PERSPECTOGRAPH & OTHER DRAWING INSTRUMENTS

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Nearly 50 various drawing instruments collection get the Gdansk University of Technology as a donation of the family of Dr. Henry Limon, a former employee of the Department of Geometry PG. It was a direct incentive to take up the topic of this work. One of the more interesting specimens of the collection is Czechoslovakian’s perspectograph from the 50s of the last century. Discussion of the design and method of use on the background history of similar devices will be the main topic of the presentation.

Purely geometrical methods for obtaining the perspective of orthogonal projection data have never been too popular among architects - require proficiency in the use of geometrical knowledge and are quite time consuming. So sought to mechanization this issue. Starting from the Renaissance were created a lot kinds of perspectographs (A. Durer, J.H. Lambert, M. Arrigunaga, Fiorini, A. Prix, G. Hauck, H. Ritter, J. Millet). However, devices were complicated, expensive, difficult to use, and therefore does not meet the expectations of practice. The best solution given thought to the idea of perspectograph was in 1909 by C. De La Fresnaye’a, the method further simplified geometry professor of Technical University of Lviv - Kazimierz Bartel.

Presented perspectograph PREMA operates on a different basis, referring to indirect methods of construction perspective. It uses a trivial combination of two indirect methods - methods of intersection points and one vanishing point. With its advantage can be considered not so much to facilitate or simplify the design (which for each drawer familiar base prospects are obvious), which eliminates the need to draw a number of lines (replaced with a transparent ruler and thread), and the possibility of obtaining a clean, clear drawing of the final. The disadvantage is the need to prepare the "underlay" of points piercing rays of perspective with the background.

In any case, this model has not gained popularity equipment, and computer methods to the rest to help eliminate this kind of use. However, this is a perfect illustration of the development of human and technical thought and the history of science.
Fig. 1. Perspectograph PREMA, made in Czechoslovakia, the 50s of the last century

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