

Petit Traité de Perspective. By Raoul Bricard. Paris, Librairie Vuibert, 1924. 87 pp.

This little treatise of perspective contains a partial reproduction of the course given by Bricard at the Conservatoire des Arts et Métiers and at the École Centrale des Arts et Manufactures in Paris.

The method used to present the elements of perspective is that of Cousinery, and is especially emphasized by Bricard. He justly maintains that this method, different from the traditional and later Monge constructions, has, in France, not received the recognition which it deserves.

The method consists in fixing the center of projection C in space by a fixed circle K in the picture plane, so that the end of the perpendicular erected at the center of K , and equal to the radius of K , coincides with C . In this manner a line l in space is determined, when its perspective l' , the trace S of l on l' and the vanishing point F' of l on l' , are known. The perspective P' of a point P is determined by the intersection of the perspectives l' and g' of two lines l and g through P . By this method also the homology between a figure in a plane Σ after rotating it around its trace down into the picture plane Σ' , and its perspective in Σ' , is easily obtained.

It may be of interest to state a few historic facts concerning this method of perspective representation. Cousinery published his *Géométrie Perspective ou Principes de Projection Polaire Appliquée à la Description des Corps* in 1828.

Brook Taylor, long before, in 1715 and 1719, made use of the same idea in *New Principles of Linear Perspective*. Joseph Highmoore applied Taylor's method in *The Practise of Perspective on the Principles of Dr. Brook Taylor*, which appeared in 1763.

Also J. H. Lambert, in 1759 and 1774, published a treatise based upon the "distance-circle:" *Die freie Perspective oder Anweisung jeden perspectivischen Aufriss von freien Stücken und ohne Grundriss zu verfertigen*.

Fiedler made systematic use of the "Distanzkreis" in his voluminous *Die Methoden der darstellenden und die Elemente der projectivischen Geometrie*, and his "Cyclographie," after having given an outline of his methods in the Programmabhandlung of the Gewerbeschule of Chemnitz in 1860: *Die Centralprojection als geometrische Wissenschaft*.

Bricard does not presuppose any knowledge of projective geometry and develops as much of the elements, Desargues' theorem, etc., as are needed for the understanding of what follows. The "*Petit Traité*" is an excellent introduction to the essentials of linear perspective, and it is obvious that it has been written by a competent hand.