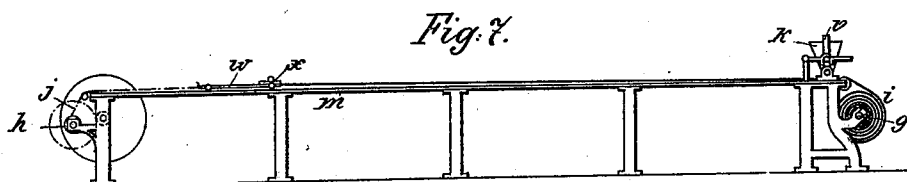
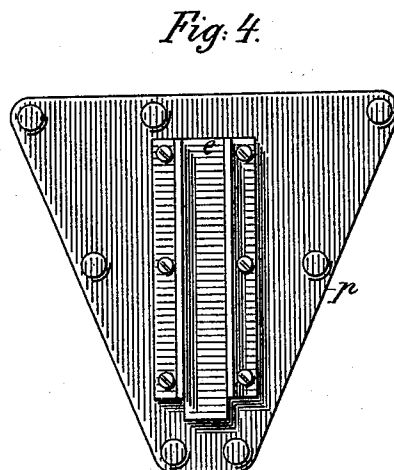
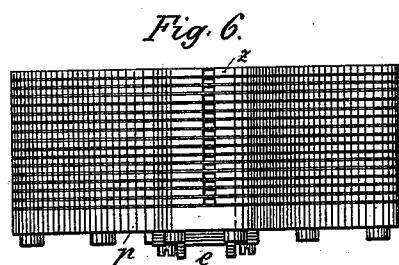
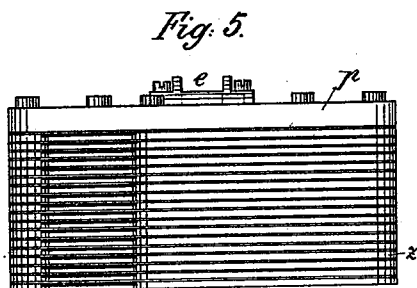
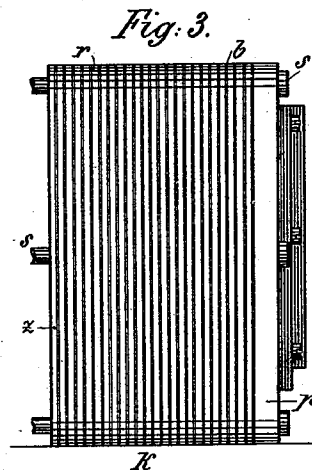
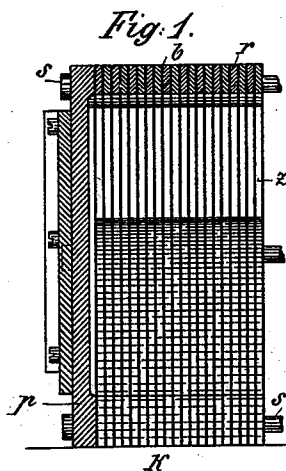
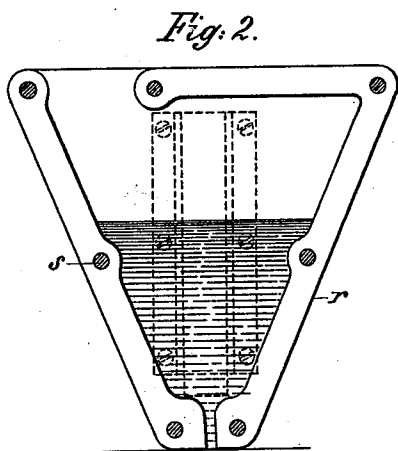


(No Model.)

R. BERKAN.
MACHINE FOR ORNAMENTING HANGINGS.

No. 510,110.

Patented Dec. 5, 1893.



Inventor:
Rudolf Berkan
Witnesses:
E. B. Bolton
E. H. Sturtevant. BY

Richardson
his Attorneys.

UNITED STATES PATENT OFFICE.

RUDOLF BERKAN, OF VIENNA, AUSTRIA-HUNGARY, ASSIGNOR TO WILHELM KOEHLER, OF SAME PLACE.

MACHINE FOR ORNAMENTING HANGINGS.

SPECIFICATION forming part of Letters Patent No. 510,110, dated December 5, 1893.

