## BOOK NO. 5.

In this number of the series the studies of design in antique ornament and of object drawing, especially rapid sketching from sight or memory, are continued, and the instructions previously given respecting these studies must be referred to and applied.

A new subject is now introduced, that of **Elementary Perspective**, treated in the simplest manner and applied to the drawing of single objects.

In the lessons on constructive and model drawing the pupils have been taught to represent objects by drawing one side at a time, making a separate drawing for each side that required to be shown. Such representation is called **geometrical**, and is necessarily used in all plans, or drawings made to a scale, from which measurements are to be taken.

Usually, however, in looking at anything we see more than one side, and we observe that its apparent form changes with every change of position. An object drawn thus, not as it actually is, but as it appears to the eye, is said to be drawn in **perspective**.

In Book 3, page 4, geometrical views are taken of the side, back, and end of a book, these three views being required by the geometrical method to represent its form. One perspective drawing, as illustrated on page 8, will give even a clearer idea of the appearance of the book, but will not give its size, nor the measurement of its parts. The same principle is illustrated by the perspective views of a chest on the same page and of a table on page 18, which are geometrically represented by two and three views, respectively, in Book 3, pages 3 and 10.

The fundamental principles of perspective are:-

- An object appears to become smaller as it recedes from the eye of the spectator.
- 2. An object, other than a spherical one, changes its apparent form with every change of position.
- 1. A man, a waggon, a boat, or a railway train, moving away from us appears to become smaller and smaller until we lose sight of it. The same objects in coming towards us appear larger as they approach.

If two objects of the same size are placed at different distances from the eye of the spectator, the more distant one will appear to be smaller than the other. To illustrate this, take two slates of the same size, place one upright on the front of the desk, then hold the other a few feet behind it farther from the class, moving it so that each pupil successively may see the two slates in the same line of view, and may observe the difference in 'apparent size. Large books may be used if more convenient.