STEREOSCOPIC VISION.

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When looking around us, if we have good vision with both eyes, we see surrounding objects in their normal position as regards distance from us, and are able to say that one object is nearer than the other; but if we have only one eye, the other being blind or temporarily covered, the picture presented to us appears flat, and the relative distance of objects is not preserved to us. On investigating this phenomenon, we find that the two eyes are normally about 21 inches apart from centre to centre, and that we converge the axis of the two eyes on different objects, and thus view the whole picture, the object converged upon being the prominent feature in the picture for the moment, and we really see two pictures, one with each eye, the central object of which is the object on which convergence is made, and that these two pictures are blended by means of the perceptive faculty of the brain, and we see only one picture. The two pictures as presented by the two eyes are not identical, and this may be readily shown by taking two pictures with a lens placed in two positions $2\frac{1}{2}$ inches apart and comparing the two pictures. They will not be tracings one of the other, but the point of convergence will be the centre of each, and other objects will take their place accordingly. This will be easily proven if we place two objects in line with our nose, and alternately converge on the nearer object and the distant one.

If we converge the eyes on the distant object, it will be seen that there are two images of the near object visible, and in like manner, if we converge our eyes on the near object, two of the distant objects will be visible.

If now, whilst converging the eyes on the distant object, and the two images of the near object are both visible, one eye, say the right eye, be closed or covered, the left-hand image of the near object will be obliterated, and if the left eye be closed or covered, the right-hand image of the near object disappears. (Fig. 1.)

Again, if whilst converging the eyes on the near object two images of the distant object are visible, and if, whilst converging on the near object, and the two images of the distant object are visible, the right eye be closed or obscured, the right hand image of the distant object disappears, and if the left eye, the image on the left disappears.

If now two objects be placed in line with the nose and the eyes con-