

No. 686,462.

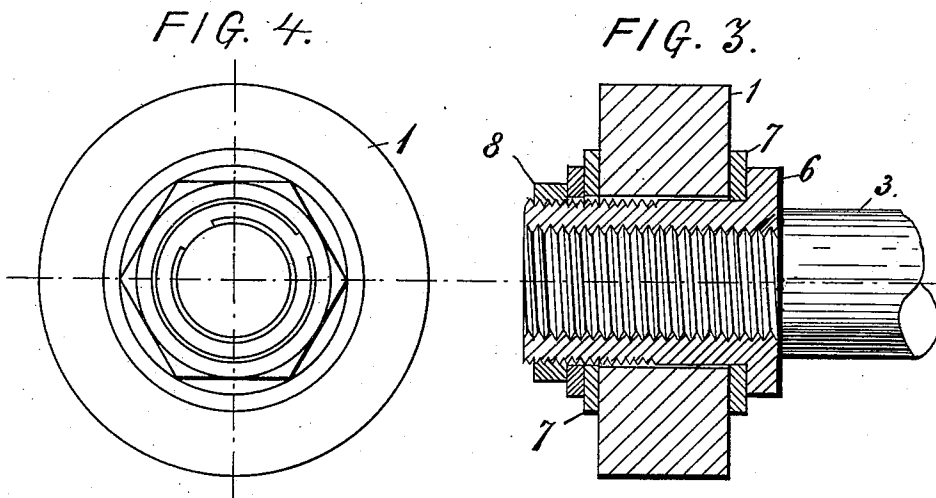
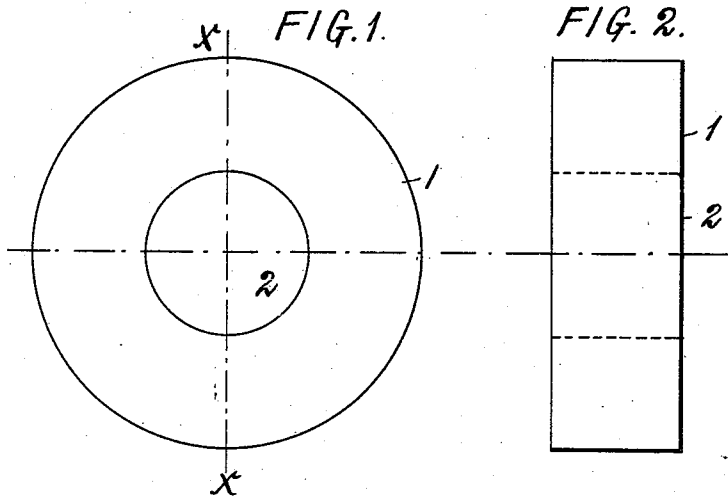
Patented Nov. 12, 1901.

C. W. A. KOELKEBECK.
DEVICE FOR COLORING DRAWINGS.

(Application filed May 4, 1898. Renewed Apr. 28, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

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2 Sheets—Sheet 2.

FIG. 5.

