

verged on the distant object, a card may be held up on the same line so as to obliterate the near object altogether, and the distant object remains visible as one object. (Fig. 1.) But if eyes are converged on near object, two images of the distant object will be seen, and if the right eye be closed or obscured, the right image of distant object will be obliterated, and if the left eye, the left image will be obliterated, and if two cards be gradually pushed in from outside towards the median line, both distant images can be obliterated whilst the near object remains visible. (Fig. 2.)

These experiments show that two distinct pictures are seen by the two different eyes, and that, therefore, to obtain true stereoscopic vision, two distinct pictures must be presented to the two eyes, the left to the left and the right to the right eye.

If, however, the pictures be reversed and the left picture put to the right eye, and the right picture to the left eye, the reverse effect is produced, and the distant object or portion of object appears near, instead of distant. In Foster's Physiology a drawing is given, from which the drawings produced are copied A. In this the foreshortening is given on the inside of the two pictures, and in B, I have reversed the sides; that is, I have put the right picture of A to the left eye in B, and the left eye picture of A to the right eye of B, and now they appear reversed in A. The object when viewed in the stereoscope appears as a solid truncated cone, whilst in B the effect of looking into a hollow truncated cone is produced.

On viewing any of these pictures with the stereoscope, they appear as if seen in relief or as solid objects, because the instrument gives to each eye its proper picture and the brain blends the two pictures into one.

It is quite possible, and most people with a little practice can see these pictures stereoscopically, the centres are placed  $2\frac{1}{2}$  inches apart, and if held opposite their respective eyes, and the axis of the two eyes be made parallel, each eye will see its own picture, and the brain will blend them together. On looking at one of these pictures with the eyes parallel, that is, converged on infinity, three pictures will be seen, a central picture which appears solid, and a picture on either side which appears flat and wanting in solidity.

If whilst looking at one of these cards and seeing the three pictures, a card be passed up between the eyes, it will be found that the two outside pictures are cut off but the central one remains visible and appears solid.

If when looking at the card and the three pictures are visible, either eye be obscured, the centre solid object becomes flat and loses its rotundity and the third image on the side opposite to the obscured eye is lost.

If when looking at the card and the three pictures are visible, the card be altered in its horizontal level so as to raise one picture above the