as to cause the patient great alarm, and since the affection most commonly occurs in nervous or irritable people alarm becomes mortal terror, when, as too often happens, they are told the trouble is in the optic nerve and threatens blindness. Such people become a ready prey to unscrupulous charlatans.

Nothing can be further from the truth than the assumption that organic disease of the retina or optic nerve is characterized by pain or discomfort from using the eyes. Such lesions may be and usually are ~~most frequently~~ attended with persistent headache, but the ocular symptoms are inconspicuous at least until there is a considerable impairment of vision. With regard to the headache, there is one point that should, I think, be regarded as an axiom in medicine. *An ophthalmoscopic examination should be made in every case of persistent headache.*

No one with any regard for his own reputation will ever pronounce any case of asthenopia to be one of organic disease of the retina or optic nerve without having first carefully tested vision, more especially with regard to refraction and accommodation and then make an accurate ophthalmoscopic examination. For it is far better to make no diagnosis at all than to diagnosticate incorrectly.

There are some other common errors I had intended to speak of, but they are of minor importance and I will not trespass further upon the time of the Association, at the same time I have the strongest reasons to believe that the facts I have presented are quite worth the attentive consideration of every medical practitioner who has not made a special study of diseases of the eye, but whose position is such as to necessitate including these in his daily practice.