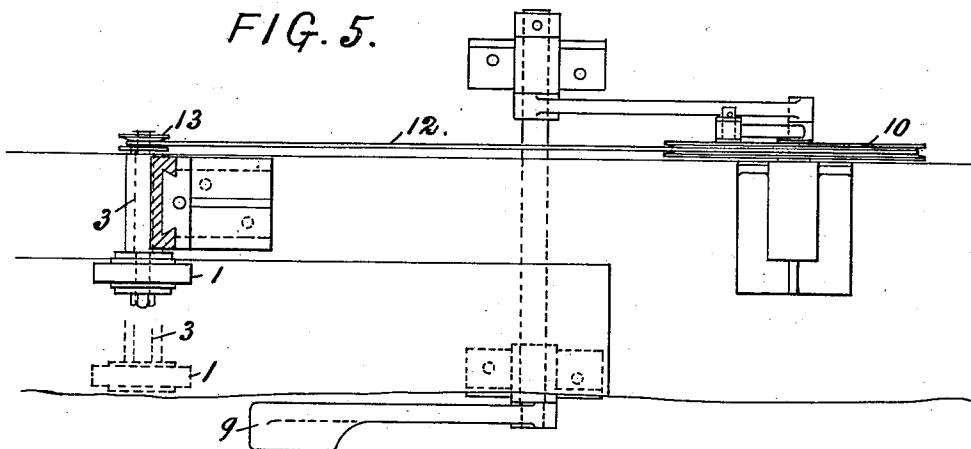
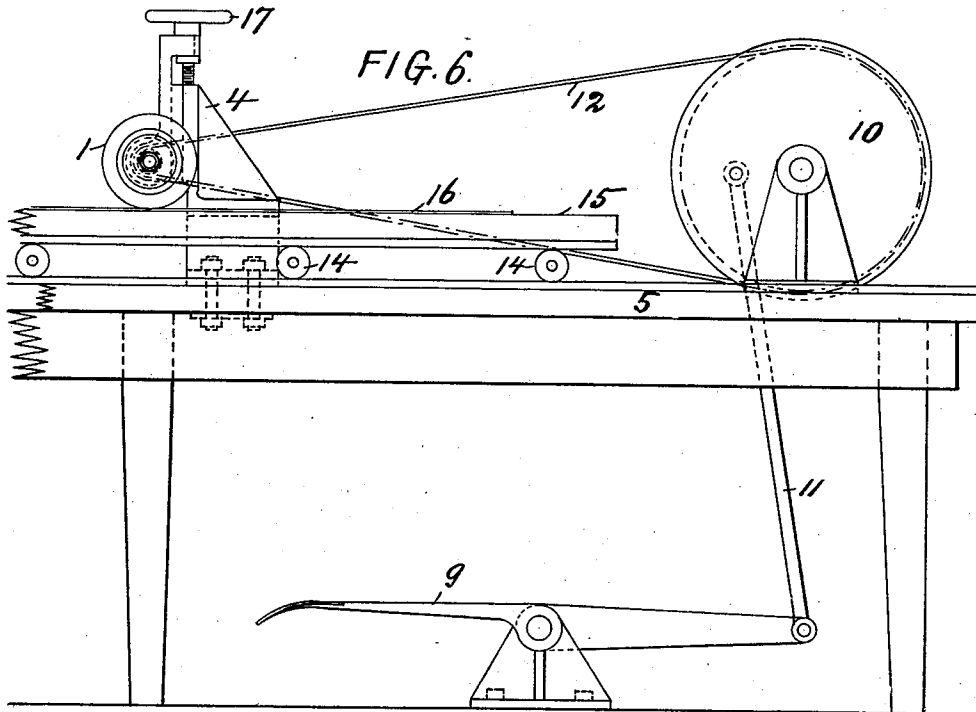


FIG. 6.



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UNITED STATES PATENT OFFICE.

CARL W. A. KOELKEBECK, OF PITTSBURG, PENNSYLVANIA.

DEVICE FOR COLORING DRAWINGS.

SPECIFICATION forming part of Letters Patent No. 686,462, dated November 12, 1901.

Application filed May 4, 1898. Renewed April 28, 1900. Serial No. 14,758. (No model.)

To all whom it may concern:

Be it known that I, CARL W. A. KOELKEBECK, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered a certain new and useful Improvement in Coloring Devices for Drawings, of which improvement the following is a specification.

10 The object of my invention is to provide means for coloring drawings; and to this end it consists of a new and improved coloring device and in new and improved apparatus for applying a coloring substance to the drawings, all as hereinafter fully set forth.

15 My invention is particularly designed to be employed for coloring certain parts of mechanical drawings—as, for example, sectional views—thereby doing away with the almost universal laborious practice of hatching. It may also be advantageously used to color any other part of a drawing.

20 To produce the results aimed to be accomplished, I preferably employ a coloring preparation, as crayon, which should be adapted to be mounted on a rotatable shaft in some convenient manner so that the crayon may be readily brought in contact with that part or parts of the drawings to be colored and rotated at the desired velocity.

