(No Model.)

E. A. HOPKINS.

RULING PEN.

No. 391,849. Patented Oct. 30, 1888.

Fig. 1.

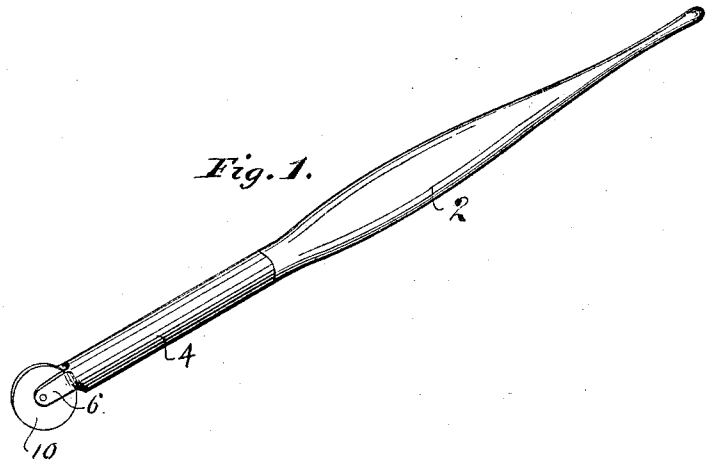


Fig. 5.

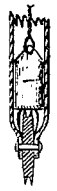


Fig. 2.

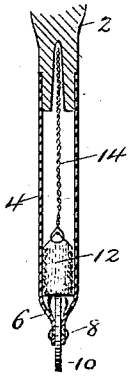


Fig. 3.

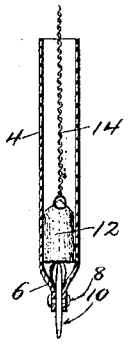
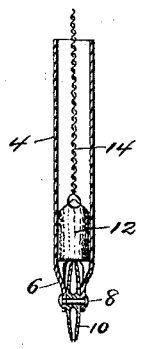


Fig 4



Witnesses.
J. Jessen.
C. L. Nachtrieb.

Inventor.
Edward A. Hopkins,
By Paul, Sanford & Merwin. Attys.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

EDWARD A. HOPKINS, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-HALF TO HUGH M. REID, OF SAME PLACE.

RULING-PEN.

SPECIFICATION forming part of Letters Patent No. 391,849, dated October 30, 1888.

Application filed August 27, 1888. Serial No 283,918. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. HOPKINS, of Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Ruling-Pens, of which the following is a specification.

My invention relates to certain improvements in ruling-pens, and the object I have in view is to provide an instrument of this class which will be self-inking and not liable to blur or blot while being used.

My invention consists, generally, in the construction and arrangement hereinafter described, and particularly pointed out in the claims.

In the drawings which form a part of this specification, Figure 1 is a perspective view of my improved pen. Fig. 2 is a longitudinal vertical section showing the interior construction of the feeding device. Figs. 3 and 4 are similar views showing a modification in the construction of the roll.

In the drawings, 2 represents the handle of a pen, made of any convenient size or shape. The end of this handle is secured to a tube, 4, into the upper end of which the handle 2 is fitted. The lower end of this tube is preferably provided with the ears or projections 6.

A pin or axle, 8, is preferably secured to and extends between the projections 6, and a disk or roller, 10, is supported by and revolves upon this axle. The projections 6 upon the tube 4 embrace this roll and hold it in a central position under the open end of the tube 4.

An inking-pad, 12, which may be composed of felt or any other suitable material, is preferably introduced into the tube until the lower portion strikes the periphery of the roll 10.

A wire, 14, is preferably secured to the inking-pad, and extends upward through the tube and projects a sufficient distance above it to allow for the removal of the pad. A recess may be formed in the end of the handle 2, to receive the wire 14 when the handle and tube are placed together. The roll 10 may be of any suitable size, and the construction may be varied in order to give a wide or narrow face to the roll. The surface may be made flat, as shown in Fig. 2, and of any width required to suit the line to be drawn. Another construction is shown in Fig. 3, in which the periphery of the roll is rounded, in order to allow slight variation in the angle of the pen and still allow it to make a smooth and continued line.

In Fig. 4 I have shown a roll constructed of two disks or plates converging toward each other at their outer edges, and leaving a space between them in which the ink may collect as the roll is brought in contact with the pad. The ink passes from the interior of the roll through the space between the edges of the disks.

In Fig. 5 I have shown another construction of the roll, in which it is formed of a double face. This construction will give two marking-edges and a double line will be produced. Any number of inking-pads may be used with one pen, and each of these pads may be of a different color, in order that by simply changing the pad in the tube 4 any desired color may be given to the line.

The operation of the device is as follows: The handle 2 is removed from the tube 4, and an inking-pad, 12, is selected to give the required color for the line. This pad may be moistened with the ink, which it will absorb, and after it has been so moistened it may be inserted within the tube 4. The handle 2 is now inserted into the top of the tube and the pen is ready for use.

It will be seen that the pen can be used in any place where an ordinary ruling-pen is adapted to be used, and is particularly adapted for use upon account and blank books, where a pen is needed for a short time and then laid aside. In such cases, where the ordinary ruling-pen is used, the ink is continually drying in the pen, and more time is consumed in preparing the pen for use than in the actual use of it. With my improvement the pen is always ready for use, and the pad when once moistened will remain so for a long time. It being inclosed in the tube, the evaporation or drying of the ink is very slow, and, if desired, a prepared ink may be used—such as is ordinarily used for inking-stamps—which does not evaporate if exposed to the air. The inking-pad absorbs the ink and retains it, and only distributes it upon the roll as it is needed for use. Consequently all liability to blot or mar the book in the use of my pen is avoided.

With my pen I am enabled to rule lines upon common or fibrous paper, upon which it would be impossible to use an ordinary ruling-pen.

I claim as my invention—

1. As a new article of manufacture, a ruling-pen consisting of a roll, 10, a suitable tube for supporting said roll, and an inking-pad, 12, inserted in said tube and in contact with said roll, substantially as described.

2. A ruling-pen comprising, in combination, the roll 10, provided with a ruling-edge, and the inking-pad arranged in contact with said roll, substantially as described.

In testimony whereof I have hereunto set my hand this 22d of August, 1888.

EDWARD A. HOPKINS.

In presence of—
R. H. SANFORD,
C. L. NACHTRIEB.