2. Inventory of Essentials

Tools

For all except verse texts, only two tools are required, the compass and the straight-edge. They work on a flat surface (a plane).

Compass, also called a pair of compasses    Mechanically, this is nothing more than two members, usually called ‘legs,’ joined by a pivot, or hinge. The legs may be straight or curved or otherwise, so long as they are rigid. The joining may be at the ends of the legs, or at some point midway along their lengths. If midway, the compasses may be ‘proportional,’ the extensions at one end proportional to the extensions at the other.

Functionally, the compass is used for drawing circles or parts of circles (‘arcs’), and to ‘take’ measures. In drawing circles or portions of them, the end of one leg (its ‘foot’) is fixed in place, and the other end (the other ‘foot’) moves along a plane surface, marking its path. In taking measures, the feet of the compass are placed at the points to be measured.

Straight-edge    Mechanically, this is nothing more than a piece of flat material having one edge that is straight, that is to say, extending uniformly in a single direction.

Functionally, a straight-edge guides the path for a moving point for marking the direct (shortest) path between two points.

A lineal measuring scale is needed for verse texts, to convert lineal extension into numerical expression. Optimal is a straight-edge marked with ten equal measures, one of them—at one end—divided into twelfths (as fourths each divided into thirds).

(A set square, convenient for drawing plans incorporating right angles, seems not to have been used for carpet pages, and quite possibly was not used for the other designs either.)