Application filed March 29, 1893. Serial No. 468,221. (No model.) Patented in Austria-Hungary December 11, 1890, No. 40 and No. 3,730.

To all whom it may concern:

Be it known that I, RUDOLF BERKAN, merchant, a subject of the Emperor of Austria-Hungary, residing at 37 Mariahilfer Strasse, Vienna, Austria-Hungary, have invented certain new and useful Improvements in Machines for Ornamenting Hangings, of which the following is a specification.

This invention has been patented in Austria-Hungary, December 11, 1890, No. 40 and No. 3,730.

The objects of my invention are to reproduce rounded, fluted, architrave and other similar moldings on paper hangings in a more direct and less costly way than has heretofore been the case. In order to do this perfectly, it is necessary to distribute the varying tints between full and secondary colors, full and half shades and high lights, in accordance with their respective intensities—an operation which, as the art now stands, is very circumstantial and costly. By means of my device, the color tones, by being shaded exactly in accordance with their intensity, are perfectly reproduced in their most delicate shades, and this, moreover, in one single direct operation, that is, by simply once passing the paper roll under the color box.

Referring to the drawings which form a part of this specification: Figure 1 is a longitudinal section. Fig. 2 is a cross section; Fig. 3 a longitudinal view; Fig. 4 a front view; Fig. 5 a plan view; Fig. 6 an under view, and Fig. 7 a view of a drawing frame for paper hangings ready for work.

The color box K consists of a number of cells or compartments Z, made as narrow as possible, and corresponds to the width of the paper hanging, such cells being formed by the frame r, to whose thickness the width of the cell corresponds, and thin strips of lead b fixed between the same. The whole of the cells are held in position by strong front plates p, and screw bolts s, and are firmly clinched against each other and also at the outer side. The leads b, frame r and head plates p correspond in form, in such manner, that the whole system forms a cell-box of prismatic cross-section, of which the under

side is smaller than the others. The frames r are not closed underneath and for a part at the top, and, in consequence, the cells are also left open at such points. The upper openings serve for filling the colors in the cells, for which purpose, funnels with flat spouts sufficiently long for them to be inserted in the various cells, are used. The under openings of the cells are considerably shorter, and form a row of drawing pens or a multiple color drawing device, by means of which the colors in the cells are transferred to the paper drawn along under the cells, and more or less pressed against them; in this way regular lines are formed on the paper running close together and leaving no space between without color. The head plates p are provided with grooves e which serve to guide the color box when sliding same on the rails v (Fig. 7). The cells Z are filled in rows with the colors necessary for printing the correct shades. When, for example, it is required to print friezes or moldings with large shoulder pieces, the single tints or tones of the corresponding color—from the fullest light to the darkest shade of the profile—must be arranged in the cells in the same order as they are required to appear on the paper hanging. In this operation, each vertical surface will be of equal tone, in accordance with its width and, consequently, so many contiguous cells are filled with the same color as corresponds to the width of the surface. In the case of narrower frieze facings or borders, several can be placed in juxtaposition and printed by being once drawn through and which must be divided before use. The colors used must not only be correctly distributed with regard to the tints, but must also have the correct consistence. This is necessary to keep the different colors distinct, and to prevent them running into each other on coming into contact.

The manipulation in producing paper hangings after the manner described will be easily understood from Fig. 7. At the end of the drawing frame m is a frame with parallel rails v, between which the color box is made to slide. The continuous paper roll i is mounted in the frame g, the end of the paper

being passed through the slot under the color box, and fastened on a slide *w* by means of a clamp. To this slide, a string or cord *j* is attached, so that by winding the string on a roller *h*, pivotally supported on to the other end of the table, the finished paper issues on the table, and can be cut in proper lengths, without the process of applying the colors or tints being interrupted.

10 Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the end frames, the frames *r*, the partitions *b*, openings in the 15 frames *r* at top and bottom and bolts for

clamping the frames and partitions together, substantially as described.

2. In combination with the end frames, frames *r*, partitions *b* and clamping bolts, the ways *e* on the end frames, the drawing frame 20 *m* and the rails *v* adapted to the ways *e*, substantially as described.

In witness whereof I hereunto set my hand in presence of witnesses.

RUD. BERKAN.

Witnesses:

WILHELM KÖHLER,

LAR ZUNGE,

VICTOR TISCHLER,

Engineer.