The young man's book of amusement

Halifax, 1848

The Artificial Landscape

urn:nbn:de:bsz:31-100120

The Artificial Landscape.

Procure a box (See Fig. 4.) of about a foot long, eight inches wide, and six inches high; or any other dimensions you please; so they do not greatly vary from these proportions. At each of its opposite ends on the inside of this box, place a piece of looking-glass that shall exactly fit: but at that end where the sight hole A is, scrape the quicksilver off the glass, through which the eye can view the objects.

Cover the box with gauze, over which place a piece of transparent glass, which is to be well fastened in. Let there be two grooves at each of the places C, D, E, F, to receive two printed scenes as follows: on two pieces of pasteboard, let there be skilfully painted, on both sides, any subject you think proper, as woods, bowers, gardens, houses, &c. and on two other boards, the same subjects on one side only, and cut out all the white parts: observe also, that there ought to be in one of them some object relative to the subject placed at A, that the mirror placed at B may not reflect the hole on the opposite side.

The boards painted on both sides are to slide in the grooves C, D, E, F, and those painted on one side are to be placed against the opposite mirrors A and B; then cover the box with its transparent top. This box should be placed in a strong light, to have a good effect.

When it is viewed through the sight hole, it will present an unlimited prospect of rural scenery, gra-

dually loosing itself in obscurity; and be found well worth the pains bestowed on its construction.

Pleasing Optical Appearance.

If a soap-bubble be blown up, and set under a glass, so that the motion of the air may not affect it, as the water glides down the sides, and the top grows thinner, several colours will successively appear at the top, and spread themselves from thence in rings down the sides of the bubble, till they vanish in the same order in which they appeared. At length a black spot appears at the top, and spreads till the bubble bursts.

The thinnest substance ever observed is the aqueous film of the soap bubble previous to bursting; yet it is capable of reflecting a faint image of a candle, or the sun. Hence its thickness must correspond with what Sir Isaac Newton calls the *beginning of black*, which appears in water at the thickness of the seven hundred and fifty thousandth part of an inch.

Another.

A convex and concave lens, of nearly the same curvature, being pressed closely together, exhibit rings of colours about the points where they touch. Between the colours there are dark rings, and, when