25 In the accompanying drawings, which illustrate an application of my invention, Figure 1 is a plan view of a coloring device; Fig. 2, a sectional view on line *x x* of Fig. 1; Fig. 3, a central vertical sectional view showing the coloring device applied to a shaft; Fig. 4, an end view; Fig. 5, a plan view of an apparatus and coloring device applied thereto constructed in accordance with my invention, and Fig. 6 a side elevational view.

30 As shown by the drawings, the disk-shaped coloring device 1, which may be of any preferred size and color and preferably a block or piece of crayon, is provided with a central aperture 2. I find that for coloring the different parts of the usual mechanical drawings on almost any kind of drawing-paper and tracing-cloth the coloring device best suited for this work is a piece or several pieces of crayon; but I do not desire to limit myself to the use of crayon only as the coloring material.

The apparatus shown for use in connection

with the coloring device comprises a rotatable shaft 3, journaled in suitable bearings on a casting 4, which latter is fastened to and supported by a table 5. One end of the shaft 3 is screw-threaded and adapted to receive an internally-screw-threaded chuck 6, on which the coloring device 1 is mounted and which is securely held in place thereon between washers 7, preferably made of rubber or of a similar material. In place of washers the coloring device may be held between any suitable yielding parts. The chuck 6 for a portion of its length is externally screw-threaded to receive the clamping-nut 8.

35 The shaft 3 is driven by means of the foot-treadle 9 and the intermediate mechanism comprising the wheel 10, the connecting-rod 11, the belt 12, and the small wheel 13 on the end of the shaft 3. While this construction is simple and convenient, any other suitable construction may be employed for driving the shaft.

40 The table 5 is provided with grooves or tracks adapted to receive and guide the small loose wheels or rollers 14, on which the carriage 15 rests and on which it is moved. To illustrate the manner of coloring the sheet of drawings, I have shown a sheet 16 on the carriage 15, showing contact between the crayon 1 and the sheet. The disk-shaped crayon may be vertically adjusted to the desired position by actuating the hand-wheel 17.

45 It may sometimes be desirable to use more than one coloring-disk, and if this is the case two or more disks may be placed upon the shaft without materially altering the construction above described.

50 The crayon or other coloring device may be conveniently brought into contact with that part or parts of the drawing to be colored, and when in that position it is rotated by the means shown and the coloring substance quickly and accurately applied to the drawings.

55 The apparatus shown in connection with the coloring-disk may be differently constructed—that is to say, the shaft 3, having the disk or disks mounted thereon, could be rotated by means of a crank, and other changes may be made that would come within the scope of my invention, the characteristic features of which are a disk-shaped coloring device adapt-

ed to be mounted on a rotatable shaft and means for rotating the coloring device, whereby a part or parts of a drawing may be colored.

In the drawings I have shown a simple and convenient arrangement for accomplishing the purpose for which my invention is designed. In this construction the sheet of drawings placed on the carriage may be readily moved under the coloring device, which latter may be vertically adjusted to the desired position.

By means of my invention a great saving of time and labor in the preparation of drawings is possible.

I claim as my invention and desire to secure by Letters Patent—

1. Means for coloring drawings, comprising, a color-disk of crayon or other suitable coloring material, a rotatable shaft, the coloring-disk mounted on the shaft, and means for rotating the shaft and the color-disk, substantially as set forth.

2. Means for coloring drawings, compris-

ing, in combination, a color-disk of suitable coloring material, a rotatable shaft having a disk-holder thereon, said color-disk mounted on the holder between yielding parts, and means for rotating the shaft and the color-disk, substantially as set forth.

3. Means for coloring drawings, comprising, in combination, a color-disk composed of crayon or other suitable coloring material, a rotatable shaft, said color-disk mounted on the shaft and held thereon between yielding parts, means for rotating the shaft and the color-disk, a movable surface on which the drawings to be colored are placed, and means for adjusting the color-disk with reference to the drawings, substantially as set forth.

In testimony whereof I have hereunto set my hand.

CARL W. A. KOELKEBECK.

Witnesses:

THOMAS EWING, Jr.,
W. G. DOOLITTLE.