position, we place the opaque disc in front of the left eye. He is asked to read the letters, beginning at the top. We will suppose he reads down to $\frac{6}{6}$. We then record the right as normal. If the left eye, on testing, only comes down to $\frac{6}{18}$ then that eye has only one-third of normal vision. But we will suppose the left can read $\frac{6}{6}$, therefore the eyes have equal vision for distance. It is well, however, to also test the reading power, and if they are equal and normal for reading, then we may note that there is no inequality of vision, and therefore we have not yet found ocular cause for headache.

Test for Hyperopia (often called hypermetropia).—For this test we use the plus (+) glasses. Covering the left eye, we place the +0.5 in front of the right. If there is no blurring of sight while he looks at the distance types, then there is hyperopia present. If we wish to determine how much, we put in + glasses until there is slight blurring of vision. The strongest + glass with which he can read as well at the distance as with the naked eye will give us the amount of the hyperopia.

Test for Myopia.—If our patient has already read $\frac{6}{6}$ with each eye, we have already tested for myopia negatively. For no myope can read $\frac{6}{6}$. But in order to give the test, we will suppose that the patient can only read the $\frac{6}{24}$ line (he has thus only one-fourth of normal vision.) Covering one eye with disc, we place the −0.5 in front of the other eye. If this improves his sight, he is myopic. To ascertain the amount, you proceed as in hyperopia, using the minus (−) glasses, and remembering that the weakest glass which gives the best sight for distance is the measure of his myopia.

Test for Astigmatism.—Covering one eye, the patient is asked to look at the clock-face (which has been hung on the same wall as the distance types) and to say whether all the lines upon it are equally dark, or if some are darker, or lighter, than the others. If he says they are all alike, probably that eye is not astigmatic. But if, instead of the lines being all alike, he sees any of them to be darker than the rest, that eye is probably astigmatic. Try now both a plus (+) and a minus (−) glass, first one and then the other. If either of them makes the lines dark and clear which were previously blurred, then there certainly is astigmatism.

Take an example. If an eye sees the lines from 12 to 6 to be dark, and a glass (plus or minus) makes the lines from 3 to 9 to be dark, while the 12 to 6 lines are now blurred, astigmatism is proved to be present. By these few simple tests we have examined for the principal errors of refraction.